SILESIAN UNIVERSITY OF TECHNOLOGY SCIENTIFIC PAPERS

POLITECHNIKA ŚLĄSKA

ZESZYTY NAUKOWE

ORGANIZATION AND MANAGEMENT Scientific paper no. 164

Human Resource Management: Perspectives, Implementation and Challenges

ORGANIZACJA I ZARZĄDZANIE Zeszyt Naukowy nr 164

Zarządzanie zasobami ludzkimi: perspektywy, wdrażanie i wyzwania

Edited by

Magdalena KOGUT-JAWORSKA Radosław WOLNIAK Bożena SKOTNICKA-ZASADZIEŃ Pod redakcją

Magdaleny KOGUT-JAWORSKIEJ Radosława WOLNIAKA Bożeny SKOTNICKIEJ-ZASADZIEŃ

Kolegium redakcyjne

REDAKTOR NACZELNY- Dr hab. inż. Barbara KULESZ, prof. PŚREDAKTOR DZIAŁU- Prof. dr hab. inż. Radosław WOLNIAK

Wydano za zgodą Rektora Politechniki Śląskiej

ISSN 1641-3466 ISSN 2720-751X

© Copyright by Wydawnictwo Politechniki Śląskiej Gliwice 2022

WYDAWNICTWO POLITECHNIKI ŚLĄSKIEJ ul. Akademicka 5, 44-100 Gliwice tel. (32) 237-13-81, faks (32) 237-15-02 www.wydawnictwopolitechniki.pl

> Sprzedaż i Marketing tel. (32) 237-18-48 wydawnictwo_mark@polsl.pl

Ark. wyd. 54

CONTENTS

Fo	reword	7
1.	Sylwester BIAŁOWĄS, Anna WALIGÓRA – Economic preparation of young people for Economy 4.0 – multi-competency or specialization?	9
2.	Joanna BOHATKIEWICZ-CZAICKA – Calculation methodology of the hourly rates on the example of a specialist engineering company	23
3.	Wiesław DANIELAK, Przemysław NIEWIADOMSKI – Managerial competences in relation to management level - a survey among manufacturers in the sector of agricultural machinery	37
4.	Karolina DRELA – Professional burnout of Polish employees in enterprises during the Covid-19 pandemic	55
5.	Katarzyna DURNIAT – Relations between exposure to and acceptance of mobbing – an explorative study on a sample of Polish employees	69
6.	Tomasz GIGOL – Impact of organizational identification on unethical pro-supervisor behavior: moderating role of charisma	85
7.	Milena GOJNY-ZBIEROWSKA – The significance of leader transgression for the psychological safety of employees with a high level of sensory sensitivity	97
8.	Alena IVANOVA – Employee propensity to professional development and its measurement	109
9.	Sławomir KAMOSIŃSKI – Trust as the resource and informal institution in economic activity after 1988	121
10.	Katarzyna KLIMKIEWICZ, Marzena STASZKIEWICZ – Social sensitivity among HR business partners as determinant of CSR attitudes	137
11.	Magdalena KOGUT-JAWORSKA – Towards searching for a gap in network relations for smart specialization strategy – results of bibliometric analysis	151
12.	Anna KRASNOVA – Decruitment in project teams – determinants and ways of implementation	165
13.	Sebastian KUBASIŃSKI – A proactive strategy of the organization, and action-taking efficiency having an impact on work safety	175
14.	Marek KUNASZ – Motives for employee silence in an organization – a correlation analysis of a Polish sample	189
15.	Dorota KUREK – Attractiveness of the Polish Army as an employer – results of empirical research	201
16.	Agnieszka KWARCIŃSKA – Assessment of the preferences of CSR activities addressed to employees in the light of the results of primary research	215
17.	Regina LENART-GANSINIEC – Ghost workers – the essence and importance for creating scientific knowledge	229

18.	Kamila LUDWIKOWSKA – Employee support for HRM Covid-19 strategies as a factor shaping job redesign influence on job performance	243
19.	Karolina ŁUDZIŃSKA – Diagnosis of educational needs and expectations for mentoring entrepreneurial competence: the case of the European food sector	255
20.	Joanna MACALIK – Personal brand of a start-up leader in creating the online employer's brand	271
21.	Ewa MAZUR-WIERZBICKA – Greenwashing – consumer's perspective	283
22.	Michał A. MICHALSKI – Family policy and social justice – or why invest in human capital?	299
23.	Alicja MIŚ – Sustainable careers. Implications for HRM	311
24.	Patrycja MIZERA-PĘCZEK – Recruitment and selection of artists in the media discourse	319
25.	Marta MŁOKOSIEWICZ – Development of workplace safety culture – implications for management practice	329
26.	Alicja NERĆ-PEŁKA – The teacher in the age of pandemic	341
27.	Agata OPOLSKA-BIELAŃSKA – Irresponsible actions of socially responsible companies towards the political situation in Ukraine	351
28.	Anna PAWŁOWSKA – Turnover of employees with employability market orientation versus affective commitment in the context of superior support, role and intra-organisational employability	363
29.	Wojciech PAWNIK – Recruitment lying and trust in an organization	379
30.	Agnieszka POSTUŁA, Tomasz ROSIAK – Human resource management in the public sector. The challenges of the Industry 4.0	391
31.	Janusz ROSIEK – Social policy and poverty and income inequalities in Poland in 2008-2020	407
32.	Gabriela ROSZYK-KOWALSKA, Janusz KRAŚNIAK, Tomasz KLIMANEK – Attitudes of managers of the high-tech enterprises in Poland	423
33.	Janusz RYMANIAK – Remote workplaces over the time of Covid-19 in Poland as a form of organisational space	437
34.	Monika SIPA – Trends and challenges in talent management – mind map	449
35.	Alicja SMOLBIK-JĘCZMIEŃ, Patrycja PALEŃ-TONDEL – Do representatives of different generations identify with their stereotypical characteristics?	465
36.	Barbara A. SYPNIEWSKA – Counterproductive behavior and job satisfaction – based on the study of Polish employees	477
37.	Agnieszka WALCZAK-SKAŁECKA – Personal brand as a tool for shaping organizational culture	489
38.	Krzysztof WĄSEK, Przemysław ZBIEROWSKI – Interactivity, proactivity, community – the pillars of onboarding. Test tool proposal	503
39.	Arkadiusz WIERZBIC, Agnieszka TAUROGIŃSKA-STICH – The formation of student leadership competence at selected military academies in the world	513

40. K	Kamil WRÓBEL – Management of ergonomic interventions in Industry 4.0	527
	Vieslawa ZAŁOGA – Digital competences of the information society era the aspect of safety in cyberspace	541
	Ialina ZBOROŃ – The ethical and civic competence of young people in the region f Wielkopolska	553
43. P a	atrycja ZWIECH – Approaches to socio-economic inequality in economic theory	565

FOREWORD

The idea of human resources management rightly attracts attention in the economy, society, and scientific research, while human capital management handles the question of how to function rationally in the increasingly complex reality. To better identify the processes taking place in the two areas it is necessary not only to apply a scientific approach and work out rules and theories to describe the new reality, but also to implement them effectively in business practice.

The multitude of concepts and approaches to human capital, considered on both micro- and macro-scale, derives from the interdisciplinary nature of the term. Even though hitherto the predominant analyses in the area of human capital were part of economic and management sciences, more and more frequently it is possible to encounter subdisciplines derived from diverse areas of research, which are integrated by this broad term (e.g. psychology of labour, sociology of labour, business ethics). The human capital category thus becomes an object of detailed analysis shared by environments which focus on joint research of similar analytical phenomena, though most probably taking different viewpoints.

Therefore, research topics are in abundance. Representatives of various research disciplines engage in research projects on human resources and human capital management, thus participating in the exchange of knowledge, research results, views and experience in the said areas. This publication is an example of activity demonstrated by academic circles and business practitioners, who are interested in contemporary challenges of human resources and human capital management.

This publication of The Silesian University of Technology Scientific Papers, Organization and Management Series contains 43 articles which are the outcome of the research and analyses completed by researchers from renowned research centres in Poland. The issues addressed in these articles regard in particular the challenges of public sector management in the context of the social policy and social justice, flexible management of human capital, human resources competences and developing organisational relationships in enterprises, corporate social responsibility, and support to be provided to employees at different stages of their careers. The authors should be greatly appreciated for their contributions in the form of compelling articles, also reviewers should be acknowledged for their valuable comments and pertinent suggestions which helped to perfect the reviewed articles. Hopefully, the readers will greatly appreciate the high level of the papers and they will meet the readers' expectations.

Magdalena Kogut-Jaworska Radosław Wolniak Bożena Skotnicka-Zasadzień

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

ECONOMIC PREPARATION OF YOUNG PEOPLE FOR ECONOMY 4.0 – MULTI-COMPETENCY OR SPECIALIZATION?

Sylwester BIAŁOWĄS^{1*}, Anna WALIGÓRA²

 ¹ Poznan University of Economics and Business; sylwester.bialowas@ue.poznan.pl, ORCID: 0000-0003-4575-5346
 ² Poznan University of Economics and Business; anna.waligora.ue.poznan.pl, ORCID: 0000-0003-1361-4709

Purpose: Paper is an attempt at theoretical and practical answer to the question about the economic preparation of young people for Economy 4.0.

Design/methodology/approach: The paper consists of a literature study relating to research findings on multicompetence vs specialization of youth attending secondary schools and a review of own research with young people carried out as part of the project "New Generation in the New Economy" carried out at the Poznań University of Economics and Business in 2021-2022.

Findings: The results confirm high correlations between competencies. Authors calculated also the Competencies Index, as the arithmetic mean from normalized results of all measured competencies. This lead to the recognition of inconstant variabilities of competencies along the Competencies Index results. The variability of competencies levels is much bigger among students with average lower multicompentecies index.

Research limitations/implications: The results of the conducted own research seem worth carrying out on subsequent groups of respondents and on a larger population of them. Particular attention should be paid to the research sample - panel studies taking into account cultural differences, age, gender and the type of school attended by the respondents seem particularly interesting in the future. The undertaken research topic is undoubtedly worth exploring and more extensive research.

Practical implications: As indicated by literature research, the competences analyzed in the paper are the subject of interest of various stakeholders (including scientists, institutions and organizations responsible for education or the future of the labor market).

Originality/value: The novelty of the paper comes from unique research consisting all the most important competencies. This allowed to measure the relations between them, calculate the multicompetencies index and check if inter-competency differentiation is different in the group of people well prepared for Economy 4.0 and in the group of people with worse preparation.

Keywords: competences in the New Economy, Economy 4.0, the Index of Competencies, competencies of Youth.

Category of the paper: Research paper.

1. Summary

The competences of school youth, with particular emphasis on the competences of secondary school students, are of interest to various environments. The issues are dealt with both by the sphere of education, as well as labor market institutions and employers for whom today's student is the employee of tomorrow.

The discussion around the specialization of education has been going on for many years educate for the needs of the economy and its diverse expectations or educate in general, putting emphasis on shifting responsibility for specialization to the next levels of education (studies) or the beginning of a professional career?

Paper is an attempt at theoretical and practical answer to the question about the economic preparation of young people for Economy 4.0. The paper consists of a literature study relating to research findings on multicompetence vs specialization of youth attending secondary schools and a review of own research with young people carried out as part of the project "New Generation in the New Economy" carried out at the Poznań University of Economics and Business in 2021-2022.

The results confirm high correlations between competencies. Authors calculated also the Competencies Index, as the arithmetic mean from normalized results of all measured competencies. This lead to the recognition of inconstant variabilities of competencies along the Competencies Index results. The variability of competencies levels is much bigger among students with average lower multicompentecies index.

2. Introduction

The topic of economic preparation of young people to function in the 4.0 Economy returns regularly during secondary school-leaving examinations or other exams that have a cross-sectional dimension to check the results achieved by young people. As indicated by the results of the Program for International Student Assessment (PISA) for 2018, i.e. a study used to measure the mathematical skills of 15-year-olds in the use and interpretation of mathematics in various contexts in order to describe, predict and explain various phenomena, Polish youth includes in the European rate. The result of the study is the average number of points obtained by one student in a given country. For 2018, students from Poland achieved an average score of 503.0 points, being behind the best: Finland, Switzerland, the Netherlands (520.0-528.3 points) and Germany, Denmark, Belgium, Estonia and Slovenia (503.1-519.9 points) (OECD, 2018).

The results of the study say a lot not only about the mathematical skills of students, but also about their ability to communicate, the so-called associating facts using mathematics. This skill will become more important once students enter the job market and will no longer be asked for test results. Then it will be their ability to solve real professional problems, which is undoubtedly facilitated by the development of mathematical skills.

Economy 4.0 sets even more complex assumptions for students-future employees. Economy 4.0 is described as an issue concerning not only new technologies, but also new ways of working and the role of people in industry. It becomes important to reflect on the expected competences of people operating on the labor market, especially those who will contribute to the new economy - that is, the young generation (New Generation in the New Economy, 2021).

Of course, a change in human resources in the economy is not only a simple generational change. Therefore, joining the staff of Economy 4.0 requires young people not only to have skills conducive to functioning in Industry 4.0, but also developed communication and cultural skills that allow them to communicate effectively with employees/superiors representing other generations, as well as colleagues from other cultures (Biernat, 2015).

An attempt at a comprehensive study of the competences of young people with regard to functioning in the economy 4.0 was made as part of the research project "New Generation in the New Economy" carried out at the Poznań University of Economics and Business. Over 500 students from the Wielkopolska region participated in the study. Students participating in the research study at a vocational school, technical secondary school and general secondary school.

As part of the study, the following competences were measured: (1) mathematical literacy competences, (2) ethical and civic competences, (3) communication, (4) creativity, (5) self-organization of work, (6) creating digital content and the ability to seek information using IT, (7) learning new issues and (8) teamwork. Based on the obtained results, the Competence Index in the New Economy was developed. The Competence Index is the arithmetic mean from normalized results of all measured competencies.

Certainly, studying the competences of young people heading towards participation in Economy 4.0 requires constant reflection and careful observation. Firstly, because young people are constantly changing (Wiktorowicz et al., 2016). Secondly, due to the fact that the economy is constantly changing, and the effective combination of these two worlds is a success on the labor market in relation to individual biographies (Szymańska et al., 2014). It also determines the success of the labor market as a coherent work and management environment prepared for 4.0 changes.

3. Literature review

Various sources - both scientific studies and research reports indicate relationships between students' competences (Karwowski, 2013; Szymańska et al., 2014; Przybył et al., 2014; Oberrauch, Kaiser, 2018; OECD, 2018). The general conclusion on the subject of dependence comes down to the fact that the balanced development of various types of skills - from mathematical to social competences - is conducive to balanced participation in education and then in the labor market.

An analysis of the challenges posed by participation in the modern economy, and especially in the Economy 4.0, brings the conclusion that the competences expected from young people do not change; however, the way they are combined and then used changes (Przybył, 2014; Kwiatkowski, 2018; Lase, 2019; Grenčiková, Kordoš, Navickas, 2021).

For the purposes of the paper, a review of the results of research on the competences studied in the project "New Generation in the New Economy" was made. The analysis is oriented towards showing the relationship between competences. The analysis shows that the dominant approach among other researchers is the group approach to examining the competences of young people. Even if one competence is dominant, it is analysed through the prism and in a sense "in the company of" other competences.

Mathematical literacy competences

As mentioned in the Introduction, an extensive study of mathematical competences is carried out periodically as part of the pan-European study Program for International Student Assessment (PISA) (OECD, 2018). The study showed that math skills correlate with communication skills. Thus, mathematical competences are widely treated here, as a component necessary to shape the imagination, and thus also creative abilities.

Another study referring to the PISA test is the Test for International Comparisons of Knowledge and Skills (TICKS). In addition to math skills, it focuses on testing reading comprehension and reasoning in natural sciences. TICKS implemented during the pandemic (Jakubowski, Gajderowicz, Wrona, 2022) brings less optimistic results than PISA regarding the skills of Polish youth, nevertheless, it indicates relationships similar to PISA.

Mathematical literacy competences are connected with communication and creativity, and if you take into account the way of solving both tests, also with the competence to learn new things and self-organization of work.

Ethical and civic competences

An example of research devoted to ethical and civic issues is The International Civic and Citizenship Education Study (ICCS) (ICCS, 2022). As part of the research carried out by the International Association for the Evaluation of Educational Achievement in 38 countries,

the knowledge of, inter alia, democracy, democratic institutions, and awareness of threats to civil society was examined with high school students. The entire study is oriented towards the Sustainable Development Goals set out by the United Nations. Ethical and civic competences are one of the most important competences of the future (Kwiatkowski, 2018) because they are a kind of compass for navigating in the social and digital world. Ethics also sets a common communication platform conducive to dialogue attitudes.

Ethical and civic competences are combined with communication skills, and in the context of future challenges related to, for example, the development of democracy or ecology, also with the learning new issues, mathematical literacy competences and creating digital content and the ability to seek information using IT.

Creating digital content and the ability to seek information using IT

Young people's digital competences are subjected to various types of tests. The knowledge of modern teenagers is almost intuitively combined with a high level of digital skills. This is due to the technological conditions of the present day and the high availability of various types of IT tools - from computers to tablets to telephones (Sijko, 2013). An example of testing the digital competences of young people is the IT Fitness Test (IT Fitness Test, 2022), carried out cyclically in the Visegrad Group countries. It consists in completing an online test in which creative tasks are solved (e.g. related to determining the route of an autonomous vehicle) and tasks testing resistance to data fraud on the Internet and broadly understood digital security.

Digital competences are therefore connected with both communication skills, the ability to learn new things, as well as creativity, and also as well as ethical and civic competences.

Learning new issues, Communication, Creativity, Self-organization of work

The indicated competences belong to the group of competences that mostly accompany mathematical literacy competences, ethical and civic competences, creating digital content and the ability to seek information using IT. They are used to create test issues. However, this does not mean that they are important to me, and the fact that the way they are tested often depends on the methodology of testing other competences (OECD, 2018, TICKS, 2022, ICCS, 2022, IT Fitness Test, 2022).

The indicated competences are also connected with various approaches and methodologies in the study of group work competences (Kwiatkowski, 2018).

The competence to learn new things and to communicate is more often linked in research with mathematical literacy competences. Competences: Communication, Creativity and Selforganization of work - with Ethical and civic competences and Creating digital content and the ability to seek information using IT.

Teamwork

Competencies related to working in a group remain one of the most valued by employers and pass the so-called the trial of time and the resulting changes in working conditions (Szymańska et al., 2014). Teamwork, especially related to collaboration in diverse teams, is widely taught in schools, under various methodologies (Chorst ,2012). As practice shows, however, this skill is developed mainly in non-school environments. Research conducted by the Zwolnieni z Teorii Foundation shows that the ability to work in a group is best shaped in the context of the implementation of civic projects (Odporność..., 2021). Thus, broadly understood extracurricular involvement determines the level of this competence.

Due to its complexity and mainly the qualitative dimension of analyses related to the competency of group work, it should be stated that it is related to virtually all analysed competences. Mostly, however, with ethical and civic competences, but also with mathematical literacy competences, communication, creativity, self-organization of work, creating digital content and the ability to seek information using IT and learning new issues.

The above mentioned research clearly show the competencies correlations. Instead of naming single hypotheses we decided to summarize the above mentioned relations in the table, and compare it with the results of our research.

Table 1.

	Learning new issues	Creating digital content/ ability to seek information using IT	Mathematical literacy competences	Self-organization of work	Creativity	Ethical and civic competences	Communication
Learning new issues		х	х			Х	
Creating digital content/ability to seek information using IT	Х			х	х	х	x
Mathematical literacy competences	Х			Х	Х	Х	Х
Self-organization of work		Х	Х			Х	
Creativity		Х	х			Х	
Ethical and civic competences	Х	х	Х	Х	Х		Х
Communication		Х	Х			Х	

T ·	•	1 1	1	1			1
Literature	review	hased	research	stated	compe	tencies	correlations
	101011	ouseu	rescurent	Sincu	compe	<i>icricics</i>	0011010110

Source: own preparation.

According to the literature review and summarizing table we also expect, that dispersity of competencies is rather low and stable along the values of Competence Index.

4. Research methodology and sample

For our analysis we took subsample of 336 students, which have finished all the tasks carried out as part of the catalog of tasks provided for the examination of competences under the project. The catalog consisted of measuring tasks related to the following competences: (1) mathematical literacy competences (analytical competency), (2) ethical and civic competences, (3) communication, (4) creativity, (5) self-organization of work, (6) digital content creation and the ability to search for information with the use of IT, (7) learning new issues. The analyzes omitted the results on competences (8), group work due to the qualitative nature of the analyzes (the indicated competence was the only one analyzed on the basis of workshops with students). Dominant were the lyceums students (49%), technical school students are 31%, and the vocational school students are 20% of the sample. Females are 66% of the sample. Median of the age is 17 years.

5. Analysis - correlations

Seven competencies were measured as results of designed tasks. The ranges of measurement were different, so for comparisons all results were normalized. The descriptive statistics of the seven measured competencies are shown in the Table 2.

I able 2.	Tab	le	2.
-----------	-----	----	----

	Learning new issues	Creating digital content/ ability to seek information	Mathematical literacy competences	Self-organization of work	Creativity	Ethical and civic competences	Communication
Ν	336	336	336	336	336	336	336
Missing	0	0	0	0	0	0	0
Mean	.5010	.4626	.7138	.6703	.7054	.6376	.3921
Median	.4994	.5500	.7500	.7000	.7692	.6667	.3333
Mode	.47a	.55	.81	.80	.96	.72	.00
Std. Deviation	.1106	.2242	.1883	.2094	.2530	.2120	.3217
Skewness	.089	-1.066	578	831	-1.181	-1.467	.229
Minimum	.10	.00	.19	.00	.00	44	.00
Maximum	.84	.85	1.00	1.00	1.00	.97	1.00

Descriptive	statistics	of mee	asured	comp	petencies

a Multiple modes exist. The smallest value is shown

Source: own calculations.

Students from Greater Poland region obtained the highest average values for analytical competences (0.71) and creativity (also 0.71). The lowest values were measured for communication skills (0.39).

It is worth paying attention to the particularly large dispersion of communicating competences. The coefficient of variation is as high as 82%. Other competences are characterized by less differentiation, the coefficients of variation range from 22% (competence to learn new things) to 48% (digital competence).

For normalized competencies we have measured Pearson correlation coefficients. This confirms our expectations about high correlations. The results are shown in Table 3.

Table 3.

	Learning new issues	Creating digital content/ability to seek information using IT	Mathematical literacy competences	Self-organization of work	Creativity	Ethical and civic competences	Communication
Learning new issues							
Creating digital content/ability to seek information using IT	.129*						
Mathematical literacy competences	.302**	.170**					
Self-organization of work	.314**	.527**	.301**				
Creativity	.327**	.399**	.398**				
Ethical and civic competences	.225**	.163**	.142**	.315**	.177**		
Communication	.046	.439**	.166**	.418**	.280**	.088	

\mathbf{D} \mathbf{C} 1 \mathbf{C} \mathbf{C}		
Pearson Correlation Co	ootticiont for moasurod	competencies
		competencies

* Correlation is significant at the 0.05 level (two-tailed).

** Correlation is significant at the 0.01 level (two-tailed).

Source: own calculations.

The correlation matrix indicates that competences are mostly positively correlated with each other. The strongest correlation is between self-organization and planning skills and the ability to create digital content (0.527).

On the other hand, we observe uncorrelated pairs only between communication skills and the ability to learn, and between communication skills and ethical-civic competences.

As many as 19 out of 21 possible competences turned out to be significantly correlated, including 18 at the level of 0.01. It is worth noticing, that Creativity and Self-organization are relatively highest correlated with other competencies.

We have decided to show the summarized version of the correlations coefficients calculated for every type o school. The Table 4. Includes only symbols in places of significant correlations, the symbols (L, T and BS) indicated significant correlation for given type of school. Full tables available on demand.

Table 4.

Summarized version of the correlations

	Learning new issues	Creating digital content and the ability to seek information	Mathematical literacy competences	Self-organization of work	Creativity	Ethical and civic competences	Communication
Learning new issues							
Creating digital content and the ability to seek information using IT	L						
Mathematical literacy competences	SB L	SB L					
Self-organization of work	LT	SB L T	SB L T				
Creativity	SB L T	SB L T	SB L T	SB L T			
Ethical and civic competences	Т	SB T	SB T	SB L T	Т		
Communication	-SB T	SB L T	Т	SB L T	LT		

Source: own calculations.

The highest number of significant correlations was observed in technical school (17). The high school and vocational school have 14 significant correlations.

Summarized number of significant correlations counted for each competency confirms, that Creativity and Self-organization have tightest relations to other competencies (respectively 18 out of 18 possible and 17 out of 18 possible). On the other side we can find the ethical and civic competence (9 out of 18) and communication (11 out of 18).

6. Analysis – Competence Index

Based on the results of all competencies, we calculated the index. The index is the arithmetic mean of individual competences, so it takes values from 0 to 1.

Table 5.

Competence Index

	Competencies Index
Ν	336
Missing	0
Mean	.5833
Median	.6086
Mode	.15a
Std. Deviation	.1361
Skewness	842
Minimum	.15
Maximum	.84

a Multiple modes exist. The smallest value is shown

Source: own calculations.

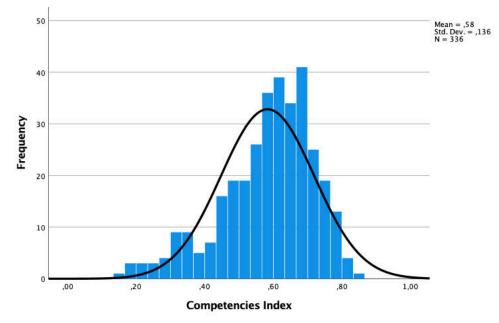


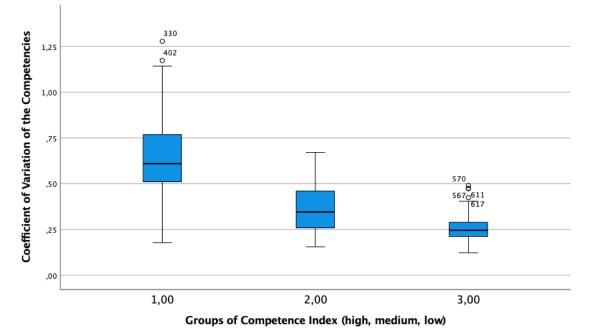
Figure 1. Competence index – histogram. Source: Own calculations.

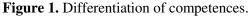
The index was used to check whether the inter-competency differentiation is different in the group of people well prepared for Economy 4.0 and in the group of people with worse preparation. We separated the groups on the basis of the 33rd and 67th percentiles, we compared the extreme groups. Therefore, in the first step, we calculated the variation measure, we decided to use the variation factor. The average differentiation was 42%, but due to the strong right-hand skewness of the distribution, the median of 35% is a better measure.

In general, it can therefore be concluded that the level of competences possessed by individual students varied only slightly. This confirms the thesis that at the level of secondary education, students' competences are not significantly differentiated, so most students generally have better all competences, or generally worse all competences.

In the second step, we checked how the differentiation of competences looks like in the group of students with generally less developed competences (low index values) and in the group with better developed competences. The Kolmogorov-Smirnov test indicated that the distribution deviates from the normal in one of the groups of interest to us, so we conducted the comparison using the nonparametric test - Kruskall-Wallis.

As predicted, the differentiation of competences decreases with increasing competences. Students with generally lower competences often have one or two competences much better developed. Students with a high general level of competence have all competences developed to a similar degree.





Source: Own calculations.

The differences are statistically significant, which was confirmed by the intergroup tests with Bonferonni's correction for multiple comparisons shown in Table 6.

Table 6.

Pairwise comparisons of Competence Index Groups.

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.a
low-high	-225.000	13.039	-17.256	.000	.000
medium-high	-112.500	12.953	-8.685	.000	.000
low-medium	-112.500	12.953	-8.685	.000	.000

a Significance values have been adjusted by the Bonferroni correction for multiple tests.

Source: Own calculations.

7. Conclusions

We have covered the matrix reflecting the literature research and the matrix containing results of our analysis. If the results confirmed the theory, we put the letter C (Confirmed). Correlations not mentioned in literature review, but confirmed in our research – are signed with letter E (Empirical).

And finally, the correlations confirmed by other authors, but not confirmed in our research are signed with letter T (Theory).

Table 7.

	Learning new issues	Creating digital content and the ability to seek information using IT	Mathematical literacy competences	Self-organization of work	Creativity	Ethical and civic competences	Communication
Learning new issues		С	С	Е	Е	С	
Creating digital content and the ability to seek information using IT	С		Е	С	С	С	С
Mathematical literacy competences	С	Е		С	С	С	С
Self-organization of work	Е	С	С		Е	С	Е
Creativity	Е	С	С	Е		С	Е
Ethical and civic competences	С	С	С	С	С		Т
Communication		С	С	Е	Е	Т	

Confirmation of the correlation between competences

Our research has confirmed all three correlations found in previous research for learning competence, additionally we have found two more correlations. In cases of digital content and mathematical competence we have confirmed all five previous research correlations, and one more was added (for each competence). All three self-organization competence correlations were confirmed, and another three were added. Same numbers for creativity competence. In case of ethic and civic competence we have expected all six correlations to be significant, but we have confirmed five, one theoretically mentioned was not significant in our research. And finally, two correlations of communication competence were confirmed, two not found in the literature were added, and one theoretical was not significant in our research.

8. Discussion and further research

As indicated by literature research, the competences analyzed in the paper are the subject of interest of various stakeholders (including scientists, institutions and organizations responsible for education or the future of the labor market). The results of the conducted own research seem worth carrying out on subsequent groups of respondents and on a larger population of them. Particular attention should be paid to the research sample - panel studies taking into account cultural differences, age, gender and the type of school attended by the respondents seem particularly interesting in the future. The undertaken research topic is undoubtedly worth exploring and more extensive research.

References

- Biernat, M. (2015). Lokalny rynek pracy, instytucje rynku pracy a globalizacja. Krótka refleksja socjologiczna. In: S. Ciupka, A. Knap-Stefaniuk, A. Sapiński (eds.). Kraków: Wydawnictwo Scriptum.
- 2. Chorst, M. (2012). *Kompetencje emocjonalne i społeczne młodzieży*. Kraków: Wydawnictwo WAM.
- Grenčiková, A., Kordoš, M., Navickas, V. (2021). The impact of Industry 4.0 on education contents. *Business: Theory and Practice, Vol. 22 Iss. 1*, 29-38, https://doi.org/10.3846/ btp.2021.13166.
- 4. International Civic and Citizenship Education Study, https://www.iea.nl/studies/iea/iccs, 28.04.2022.
- 5. IT Fitness Test 2022, https://itfitness.eu/pl/, 28.04.2022.
- Jakubowski, M., Gajderowicz, T., Wrona, S. (2022). Osiągnięcia uczniów szkół średnich po zmianach w oświacie i nauczaniu w pandemii. Wyniki badania TICKS 2021 w Warszawie, https://www.evidin.pl/wp-content/uploads/2022/01/POLICY-NOTE-1-2022_final.pdf, 28.04.2022.
- 7. Karwowski, M. (ed.) (2013). Organizacja i metodologia badania Ścieżki rozwoju edukacyjnego młodzieży szkoły pogimnazjalne. Warszawa: Wydawnictwo IFIS PAN.
- 8. Kwiatkowski, S.M. (ed.) (2018). Kompetencje przyszłości. Warszawa: Frise.
- 9. Lase, D. (2019). *Education and Industrial Revolution 4.0*, https://www.researchgate.net/publication/334837153_Education_and_Industrial_Revolution_40, 28.04.2022.
- Oberrauch, L., Kaiser, T. (2018): Economic competence in early secondary school: Evidence from a large-scale assessment in Germany. Kiel-Hamburg: ZBW – Leibniz Information Centre for Economics.

- 11. Odporni na lockdown. Raport o tym, co chroniło dobrostan młodzieży w trakcie pandemii 2021, https://drive.google.com/file/d/1pl9kHk0X4EYHd6KyxiKCAxJEh_29UL6-/view, 27.04.2022.
- 12. Program for International Student Assessment, https://www.oecd.org/pisa/publications/, 27.04.2022.
- 13. Przybył, C. et al. (2014). Analiza kwalifikacji i kompetencji kluczowych dla zwiększenia szans absolwentów na rynku pracy. Raport z badań. https://www.uj.edu.pl/documents/ 102715934/001bcfee-7b59-4983-9eaf-2ca7adbc7ad2, 28.04.2022.
- Sijko, K. (ed.) (2013). Kompetencje komputerowe i informacyjne młodzieży w Polsce. Raport. Warszawa: Instytut Badań Edukacyjnych, https://scdn.pl/images/stories/ RAPORTY2014/18.pdf, 27.04.2022.
- 15. Szymańska, E., Tobys, J., Woźniak, M. (2014). *Dwa światy? System kształcenia zawodowego a potrzeby rynku pracy aglomeracji poznańskiej*, https://www.cdzdm.pl/data/ download/dwa_swiaty_system.pdf, 27.04.2022.
- Wiktorowicz, J., Wawras, I., Kuba, M., Staszewska, E., Woszczyk, P., Stankiewicz, A., Kliombka-Jarzyna, J. (2016). *Pokolenia - co się zmienia? Kompendium zarządzania multigeneracyjnego*. Warszawa: Wolters Kluwer.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

CALCULATION METHODOLOGY OF THE HOURLY RATES ON THE EXAMPLE OF A SPECIALIST ENGINEERING COMPANY

Joanna BOHATKIEWICZ-CZAICKA

Jagiellonian University; joanna.bohatkiewicz@uj.edu.pl, ORCID: 0000-0001-9093-2685

Purpose: The purpose of the article was to present the methodology of determining hourly rates of employees in knowledge-intensive business services (KIBS) as an element of organisational resilience and building competitive advantage.

Design/methodology/approach: The proposal of the methodology was developed on the basis of a case study of a specialised engineering company in the construction industry.

Findings: A methodology proposal for calculating the hourly rates in a service company was developed and presented. Ultimately, it leads to the determination of the hourly rates including indirect costs and overheads, as well as the cost of direct wages, taking into account the effective working time.

Practical implications: Since service companies are based on the intellectual capital, the parameter that determines the potential to acquire work from the market are the hourly rates of its employees consisting of the markups for total costs including labor efficiency. The proper determination of the hourly rates influences the generation of net sales revenue, followed by trade receivables and positive net cash flow. The ability to calculate the hourly rates supports also the process of cost optimisation, which can improve profitability. Cost reduction supports company's competitive advantage in acquiring work, which again can generate an increase in net sales revenue. There is a kind of feedback loop resulting from the methodical calculation of the hourly rates and conscious management of the variables that affect it. At the same time, this improves the organisational resilience in overcoming financial difficulties primarily in the long term, which was also observed in the example of the analysed company.

Originality/value: Despite the growing role of service companies in the economy, there are no known methodologies or guidelines for calculating the hourly rate in service companies, especially knowledge-intensive business services. The literature focuses on calculating the unit cost of production or the calculation of coverage margins primarily for manufacturing companies. Moreover, these methods are based on far-reaching simplifications such as the assumption of a standardised single-assortment production. The proposal of this methodology therefore fills a research gap in the field of determining the hourly rates in service companies, especially knowledge-intensive ones.

Keywords: hourly rates, personnel controlling, financial controlling, knowledge-intensive business services, organisational resilience.

Category of the paper: Research paper, case study.

1. Introduction

The activity of service companies is burdened with specificities of operation that determine a number of management elements. One of the areas that most require a different approach is financial management, management accounting or financial controlling. Scientific publications on these issues use examples taken from production activities or, alternatively, from commercial activities. Service companies, due to their specificity, require an individual approach.

As pointed out by Pocztowski (2008, pp. 45-51), the aspect of human resources management, including the issue of shaping the remuneration of employees are immersed in a number of conditions such as, for example, technical, economic, legal, demographic, sociocultural, environmental or occurring globalisation processes. At the same time, the aspect of determining the value of an hourly rate is part of global changes such as Industry 4.0. Within this framework, aspects such as project valuations or determining remuneration strategies are influenced by a number of important factors related to the level of market saturation, level of competition, as well as technological changes (Stańczyk, Stuss, 2022). Setting an hourly rate is one element of human capital management (Armstrong, 2009, 2011). It is, however, a key task in the case of knowledge-intensive service companies, as its value determines the company's chances, and thus its competitive position in relation to gathering projects from the market primarily from the public procurement market, where the criterion of the lowest price still dominates in practice in construction industry in Poland.

The aim of the article is to present a methodology for determining hourly rates of employees in knowledge-based companies as an element of organisational resilience and building competitive advantage. The proposal of the methodology was developed on the basis of a case study of a specialized engineering company from the construction industry, where this methodology is applied. Despite the growing role of service companies in the economy, there are no known methodologies or guidelines for calculating the hourly rate in service companies, especially the highly knowledge-intensive ones. The literature so far focuses on the calculation of unit manufacturing cost or the calculation of coverage margins primarily for manufacturing companies (Leszczyński, Wnuk-Pel, 2010; Żaba-Nieroda, 2018). Moreover, these methods are based on far-reaching simplifications such as, for example, the assumption of standardised single-assortment production, in which once calculated cost parameters can be effectively replicated in subsequent periods. The proposal of this methodology therefore fills a gap in the area of determining the hourly rate in service activities, in particular knowledgeintensive ones.

2. Specificity of service companies operating in the public procurement market from the perspective of setting hourly rates

Service enterprises are an essential part of any economy, in particular knowledge-based business services (KIBS). KIBS are specialised business, commercial services that create added value through the creation, accumulation and dissemination of professional knowledge, support the development of the knowledge economy by creating and promoting innovation, and stimulate modernisation processes in global value chains (Bohatkiewicz et al., 2017, pp. 475-476). Design companies in the construction industry are an example of such business entities. Below, Table 1 presents the distinguishing characteristics of service activities and the accompanying problem areas in financial management, management accounting and financial controlling that accompany them.

Table 1.

Distinctive features of specialist engineering service companies	Consequences for the area of financial management, management accounting and financial controlling
The heterogeneity of projects and the associated	The impossibility of explicitly calculating the equivalent
difficulty in standardising processes	unit production cost for service activities
The intangible nature of the main activity	High level of variability of the value of direct costs and
	difficulty in their precise planning and sub-budgeting
The company's main potential is related to its human	High level of risk related to the increase in labour costs -
capital, which often carries out activities generating	increasing wage surcharges reduce the company's
high added value; the share of salary costs often	margin, there may be significant deviations between the
exceeds 50% of the company's total costs	implementation and the planned budget
Lack of fixed assets, in particular fixed assets such as	Potentially greater difficulties in obtaining external
real estate, plant and machinery	sources of financing (e.g. loans, credits) due to the lack
	of tangible assets that could serve as collateral

Distinctive features of service activities and accompanying problem areas in financial management, management accounting and financial controlling

Source: own study.

The heterogeneity of projects and the related difficulty in standardising processes means that in such enterprises each project is characterised by an individual specificity connected, among other things, with a different scope, time of realisation, qualifications of project team members who should be involved. Consequently, there is a difficulty in determining such elements of work as e.g.: standard duration of tasks, unit production cost, average variable costs or unit variable costs. Services have the character of an intangible product, for which the basic source of production potential is human capital. Hence, very often wage costs dominate the total cost structure of such companies.

In addition, these companies in the great majority operate in the public procurement market. This means that by signing a contract with a public procurer, it is in practice impossible to increase the remuneration of the contractor (company) due to rising labour costs. In addition, the contractor prepares and submits to the contracting authority a calculation of the costs of performing the contract. The contractual provisions on salary adjustments in the construction industry indicate a closed catalogue of situations in which there would be grounds for an increase. These are mainly such circumstances as change of:

- the rate of tax on goods and services,
- the amount of the minimum wage,
- the principles for being subject to social insurance or health insurance, or the amount of the social insurance or health insurance premium rate,
- the rules of collecting and the amount of payments to Employee Capital Plans (pol. Pracownicze Plany Kapitałowe PPK).

As the literature indicates, cost accounting, as well as analyses concerning it, mostly focus on examples of manufacturing companies, in a minority on commercial companies (Leszczyński, Wnuk-Pel, 2010). Service companies, especially those operating in the public procurement market, are not the subject of research and analysis in terms of such aspects as determining the hourly rate.

It should be pointed out that the hourly rate in such enterprises will depend on a number of factors such as:

- the scope of the employee's work,
- the industry in which the organisation operates,
- the employee's competence and work experience,
- length of service in the undertaking,
- the financial situation of the company, in particular in the area of liquidity (static and dynamic, resulting from cash flows, e.g. as shown in cash flow), profitability (of the whole company, as well as of individual departments, organisational units and projects),
- presence, role and strength of trade union influence,
- development of direct and indirect costs of business activity, as well as general administration costs, sales costs,
- level of indebtedness of the company (value of liabilities due, including overdue liabilities),
- level of planned investments in the organisation,
- the presence and effectiveness of the functioning of such departments as the financial controlling department (especially in the dimension of personnel controlling), as well as management accounting.

As Lawler (1990, p. xi) emphasised, the strategy of a company, in particular its strategic objectives, should be the source for shaping its remuneration strategy. Consequently, also the setting of hourly rates of employees is a process that should grow out of the organisation's strategy and take into account the diverse context and environment of each business activity. Service activities, and in particular knowledge-intensive business services, having in the cost structure the predominance of payroll costs, at the same time base the calculation of the hourly rate precisely on the aspect of direct payroll surcharges, adding then other types of surcharges.

Wage costs include all expenses of a monetary nature, as well as other benefits, paid to employees in connection with their employment in the economic entity, which is subject to calculation according to the principles of statistics and remuneration (Pocztowski, 2008, p. 328). As indicated in the annex to the explanatory notes to the reporting on employment and wages and salaries (GUS), wages and salaries are divided into personal remuneration, impersonal remuneration and fees. Impersonal remuneration refers to persons employed on the basis of a contract for specific work or employment. Personal salaries include the following components (Borkowska, 2001, pp. 12-13):

- basic salary for normal working hours:
 - a) fixed, basic wages, consisting of a basic salary (usually contractually stipulated) and relatively fixed wage supplements,
 - b) changable wage, which includes supplementary wages (wages for time not worked, allowances and lump sums), the variable (movable) part of wages, including perquisites (or perks) (e.g. discretionary bonuses, regulatory bonuses, piecework surplus) and prizes or bonuses payable from profit.

At the same time, it is worth emphasising that the area of personnel controlling and remuneration setting is the responsibility of various entities in organisation in the sphere of human resource management process (Stańczyk, Kuźniarska, 2020, p. 285), so the hourly rate will be the link between the work of many parts of the company's structure.

3. Calculation of the hourly rate based on the example of a specialised service company in the construction industry

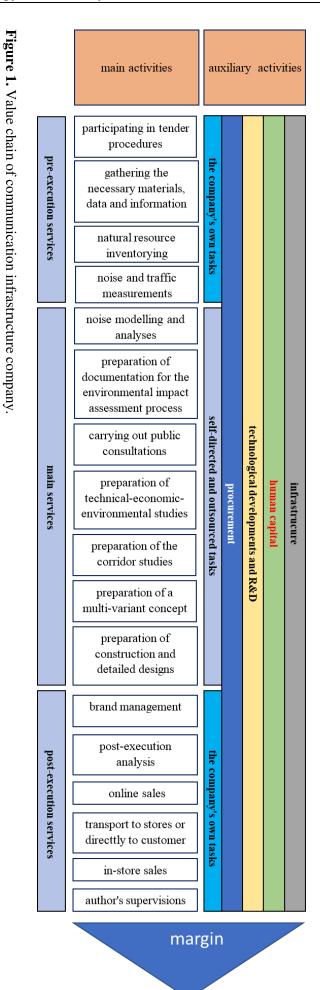
An enterprise from the construction sector in Poland, present on the market for over 22 years, was analysed. The company has 24 employees who work in three main departments. The company's business profile includes the development of design documentation for transport infrastructure, in particular in the field of road infrastructure, engineering structures, traffic engineering, engineering utilities, sewage management. The organisation also carries out studies and environmental analyses serving, among others, to conduct proceedings for issuing

environmental decisions. In addition, the company has a laboratory accredited by the Polish Centre for Accreditation, where the measurements of traffic noise are performed. The company also carries out measurements of traffic volume and vehicle speed. The source of its net sales revenues is in 95% the public procurement market, which at the same time means that among its clients, the dominant group are public finance sector units at both central and local government levels. The company can be classified in the category of knowledge-intensive business services due to the specific nature of its activities. Among the employees there are engineers of technical sciences, in particular with degrees in such fields as civil engineering or acoustics. These are often people with many years of professional experience. In addition, the company also employs doctoral students, persons with doctoral and post-doctoral degrees. The company has repeatedly created guidelines, codes of good practice addressed to all entities in the industry. The top management also participates in the processes of issuing opinions on legislative projects.

Certainly, the activity of this company can be considered a specialised and relatively complex activity, which is best illustrated by the value chain of the communication infrastructure design activity shown in Figure 1 below.

As can be seen, the value chain is divided into auxiliary activities, which include infrastructure management, human capital as one of the most important ones, technological development, research and development, and procurement process. The main activities were divided into pre-execution services, main activities and post-execution activities. The classification and structure of costs in the analysed company is as shown in Table 2 below.

Source: own study.



Project costs	direct costs	direct materials	office supplie	material costs			
			maps, extracts, extracts				
		wages and salaries of staff	net salaries	process costs			
		under employment contracts	employee's surcharges				
			employer's surcharges				
		remuneration of	net salaries				
		subcontractors under civil	employee's surcharges				
		law contracts	employer's surcharges				
		outsourced services]				
	indirect costs/	remuneration of subcontractor					
	divisional	outsourced services					
		indirect materials					
Non-project	overheads	outsourced services					
costs		administrative remuneration					
		administrative the Board of directors					
	sales costs	materials for sales purposes					
		outsourcing services for sales					

Table 2.The cost structure used in a service company

Source: Trentowska (2019), Leszczyński, Wnuk-Pel (2010) and own studies.

As can be seen, in this company costs are divided into project costs (direct and indirect) and non-project costs (overheads and selling costs). This classification serves the enterprise in the budgeting process and also when setting the hourly rate.

Base pay is used in the company, short-term moving wages and long-term moving wages are also used in the company. Fringe benefits (perquisites, perks), also referred to as gratuities (Borkowski, 2001, p. 14; Schmidt, 2000, p. 47) take into account e.g. the possession of company mobile phones or a health care package.

In addition, discretionary bonuses are granted, awarded by management. Bonus rates are set periodically at monthly intervals, usually as 1 - 10% of base pay. The bonuses depend on the level of workload of a given employee in a given settlement unit (in this case it is a month), the quality of work of a given employee in a given month, i.e. they depend, among other things, on the effectiveness of achieving the company's objectives, generating savings in projects (e.g. by reducing the use of direct materials, out-of-the-box design changes, which e.g. limit the scope of work of subcontractors, thus reducing the costs of external services and salaries of non-personnel associates employed under civil law contracts). The value of the bonus is also determined by taking into account the financial results generated by the company as a whole and those relating to the department and unit in which the employee works.

Direct materials, as well as the wages of subcontractors under civil law contracts and subcontractors' external services, are determined as part of the budgeting and pricing process, which takes place at the preparatory stage as part of the process of procuring work (both from the public procurement market and in the case of procuring work from private entities outside of tendering procedures).

This company suffered significantly during the economic crisis that occurred in the construction industry in estimated years between 2012 and 2017. This crisis was largely due to the accumulation of public expenditure on transport infrastructure in a short period of time in connection with the first period of EU funding (2008-2012) and preparations for the organisation of the EURO 2012 European Football Championship in Poland and Ukraine. After the completion of the EURO-related investments and the end of the first round of EU funding, there was a sudden collapse of the public procurement market due to the delay in launching the second round of EU funding (it was planned for 2014-2020, while tenders started to be announced in greater numbers only around 2017). The very small number of works and the simultaneous high saturation of the market with companies of a similar business profile resulted in the fact that both design and contractor companies did not acquire new projects, their net sales revenues fell dramatically, which in turn, in a short period of time, negatively affected both the profitability dimension and debt (e.g. the appearance of trade payables after the due date) and financial liquidity. During this period, the company under review undertook an internal restructuring process aimed at effectively reducing operating costs. Financial controlling was implemented. In addition to such issues as profitability analyses of projects, departments and branches of the company, or the introduction of liquidity management mechanisms, a methodology for calculating hourly rates was also implemented. Thanks to it, hourly rates for all employees were established, as well as the level of average departmental hourly rates.

4. Methodology for determining the hourly rate on the example of the company analysed

Setting an hourly rate is the process of determining the hourly equivalent of an employee's work in such a way that an appropriate multiple of the total hours worked in a given period covers all the costs associated with running a professional knowledge-intensive service activity.

Stage I of calculating the employee's hourly rate involves calculating the quotient of the monthly division costs and the number of employees in a specific department. In this company this distribution key is used, but in other, justified cases it may be better to use a different distribution key, e.g.:

- the number of projects carried out (where the revenue generated by them is similar),
- net revenue from sales of services generated in this division compared with the net revenue from sales of services of the entire company,
- the number of man-hours spent in the department in relation to the number of man-hours of the entire company per month.

As a general rule, the value of departmental costs should be calculated for each month separately, in particular when there are significant discrepancies between the values of departmental costs in individual months, which may be the case in particular in a service enterprise where projects are unique.

Stage II involves adding the value of gross monthly wages and salaries (including employee and employer mark-ups). The inclusion of the employer's full cost is important, because only in this way is it possible to include the total monthly labour costs. In a situation where the planned change in the value of the monthly wage in a specific month is known, the updated value of this wage is used to calculate the employee's hourly rate for that month. Special attention should be paid to the following elements:

- a planned increase in the remuneration of an employee, e.g. in connection with professional promotion, change of position, wage negotiations with the employee or trade unions,
- a planned change in social and health insurance contributions and the rules for their calculation,
- a planned change of contributions within the framework of PPK and the principles of their calculation as well as a possible desire of an employee to join or resign from PPK,
- any planned changes in the increase of surcharges on remuneration resulting from both changing legal regulations and internal regulations (e.g. internal remuneration regulations),
- possible planned encumbrance of remuneration with additional non-salary income such as costs of health care, additional insurance, housing subsidies, holiday subsidies, etc.

There are also those variables that cannot be predicted in advance, e.g. exact salary changes due to unforeseen absences from work (e.g. due to illness, accidents). It is also worth emphasising that it is possible to use total cash compensation, the cost of fixed remuneration, i.e. the annual salary costs including bonuses and premiums, then divided over 12 months or increased by long-term incentives such total performance pay also divided by 12 months.

Stage III of the pay rate calculation involves dividing the sum of the previous operations from stages I and II by the nominal working hours. The number of available working hours should take into account aspects such as:

- holidays and non-working days,
- planned leaves of the employee (e.g. annual leave, maternity leave, parental leave, child care leave, leave on demand, training leave).

It should therefore be noted that Stage III takes into account working time effectively used.

Stage IV is not mandatory, but is characterised by a high level of utility. It consists in dividing the previously obtained rate by an efficiency index. This index determines the estimated percentage of the employee's working hours worked in full focus and efficiency. This index should take into account any breaks in substantive work, resulting not only from the

need to rest, but also e.g. from phone calls, answering e-mails, meetings not directly related to ongoing projects. Therefore, such working time can be defined as the so-called "non-invoiced hours", because, although they occur in every organisation and are also necessary, they do not have a direct impact on the level of generated sales revenue and, consequently, cash flows, so necessary to conduct business activity, especially in turbulent internal and external conditions. In the company analysed, the value of this indicator was assumed at the level of 0.75, which means that 75% of the working time, when the employee is present at work, is effectively used for the benefit of the projects carried out. Making this calculation results in an increase in the hourly rate and at the same time constitutes a realisation of its value.

Thanks to the knowledge on the development of hourly employee rates, a service company gains a tool to shape not only its pricing policy, but above all the possibility to shape its project portfolio in such a way as to ensure that each time the costs of its activities are covered by the generated revenue. Moreover, it becomes possible to analyse changes of particular cost categories on lowering an hourly rate, thanks to which a company may gain price advantage on the public procurement market, where, at least in the construction sector in Poland, the lowest price is still a dominant selection criterion influencing the choice of a contractor, which was also confirmed by the Polish Supreme Audit Office (pol. Najwyższa Izba Kontroli – NIK).

5. Conclusions

Due to the fact that service companies are characterised by a predominance of wage costs in the cost structure, the projects they run are unique and the source of revenue often comes from the public procurement market, the parameter that determines the possibility of obtaining work from the market (and therefore the level of competitiveness) is the hourly rate including total cost surcharges taking into account labour efficiency. The correct determination of the rate translates into the generation of net sales revenues, followed by trade receivables and positive net cash flows. The ability to calculate an hourly rate supports the process of cost optimisation, which can lead to a reduction in its value. This increases the company's chances of acquiring further projects, which again can generate an increase in net sales revenue. There is a kind of feedback loop resulting from the calculation of the hourly rate and the conscious management of the variables that influence its amount. These are shown in Figure 2 below.



Figure 2. Model of determining the hourly rate and its translation into competitive advantage and organisational resilience in KIBS in construction industry. Source: own study.

At the same time it improves the resilience of the company in overcoming financial difficulties primarily in the long term, which was also observed on the example of the analysed company.

Calculation of an hourly rate in specialised service companies requires, first of all, a properly prepared financial and accounting system, which will be able to generate relevant data, regularity, so that the analysis of rates takes place periodically (e.g. once a quarter), as well as precision and meticulousness in determining the hourly rate not only for the whole company or industry, but also for an individual employee (especially in smaller teams).

References

- 1. Armstrong, M. (2009). Zarządzanie wynagrodzeniami. Kraków: Oficyna Wolters Kluwer Business.
- 2. Armstrong, M. (2011). Zarządzanie zasobami ludzkimi. Warszawa: Oficyna Wolters Kluwer Business.
- Bohatkiewicz-Czaicka, J., Gancarczyk, M., Dileo, I. (2017). Knowledge-intensive business services: characteristics, scope and sectoral approach. In: A. Ujwary-Gil, A. Nalepka (Eds.), *Business and non-profit organizations facing increased competition and growing customers' demands* (pp. 469-487). Nowy Sącz: Wyższa Szkoła Biznesu–National-Louis University.
- 4. Concepts used in public statistics. Retrieved from https://stat.gov.pl/metainformacje/slownik-pojec/pojecia-stosowane-w-statystyce-publicznej/608,pojecie.html, 03.05.2022.

- 5. Leszczyński, Z., Wnuk-Pel, T. (2010). Controlling w praktyce. Gdańsk: ODDK.
- 6. Meister, D. H. (2006). Zarządzanie firmą usług profesjonalnych, niezbędny podręcznik dla menedżerów firm usługowych. Gliwice: Helion.
- 7. Oleksyn, T. (2017). *Zarządzanie zasobami ludzkimi w organizacji*. Warszawa: Wolters Kluwer.
- 8. Pocztowski, A. (2008). Zarządzanie zasobami ludzkimi. Strategie, procesy, metody. Warszawa: PWE.
- 9. Sierpińska, M., Sierpińska-Sawicz, A., Węgrzyn, R. (2019). *Controlling finansowy* w przedsiębiorstwie. Warszawa: PWN.
- 10. Sojak, S. (2003). Rachunkowość zarządcza. Toruń: Dom Organizatora.
- 11. Stańczyk, I., Kuźniarska, A. (2020). Role of entities of human resource management in personnel controlling. In: A. Michałkiewicz, W. Mierzejewska, (Eds.), *Contemporary* organisation and management: challenges and trends (pp. 283-297). Łódź: Łódź University Press.
- Stańczyk, I., Stuss, M. (2022). Human resource management 4.0. In: Z. Makieła, M. Stuss, R. Borowiecki (Eds.), *Sustainability, technology and innovation 4.0* (pp. 193-212). London: Routledge.
- 13. Trentowska, M. (2019). *Rachunek kosztów, podstawy rachunkowości zarządczej i zarządzania finansami*. Warszawa: Stowarzyszenie Księgowych w Polsce Instytut Certyfikacji Zawodowej Księgowych.
- 14. Żaba-Nieroda, R. (2018). Budżetowanie jako element planowania w przedsiębiorstwie. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, Vol. 973, No. 1, pp. 205-220.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

MANAGERIAL COMPETENCES IN RELATION TO MANAGEMENT LEVEL - A SURVEY AMONG MANUFACTURERS IN THE SECTOR OF AGRICULTURAL MACHINERY

Wiesław DANIELAK^{1*}, Przemysław NIEWIADOMSKI²

¹University of Zielona Góra, Institute of Management and Quality Sciences; w.danielak@wez.uz.zgora.pl, ORCID: 0000-0002-7319-6847

² University of Zielona Góra, Institute of Management and Quality Sciences; p.niewiadomski@wez.uz.zgora.pl, ORCID: 0000-0002-2805-4671

* Correspondence author

Purpose: The main goal of the research is to recognize the significance of managerial competences at specific management levels (strategic, tactical, operational). Identification of key competences is emphasized, as they constitute a foundation for managerial activity, as well as help to ensure operational continuity in companies.

Design/methodology/approach: Creation of a catalog of competences forming a research model (theoretical layer) has been recommended as indispensable with reference to the outlined goal (by means of a method of reconstruction and interpretation of relevant literature). On this basis (conceptual/design level), it was crucial to assemble a research tool which would be make it possible to analyze literature (theoretical model) and conduct a survey among purposefully selected experts. On the empirical level, this facilitated the recognition of the significance of individual competences in the agricultural machinery sector in relation to specific management levels.

Findings: The collected research material is meant to stimulate the formulation of general and cognitive conclusions. A procedure and a tool that enable such identification of key competences in relation to specific management levels is proposed in the paper. On the one hand, our conviction that there is an economic need for such findings constituted the main inspiration to undertake the research. On the other hand, they conditioned our arrival at the assumed objective. The study proves that it is possible to develop a universal research model which may constitute a backdrop for compilation of a catalog of managerial competences. By means of the developed research model, it was found that, depending on management level, the addressed competences differ in terms of their hierarchy (differentiation of significance).

Research limitations/implications: The article specifies the importance of competences that are relevant to a given strategic, tactical and operational management level. In next step of the undertaken project, current and anticipated levels of their acquisition will be identified and on this basis a competency gap will be defined.

Practical implications: It should be recognized that managerial competences are of considerable importance and as such, they cannot be underestimated by entrepreneurs who are serious about effective functioning in conditions of uncertainty, which prevail in contemporary markets. The information contained in the study makes it possible to improve work, reduce operating costs or speed up procedures, and thus determine successful completion of individual

tasks. Therefore, it is absolutely necessary to agree with the statement that competent managers function as catalysts of an appropriate operational level, as well as reinforce developmental activities. Even if the presented research fails to exhaust the notion of competences, it at least hints at possible business practices. Relatively little scientific recognition of these issues on the one hand, and the complexity of problems in contemporary business practices on the other hand, justify the research direction delineated in this publication.

Social implications: Managerial competences have long been of interest among the representatives of such disciplines as education, economics, sociology or psychology. Despite many studies and analyzes carried out by eminent scientists, as of now, no universal model of competences has been invented. Due to constant changes within societies, viewpoints and priorities among researchers are constantly evolving. Therefore, managerial competences must be treated as a fundamental issue and despite the large-scale scientific diagnosis so far, its further scrutiny is justified.

Originality/value: In the face of the existing uncertainty and geopolitical situation, managerial competences ensure relatively smooth functioning of daily business practices. They arise in the wake of multiple factors (components), such as knowledge, skills, personality traits, attitudes, motivations and experiences. Therefore, it is important to undertake research that would identify the competences and the level of their assimilation by managers.

Keywords: managerial competences, competency model, management level.

Category of the paper: Research paper.

1. Introduction

Effective functioning of a business depends on managers' ability to use its existing potential, but also on their ability to intelligently choose the best solutions, tailored to the needs of a moment and current requirements of the environment (Cockerill, 1989, pp. 52-56). At the time of progressive existential complexity, companies' operational modes are changing. Unique activities, called complex undertakings or projects that require a different approach to management have now become of key importance (Cheng, Dainty, Moore, 2005, pp. 25-37). Nowadays, managers cannot rely on proven solutions, but they have to make decisions and be guided by the flow of ongoing information. The complexity and unpredictability of the contemporary environment leads to the emergence of many threats that are meant to be promptly identified by managers. Oftentimes, observation followed by the right conclusions and adequate remedial actions can determine a company's survival.

Recognition of competences as a critical factor that determines the survival of an organization has become an important feature of the present "era" (Boyatzis, 2008, pp. 5-12), as the probability of survival on the market is determined both by external processes as well as by internal resources. Therefore, it is necessary to take actions aimed at strengthening the competences that are needed for the development of innovation. Apart from resources necessary to create and develop innovations, such as good ideas, breakthrough inventions, money capital and a team of outstanding specialists, regardless of management level, a wellprepared and conscious manager is required. Hence, the focus on the competences of managers considered from the perspective of strategic, tactical and operational management levels.

The issue of managerial competences is one of fundamental issues of modern management and quality sciences because of the lack of a universal competency model.

In the face of the emerging uncertainty and geopolitical situation, competences that ensure daily functioning are of key importance. They involve the accumulation of multiple factors (components), including knowledge, skills, personality traits, attitudes, motivations and experiences. Therefore, it is important to undertake research that would identify the competences and the level of their assimilation by managers, on the one hand, crucial from the point of view of managerial continuity, and on the other hand, adequate to a given management level.

The aim of the article is to recognize the importance of managerial competences that implement management processes depending on management level (strategic, tactical, operational). The research goal is to identify key competences which, on the one hand, constitute a basis for tasks and responsibilities performed by managers, and, on the other hand, help to ensure the continuity of company's operations.

In reference to the outlined goal (using the method of reconstruction and interpretation of relevant literature), it was recommended as indispensable to assemble a catalog of competences that make up the research model (theoretical layer). On this basis (conceptual and design level), it was crucial to compile a research tool based on exploration of literature (theoretical model) and a study conducted among deliberately selected experts. On the empirical level, this made it possible to recognize the significance of individual competences adequately to a specific management level, based on the example of enterprises from agricultural machinery sector.

The collected research material is meant to stimulate formulation of general and cognitive conclusions. The paper proposes a procedure and a tool that make it possible to identify key competences adequately to a specific management level. Our conviction that there is an economic need for such applicable findings constituted the main inspiration to undertake the research, as well as conditioned our arrival at the assumed goal. The study proved that it is possible to develop a universal research model, which may constitute a backdrop for research resulting in the recognition of the catalog of managerial competences. Using the developed research model, it was found that despite the fact that competences articulated in the model differ in terms of their hierarchy (differentiation of significance), they sometimes duplicate at all levels.

The article specifies the importance of competences that are relevant to a given strategic, tactical and operational management level. In next step of the undertaken project, current and anticipated levels of their acquisition will be identified and on this basis a competency gap will be defined.

It should be recognized that managerial competences are of considerable importance and as such, they cannot be underestimated by entrepreneurs who are serious about effective functioning in conditions of uncertainty, which prevail in contemporary markets. The information contained in the study makes it possible to improve work, reduce operating costs or speed up procedures, and thus determine successful completion of individual tasks. Therefore, it is absolutely necessary to agree with the statement that competent managers function as catalysts of an appropriate operational level, as well as reinforce developmental activities. Even if the presented research fails to exhaust the notion of competences, it at least hints at possible business practices.

2. Managerial competences in management and quality sciences - a point of departure

There are many definitions of managerial competences in literature. Most often, they are seen as integrated organizational, conceptual, administrative, technical and interpersonal skills (Nogalski, Śniadecki, 1998, p. 98).

A holistic approach incorporates cognitive competences (knowledge and skills), functional competences (related to professional competences), social competences (contacts and interpersonal relations) and meta-competences, which relate to an active approach to self-development (Delamare Le Deist and Winterton, 2005). They include the ability to acquire and learn new competences, to cope with conditions of uncertainty, as well as to learn about new technological and business solutions.

In managerial competences, leadership and knowledge skills, relational abilities to develop valuable relationships with suppliers, customers and employees, as well as the ability to communicate effectively and motivate employees, as well as teamwork skills are all important (Matysik, 2016, pp. 18-19). Also, understanding people, recognition of their value and personal importance, sense of social responsibility and teamwork, the ability to create positive motivation to work and care for the right atmosphere at work, willingness to take risks and assume responsibility for decisions, care for common interests and values are all crucial (Penc, 2005, p. 124).

Based on the definitions of competences articulated in the literature, it should be indicated that they are basic features of a given person, which reveal a cause-and-effect relationship (measured on the basis of specific criteria), work efficiency and its above-average results achieved during the implementation of a specific task or in a given situation (Spencer, Spencer, 1993, p. 9). This means that competences are recognized as critical and decisive factors in the development of an organization (Kheirmand, Lotfi, Etebarian, 2012, pp. 93-119).

The relationship between success and managerial effectiveness stimulates researchers to make attempts at defining competencies that are the most important for its effectiveness (Kerzner, 2005, p. 162). It is emphasized that the higher the hierarchy, the greater the importance of managerial skills (Taylor, 1911). The dynamically changing business environment emphasizes the need to have skills, thanks to which enterprises will be able to effectively cope in times of constant uncertainty (Allen, de Grip, 2012, pp. 3237-3245).

In addition to professional theoretical knowledge and practical skills, organization of work requires form managers to possess basic leadership competences based on many social and ethical aspects. Although a manager is a person whose competences include planning, making decisions, organizing, motivating and controlling, when analyzing competences and their division, it should be emphasized that they cannot be generalized to all people in managerial positions. For example, the competences of a project or finance manager will not be the same as the competences of a production management.

Shaping managerial competences is a very complex process. It's not just about creating lists. The characteristics of contemporary managers differ from each other, especially due to the variety of functions and management levels. Therefore, a question arises about their level of competences at strategic, tactical or operational management levels, which bestows them with legitimacy to lead.

High correlation between quality and internal skills indicates that the decision to choose a manager can be made on the basis of such skills as: thinking, reasoning, logic, problem solving, and the ability to learn (Gardner, Stough, 2002, pp. 68-78; Carmeli, 2003, pp. 788-813; Fakhreldin, Hattab, 2019, pp. 399-414). These constructs reveal a long-term and stable image of a person and are mainly measured non-verbally. However crucial are general mental abilities (Nazari, 2017, pp. 124-133), analytical, numerical and verbal skills, logical and abstract thinking (Billsberry, Birnik, 2010, pp. 171-178), the ability to visualize, the ability to make decisions and judgments, the speed of information processing as well as the speed and ability to acquire knowledge (Lara, Palacios, Devece, 2012, pp. 1853-1863), in-depth scrutiny of the area delineated by the above problems and own observations of economic practices led the authors of the paper to formulate detailed questions.

Identification of the four basic groups of managerial competences was made by Gordon and Howell in 1959. They distinguished organizational, interpersonal, communication and problem solving skills. Porter and McKibbin (1988) created a similar typology of skills. Considering the importance of managerial competences and managerial roles in managing enterprises, it should be stated that they constitute one of the most basic operational components in companies. For this reason, it is important for development-oriented managerial competences to be rooted in knowledge and experience. Therefore, knowledge can be seen as one of the most important resources of modern enterprises. Managers must be more than ever open to new conditions and operational rules, which primarily result from limitations in the supply chain, remote office practices or the demand for new knowledge (Lara, Salas-Vallina, 2017, pp. 152-160). This requires a fundamental reevaluation of managerial orientation in terms of operational goals and procedures. The process is instituted on several levels (Aslan, Pamukcu, 2017, pp. 1-15), i.e. structural (organization "in the network"), work systems (digitization), technology (agile production systems), organizational procedures and values (emphasis on social responsibility) and competences (creating new knowledge).

Although it is not the authors' role to procure a universally accepted definition of managerial competences, management theory and practice attest that there is still a long way to the adoption of one universally accepted definition. Despite many attempts to agree, there is no consent among researchers as to the meaning of this concept. It is emphasized, however, that the only proper way to practice management and quality sciences would be by means of multiplicity of perceptions, interpretations and influences on the examined fragment of reality. Therefore, such a definition was adopted that makes sense from the perspective of the conditions in which modern managers are expected to function, regardless of their management level. It is also assumed that it can be used consistently in a scientific discourse.

Therefore, it was articulated that managerial competences make up a system of interrelated knowledge, skills, abilities, personality traits, values and attitudes as well as experiences, motivations and behaviors aimed at efficient and effective management from the perspective of strategic, tactical and operational management levels.

The proposed definition is an amalgam of different approaches. The essence of competences presented in literature is relatively dispersed; some of the proposals are limited to reactions, others only to adaptation to changing conditions, yet others limit the scope of competences only to accessible resources. As the conducted research focuses on management levels, the definition of competences highlights the following: (1) the ability to deliberately create, expand or change a manager's potential; (2) the process of integrating, reconfiguring, acquiring and releasing competences in order to be able to react to emerging opportunities, or even spontaneously provoke their appearance; (3) manipulating competences articulated in the research model in order to create specific configurations.

3.1. Construction of the research model - preliminary research

In the first stage, i.e. a preliminary research, the authors used a method of literature analysis. The review (Green, 2005, pp. 270-273) was instituted in three stages, i.e. generation of a literature database, selection of items included in further analysis, and a critical analysis of the selected content (Anello, Fleiss, 1995, pp. 109-116). The methodology of literature review not only allowed for a formalized and objectified synthesis of the current literature (Columb, Lalkhen, 2005, pp. 391-394), but most of all, it made it possible to identify areas important for further research. The primary objective of the preliminary examination was to list key managerial competences in the context of management levels. On this basis, an inventory of 105 competences was developed.

Due to diversified and multifaceted nature of the selected competences, their importance was established by means of expert knowledge (design layer) and a survey technique was used as a research tool. The respondents were asked to indicate the significance of competences articulated in the theoretical research model from the perspective of further research (defining the hierarchy of competences from the perspective of a specific management level). 47 experts were nominated to respond, 37 of whom were from production companies in the agricultural machinery sector (group I), and 7 from research units and non-governmental organizations (group II). Only respondents who possessed knowledge about management (leadership), were qualified for the study, although it did not necessarily have to be attested by formal education. As business people are not prone to declare willingness to participate in research, direct acquaintance between the experts and the researchers constituted an important criterion conducive to cooperation (guarantee of participation in the research). This undoubtedly contributed to high effectiveness and quality of the declared statements.

In the first group, 21 entrepreneurs (56.76%) and 16 managers (43.24%) were invited to respond; 52.38% of the entrepreneurs had higher education, 28.57% - secondary, 19.05% - vocational; 47.61% of them were <50 years old, the age of 33.33% was in the range of 40-50, and the age of 19.05% below 40. The remaining experts (group II) were representatives of: (a) Poznań Institute of Technology - Łukasiewicz Research Network (2 in managerial positions), (b) university (professor of organization and management sciences - head of the department and dr hab. in management and quality sciences - director of institute), (c) the Marshal Office of the Wielkopolska Province (department director), (d) Platforma Fundacja Przemysł Przyszłości (Future Industry Platform) (department director), (e) a consulting company (management strategy consultant).

A large number of variables significantly complicates the possibility of carrying out the research and prevents the formulation of significant conclusions. Time constraints and the need to answer many questions discourage managers from carrying out a thorough self-assessment.

In the context of the above, for the next stage of the research, a list of 21 competences significant from the perspective of a given management level was prepared. The key components were made more operational by means of multiple-choice quetions. Namely, it was assumed that at the later stage of the research, key competences are determined by a subset constituting 20% of their entire set, of which competences concerning strategic (top), tactical (medium) and operational levels (first-line managers) were distinguished. Details are presented in Table 1.

Table 1.

Management level	Competence	General character	Dimension	
	Resistance to stress	Ability to coordinate and		
	Client-orientated attitude	integrate all organizational		
	Managerial intuition	interests and activities. It is an		
	Calculation of risk	ability to perceive the		
Strategic	Strategic/managerial skills (mission,	organization as a whole and	Conceptual	
	vision, strategic goals)	interdependent parts, as well as		
	Cognitive abilities	understand how a change in any		
	Analytical, prognostic, decision-	part of the organization will		
	making abilities	affect the whole		
	Negotiation abilities		Social	
	Communication skills			
	Ambition, occupational passion	Ability to cooperate with other		
Tactical	Motivation	people, understand their needs		
Tactical	Problem-solving skills and motivate		Social	
	Responsibility, reliability			
	Managing relations, focus on			
	cooperation			
	Task and powers delegation skills			
	Production expertise (technology,		Technical	
	production means, production items)			
Operational	Planning and organizational skills	Ability to use tools, methods		
	Ability to create organizational and	and technology in a specific		
	human structures required to operate	specialty		
	highly automated production parks	specialty		
	Creativity and innovation			
	Orientation on development			
	Quick-learning skills			

Research mode	l design -	introduction	to research
---------------	------------	--------------	-------------

Source: own study.

As part of the strategic management level (conceptual dimension), attention was paid to the ability to coordinate and integrate all the interests and organizational activities of an enterprise. The competences that determine the ability to perceive an organization as a whole as well as the interdependence of its parts (systemic approach), as well as to understand how a change in any part of the organization will affect the whole, are indicated. In the context of the above, resistance to stress, client-oriented attitude and managerial intuition were articulated. Strategic and management skills (including the ability to formulate a mission, vision and strategic goals) and the ability to take risks were indicated. It was confirmed that the functioning and effectiveness of a business depend on how managers are able to use the existing potential at this level, but also on whether they are able to intelligently choose the best solutions, tailored to the

needs of the moment and the current requirements of the environment. Therefore, analytical, prognostic and decision-making as well as cognitive skills were indicated. As part of the tactical level (social dimension), attention was paid to competences that determine the ability to exist in a professional environment and create relationships with the environment. Thus, empathy, the ability to understand the needs of colleagues and the ability to motivate them were articulated.

As creation of new products sits at a core of innovative activities for modern companies and delineates the directions of their development, hence the need to acquire knowledge in the area of new technologies and innovations by operational level managers. Due to the need for efficient and timely implementation of complex and largely unique projects, the ability to delegate powers and tasks, production knowledge, organizational and planning skills, as well as the ability to create organizational and human structures are permanently included in the current activity of modern managers. The specificity of the implementation of tasks at the operational level and the features that distinguish them from other activities pose specific requirements for the ability to learn quickly.

The developed research model plays a very important role, because on the one hand it provides a specific picture of reality, and on the other hand, it makes room for further research.

3.2. Verification of the research model - main research

The main study was carried out during the 27th International Fair of Agricultural Technology AGROTECH in Kielce on March 18-20, 2022. 73 interviews were conducted, including 39 entrepreneurs (53.42%) and 34 deliberately selected managers (46.58%) representing production companies operating in the agricultural machinery sector (technical means of agricultural transport). When making the decision to select a particular respondent, his direct acquaintance with the researchers constituted an important criterion. This ensured a degree of independence in the views expressed by the respondents, as well as the expected level of expertise. In the process of selection, respondents' practical experience in managing people was taken into account. They were invited to participate in direct business meetings during which questionnaires were handed in. In our opinion, this contributed to high efficiency and quality of the study. The respondents (26.03%), medium - 45 respondents (61.64%) and large - 3 respondents (4.11%).

The aim of this study was to specify which of the listed competences were of key importance from the perspective of the articulated management level. In the context of a goal which was formulated in this way, the following thesis was adopted: *the level of acquisition of individual competences is affiliated to the management level to which they relate.* Although the competences articulated in the model are important from the point of view of managerial activity, their hierarchy differs from the perspective of strategic, tactical or operational levels.

In order to recognize the significance of individual competences, a five-level scale was used, where 1 meant a low level of competence, and 5 - very high. In the course of the research, the results were interpreted based on respondents' declarations.

4. Own research results

Regardless of management level, modern managers must be open to new trends in the functioning of enterprises resulting primarily from the challenges of globalization, networking, technological innovations for the sake of a competitive advantage and the constant search for new knowledge. The existing competition causes new problems and, above all, tightens the requirements for the competences of the managerial staff.

Although it is not a new issue, managerial competences are nowadays a popular topic and subject of interest of many practitioners and researchers. Although the analysis of the literature indicates that managerial competences have been scrutinized on many occasions, the subject is most typically presented in the form of model sets of competences, regardless of management level and specialization of a given sector. Lack of scientific recognition of managerial profiles in the agricultural machinery sector is definitely noticeable, which became an incentive for the authors to undertake research, whose results are presented in Table 2.

Table 2.

	LEVEL				
COMPETENCE	STRATEGIC	TACTICAL	OPERATIONAL		
	Average indica	Average indications/% for the value of 5 points			
Resistance to stress	4.07 (34.2)	3.47 (15.1)	3.38 (12.3)		
Client-oriented attitude	4.01 (32.9)	4.05 (37.0)	3.82 (30.1)		
Managerial intuition	4.47 (58.9)	4.07 (32.9)	3.62 (21.9)		
Calculation of risk	4.22 (45.2)	4.01 (32.9)	3.07 (9.6)		
Strategic/managerial skills (mission, vision, strategic goals)	4.56 (60.3)	4.33 (45.2)	3.47 (12.3)		
Cognitive abilities	4.19 (38.4)	3.95 (28.8)	3.37 (11.0)		
Analytical, prognostic, decision-making abilities	4.48 (57.5)	4.30 (47.9)	3.84 (27.4)		
Negotiation abilities	4.14 (38.4)	4.23 (43.8)	4.14 (34.2)		
Communication skills	4.30 (45.2)	4.36 (47.9)	4.16 (38.4)		
Ambition, occupational passion	4.00 (30.1)	4.22 (42.5)	3.92 (27.4)		
Motivation	4.29 (43.8)	4.29 (45.2)	4.10 (39.7)		
Problem-solving skills	3.74 (21.9)	4.37 (52.1)	4.36 (53.4)		
Responsibility, reliability	4.11 (30.1)	4.22 (38.4)	4.23 (38.4)		
Managing relations, focus on cooperation	4.36 (45.2)	4.40 (47.9)	4.32 (43.8)		
Task and powers delegation skills	3.89 (34.2)	4.10 (37.0)	4.40 (52.1)		
Production expertise (technology, production means, production items)	3.64 (17.8)	3.99 (34.2)	4.37 (50.7)		
Planning and organizational skills	4.04 (39.7)	4.19 (45.2)	4.33 (49.3)		
Ability to create organizational and human structures required to operate highly automated production parks	3.27 (5.5)	3.49 (15.1)	4.30 (45.2)		

Results of own research - a collective summary

4	7

Cont.	tabl	e 2	

Creativity and innovation	4.16 (34.2)	4.30 (49.3)	4.38 (50.7)
Orientation on development	3.95 (30.1)	4.05 (37.0)	4.16 (41.1)
Quick-learning skills	4.23 (42.5)	4.32 (49.3)	4.44 (56.2)

Source: own study.

Top management of a company (strategic level) is responsible for the entire management, represents the company outside and sets its goals. It is responsible for developing a strategy, allocating resources and deciding on the choice of developmental directions. It is at this level that decisions regarding the general policy of a company are made. In this context, strategic and managerial abilities (4.56; 60.3), analytical, prognostic and decision-making skills (4.48; 57.5) and managerial intuition (4.47; 58.9) are indicated as key top management competences. Also significant from the point of view of the tactical level (middle management), - relationship management (4.36; 45.2), communicativeness (4.30; 45.2) and the ability to motivate (4.29; 43.8) were articulated in the course of the conducted research. It is worth emphasizing that a significant competence of strategic managers was their ability to learn quickly, classified in the research model at the operational level (4.23; 42.5). Taking into account the assessment of significance - articulated in model competences (global approach), from the perspective of the strategic management level, they were classified on position 1 (strategic and management skills), 2 (analytical, prognostic and decision-making skills), 3 (managerial intuition), 8 (risk orientation), 9 (cognitive), 13 (stress resistance), 15 (customer orientation). However, it should be emphasized that all of the above should be learned at a higher level than in the case of operational or tactical levels.

In addition to the implementation of control tasks over the operational level, managers at the tactical (middle) management level control activities related to company's policy, examine deviations from the assumed goals, the legitimacy of the implementation of individual transactions, look for causes of unfavorable results and develop proposals for changes and improvements. The task of tactical management level managers is to monitor the environment and propose actions that optimize negative impact on the company. In the context of the above, attention was paid to their ability to manage relations (4.40; 47.9), to resolve conflicts (4.37; 52.1) as well as to their communication skills (4.36; 47.9), as superior competences characteristic of the tactical level of management. The development of new proposals is based both on internal information and signals from the environment, therefore the competences characteristic of the above, attention was paid to strategic and managerial skills (4.33; 45.2), analytical, prognostic and decision-making skills (4.30; 47.9), as well as to the ability to learn quickly (considered from the perspective of the operational level) (4.32 (49.3) and creativity and innovation (4.30; 49.3).

Taking into account the assessment of the significance of the competences articulated in the model (global approach), those classified under the tactical management level were identified as 1 (relationship management), 2 (conflict resolution skills), 3 (communicativeness),

8 (motivation skills), 9 (negotiation skills), 10 (ambition, professional passion), 11 (responsibility, reliance). At the same time, almost all of the competences should be acquired at a higher level than in the case of the strategic or operational levels. The exception is responsibility where the difference between the level of acquisition for the tactical and operational levels (with the same level of indications (38.4%) for the value of 5 points) is 0.01 in favor of the latter.

At the lowest operational management level, decisions are made regarding the implementation of company's strategy. Managers at this level are responsible for collecting and preparing data and calculations, conducting analyzes, and preparing various techniques and methods used to prepare operational plans. In the process of creating a strategy, the competences of operational level managers are used to build developmental scenarios in order to confront the plans with the actual potential of the company. In this context, attention was paid to managers' ability to learn quickly (4.44; 56.2), to delegate powers and tasks (4.40; 52.1), to creativity and innovation (4.38; 50.7), production knowledge (technology, means of work, work items) 4.37 (50.7) and organizational, planning and design skills (4.33; 49.3). Also indicated was their ability to resolve conflicts (4.36; 53.4) and create relationships (4.32; 43.8) identified at the tactical level. Competences considered from the perspective of the strategic level turned out to be less important from the perspective of the operational management level.

Taking into account the assessment of significance of competences articulated in the model (global approach) from the perspective of the operational management level, they were classified as 1 (the ability to learn quickly), 2 (the ability to delegate powers and tasks, 3 (creativity and innovation), 4 (production knowledge), 6 (organizational, planning and design skills), 8 (the ability to create organizational and human structures required to operate highly automated production parks), 10 (focus on development). Importantly, all of the competences should be acquired at a much higher level than in the case of strategic or tactical levels.

5. Discussion and conclusions

The highest level of management (strategic level) is responsible for the overall management of a given enterprise, it makes strategic decisions, as well as determines the company's development in the long term. Decisions made by managers are therefore related to effective use of the organization's resources. Top-level managers define strategies, indicate which markets to enter, who to connect with, how much to invest or what technology to buy. It should be mentioned here, however, that the approach to strategy management in an organization is changing today and strategy formulation is less and less often separated from its implementation. A more holistic approach to strategy formation or development depicts the process as a series of actions and decisions made by many members of an organization over a period of time. Forming a strategy is more of an organizational learning process related to the accumulation and dispersion of organizational skills. Looking at the strategy in this way, managers at all levels play a very important role. This is confirmed by research results revealing the relationship between strategic tactical and operational levels in terms of importance of individual competences (Table 3).

Table 3.

T .	c .	• 1.•		1 (* 1*
Importance of	t comnetences	' in relation	to managerial levels - a	wn research findings
importance oj	competences	in recurion	to manager tal levels c	with research junantss

Importance	Strategic	Tactical	Operational
1	Strategic and management abilities (mission, vision, strategic goals)	Relationship management, focus on cooperation	Fast learning skill
2	Analytical, prognostic and decision-making skills	Conflict resolution skills	Ability to delegate powers and tasks
3	Managerial intuition	Communicativeness	Creativity and innovation
4	Relationship management, focus on cooperation	Strategic and management abilities (mission, vision, strategic goals)	Production knowledge (technology, means of work, work items)
5	Communicativeness	Fast learning skill	Conflict resolution skills
6	The ability to motivate	Creativity and innovation	Organizational, planning and design skills
7	Fast learning skill	Analytical, prognostic and decision-making skills	Relationship management, focus on cooperation

Source: own study.

The above list makes it possible to postulate that middle managers are responsible for the implementation of goals and strategies developed at the highest management level. Managers of this level also perform advisory functions towards the highest level, and at the same time are responsible for their managed unit of the enterprise and the scope of work assigned to it, even if they relate to the entire company. This is indicated by the necessity to have strategic and management skills as well as analytical, prognostic and decision-making skills characteristic of the highest level. Managers of this level make tactical decisions related to the overall functioning of their organization from the technical, financial, organizational and personnel perspectives. Tactical decisions translate goals set at a higher level into techniques and methods of performing particular tasks, the implementation of which takes place at a lower level. In view of the above, their attitude to cooperation, their ability to resolve conflicts and communication skills are of key importance. However, the ability to learn quickly or manage relationships is characteristic of all levels, as managers lead and cooperate with people as part of their daily routine. Due to the ubiquitous emphasis on teamwork, managers at all levels are responsible both for internal team management as well as for acting as ambassadors to other levels. The relationships that take place between superiors and their subordinates at a given level result in specific expectations of the subordinates from the behavior of their superiors. Also, the behaviors and emotions of superiors influence the behavior, emotions and thinking of subordinates, hence attention was paid to the need to acquire cognitive competences, classifying them as 9 (strategic management level), 19 (tactical management level) and 21 (operational management level), respectively.

As part of strategic and tactical levels, competency links relate to strategic and management skills, analytical, prognostic and decision-making skills, as well as to communication skills. When comparing competences important from the point of view of tactical and operational levels, a convergence in the field of conflict resolution skills, creativity and innovation, and the ability to quickly learn or create relationships are noticeable.

On the basis of the conducted analyzes, it can be presumed that the operational level is occupied by managers of organizational units who directly cooperate with executors of particular tasks. In the work of this managerial group, technical and executive competences prevail. Independence is limited to distribution of tasks and resources necessary for their implementation, and responsibility relates to the implementation of tasks. The lowest-level managers make decisions regarding the performance of the commissioned work or orders issued by the supervisor. At this level, there is a direct relationship between the managers and executors of tasks. Decisions concern specific working routines, have a short-term scope and are related to rational use of resources and are in the course of day-to-day activities. Therefore, the ability to delegate powers and tasks, creativity and innovation, the ability to resolve conflicts and production knowledge including technology, means and production items, as well as organizational, planning and design skills are essential.

The presented research is consistent with the views of many authors dealing with the issue of competences. There is an increased interest in competency models on the part of management theorists and practitioners. There have been a number of publications presenting the results of literature and empirical research on the management of professional competences, competences of employees working in industry, competences of an effective manager, key competences of managerial staff or competency gaps. A competency-based human resource management system is described, attention is drawn to the relationship between competencies and careers as well as management levels. An analysis and evaluation of the possibilities of vocational education was carried out based on the needs of employers, analyzing the professional competences of young people. In many areas, the areas of competence - presented in the publication - are articulated, indicating a specific level of their assimilation. The above allows to postulate that there is a group of competences that are important regardless of the company, market or level of the manager.

6. Conclusions

The material collected in the research procedure as well as in theoretical and empirical scrutiny found their confirmation. The research model created as a result of interviews with experts reflects competences characteristic of particular management levels (strategic, tactical and operational). The study revealed that it is possible to assemble a catalog of competences reflecting areas that are necessary for modern managers regardless of their level. It was found that managers should demonstrate relatively high levels (key competences) of strategic and management skills, as well as managerial intuition (strategic level). In addition, management of relationships (focus on cooperation), conflict resolution and communication skills (tactical level) were indicated. The ability to learn quickly, to delegate powers and tasks, as well as creativity and innovation (operational level) were also articulated. However, building and implementing strategies within which companies will be able to thrive requires acquiring the indicated competences, regardless of management level.

Although there are many works dealing with competences, it should be emphasized that the issues raised are by no means exploited; there are many issues that require scientific explanation, which is manifested by, among others, presented publication. It concerns a significant deficit of knowledge in the field of management and quality sciences, the elimination of which is the subject of desired scientific work. In the context of modern management, the undertaken research problem should be considered as still valid and important. Its solution significantly fills the existing methodological and empirical gap and constitutes a kind of "guide" for contemporary managers.

References

- 1. Allen, J., de Grip, A. (2012). Does skill obsolescence increase the risk of employment loss? *Applied Economics*, 44, pp. 3237-3245.
- 2. Anello, C., Fleiss, J.L. (1995). Exploratory or analytic meta-analysis: should we distinguish between them? *Journal of Clinical Epidemiology*, *48*(*1*), pp. 109-116.
- Aslan, M., Pamukcu, A. (2017). Managerial Competencies and Impact on Management Levels. *International Journal of Advanced Research in Management and Social Sciences*, 6(9), pp. 1-15.
- 4. Billsberry, J., Birnik, A. (2010). Management as a contextual practice: The need to blend science, skills and practical wisdom. *Organization Management Journal*, *7*, pp. 171-178.
- 5. Boyatzis, R.E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), pp. 5-12.

- 6. Carmeli, A. (2003). The relationship between emotional intelligence and work attitudes, behavior and outcomes. *Journal of Managerial Psychology*, *18*, pp. 788-813.
- 7. Cheng, M., Dainty, A.R.J., Moore, D.R. (2005). What makes a good project manager? *Human Resource Management Journal*, *15*(*1*), pp 25-37.
- 8. Cockerill, T. (1989). The kinds of competence for rapid change. *Personnel Management*, 21(9), pp. 52-56.
- 9. Columb, M.O., Lalkhen, A.G. (2005). Systematic reviews & meta-analyses. Current *Anaesthesia & Critical Care, 16(6),* pp. 391-394.
- 10. Delamare Le Deist, F., Winterton, J. (2005). What Is Competence? *Human Resource Development International*, *8*, *1*, pp. 27-46.
- 11. Fakhreldin, H., Hattab, H. (2019). The effect of emotional intelligence on entrepreneurial behaviour and new venture creation: An Egyptian perspective. *IJESB*, *37*, pp. 399-414.
- 12. Gardner, L., Stough, C. (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organization Development Journal*, 23, pp. 68-78.
- 13. Gordon, R.A., Howell, J.E. (1959). Higher Education for Business. New York: Garland.
- 14. Green, S. (2005). Systematic reviews and meta-analysis. *Singapore Medical Journal*, 46(6), pp. 270-273.
- 15. Kerzner, H. (2005). Project Management. New York: John Wiley & Sons.
- Kheirmand, M., Lotfi, H., Etebarian, A. (2012). Study the Relationship Between Management Skills of Agricultural Bank Managers of Esfahan Province with The Performance of The Branches. *Quarterly Journal of Management and Development Process*, 25(3), pp. 93-119.
- Lara, F.J., Palacios, D., Devece, C. (2012). How to improve organizational results through knowledge management in knowledge-intensive business services. *Services Industrial Journal*, 32(11), pp. 1853-1863.
- Lara, F.J., Salas-Vallina, A. (2017). Managerial competencies, innovation and engagement in SMEs: The mediating role of organizational learning. *Journal of Business Research*, 79, pp. 152-160.
- 19. Le Deist, F.D., Winterton, J. (2005). What is competence? *Human Resource Development International*, 8(1), pp. 27-46.
- 20. Matysik, S. (2016). Kompetencje pracownicze jako element strategii przedsiębiorstwa. *Zeszyty Naukowe Politechniki Częstochowskiej, 24(2),* pp. 17-26.
- Nazari, R. (2017). The Impact of Mental Skills on Management Skills and Selecting Management Models on Sports Managers. *International Journal of Science and Sport, 24*, pp. 124-133.
- 22. Nogalski, B., Śniadecki, J. (1988). *Kształtowanie kompetencji menedżerskich*. Bydgoszcz: TNOIK, p. 98.
- 23. Penc, J. (2003). Menedżer w działaniu. Warszawa: C.H. Beck.

- 24. Porter, L.W., McKibbin, L.E. (1988). *Management Education and Development: Drift or Thrust into the Twenty-First Century.* St. Louis, MO: AACSB.
- 25. Spencer, L.M., Spencer, S.M. (1993). Competence at work. New York: Wiley.
- 26. Taylor, F.W. (1911). The Principles of Scientific Management. New York: Harper.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

PROFESSIONAL BURNOUT OF POLISH EMPLOYEES IN ENTERPRISES DURING THE COVID-19 PANDEMIC

Karolina DRELA

University of Szczecin, Institute of Management, Faculty of Economics, Finance and Management; karolina.drela@usz.edu.pl, ORCID: 0000-0003-0358-7938

Purpose: The aim of this article is to present professional burnout of employees in the workplace during the COVID-19 pandemic and to address the following research question: how has the COVID-19 pandemic affected the phenomenon of professional burnout and is there a high frequency of burnout in Polish enterprises and is it a serious problem that has a negative impact on all working people?

Design/methodology/approach: The research methods used in the paper include: a critical analysis of source literature, survey method, and analysis of primary data. The paper presents the results of the original studies carried out in Poland in 2020.

Findings: The results of the research presented in the article reveal that Polish workplaces show a high frequency of professional burnout and that this is a serious problem having a negative impact on all working individuals. Large groups of people are professionally burnt out and there are also individuals who exhibit symptoms preceding burnout and – because of the lack of knowledge – they cannot determine themselves whether the problem at hand affects them. It was also proven that burnout occurs more often in large workplaces and in professions involving contacts with clients. It was also shown that a considerable number of employers and employees do not possess knowledge of the issue and that the syndrome is frequently disregarded.

Research limitations/implications: Since the examined issue is wide and multifaceted, the article discusses only the most important problem professionally burnout.

Originality/value: The issues presented in the article, concerning professional burnout, have not never been studied in a pandemic crisis situation. Examining selected aspects of professional burnout can extend knowledge of Polish organisations in connection with COVID-19.

Keywords: professional burnout, burnout, pandemic, organisation, COVID-19.

Category of the paper: Research paper.

1. Introduction

The COVID-19 pandemic has led to a situation where people from all around the world are struggling with elevated anxiety and depression at work and problems with mental health at work have a negative effect on personal life. Therefore, it is highly advisable to present professional burnout as a serious problem and to show its high incidence and strong effect on people working in various organisations. The paper aims to present the professional burnout of employees in the workplace during the COVID-19 pandemic. The study asks the research question: how has the COVID-19 pandemic affected the phenomenon of professional burnout and is there a high frequency of burnout in Polish enterprises and is it a serious problem that has a negative impact on all working people? Therefore, it is very advisable to present burnout as a serious problem and show its high incidence and strong impact on people working in various organizations in this difficult time of the pandemic. The paper presents the results of the original studies carried out in Poland in 2020.

In order to achieve the research objective, the first part of the article presents a literature review, the second part pertains to research related to professionally burnout during the COVID-19 pandemic as well as the analysis of own research (related to the West Pomeranian Voivodeship). The article ends with conclusions drawn from empirical research.

2. Literature review

The phenomenon of professional burnout can affect anyone in any job. Matthias Burisch (1989; Litzke, Schuh, 2007) stated as follows: "There is no such profession where there is no risk of burnout in one form or another", but the highest propensity to develop it is exhibited by the individuals who pursue professions with close interpersonal contact and who are full of commitment. These include such profession groups as physicians, nurses, educators, psychologists, psychiatrists, social workers, police officers, priests or employment counsellors in public offices (Mańkowska, 2017). The professional burnout syndrome develops when work ceases to be rewarding, the employee stops to develop professionally and feels overworked and unsatisfied with the performed activity, which was once pleasurable. The individuals who devote themselves to the job completely and performs it wholeheartedly and who have high expectations of themselves and stop looking at their needs are the textbook examples of people exposed to burnout (Litzke, Schuh, 2007).

It is more and more the case that the phenomenon is described using the term "professional suitability" (Erenkfeit, Dudzińska, Indyk, 2012), which means the co-creation of the individual and place in terms of professional work spheres. The factor necessary to create improper

changes resulting in professional burnout is stress in tandem with the lack of balance between the requirements of the workplace and the resources of the individual.

A lot of workplaces realise that refining work and developing the enterprise is made possible thanks to a high level of knowledge possessed by employees, commitment and the sense of responsibility for the future of the organisation (Zając, Kulig-Moskwa, 2014). However, achieving such a level requires them to develop knowledge individually, use their experience to solve problems and do well in teamwork. Their contribution to the growth of the enterprise is not narrowed down to exchange of information only, but it also involves mutual satisfaction of needs, inspiration of motivation, joint activity and correction of inadequate attitudes and behaviours. Employees who can participate in the development of their enterprise, train themselves and raise their skills is more satisfied from the workplace, which translates into their mental comfort. As a result, they are less prone to develop professional burnout.

The first attempts at defining the term were chiefly based on observations of human behaviour in the work environment and were speculative in nature (Bilska, 2004). The very term "professional burnout" appeared in the psychological literature in mid-1970s – in 1974. Herbert Freudenberger (1974), an American psychoanalyst, wrote an article to the Journal of Social Issue, where he used the term "burnout" to characterise the state of exhaustion of the individual overloaded with tasks imposed on him or her by the work environment. Freudenberger optimistically showed volunteers who worked in a centre in New York for juvenile drug addicts. Despite their willingness and efforts, their devotion did not bring the expected results. Already a year in, they started to lack motivation and were losing energy for further work. He also observed that despite all their efforts, they did not receive any support or recognition.

To the extent similar to that of Freudenberger, the burnout was also studied by Christine Maslach (2000), social psychologist (Mańkowska, 2017), who examined how people cope with their emotions at work (Tucholska, 2001). She was interested in how the given individuals cope with the tension related to the work they do. She interviewed different people working in the healthcare system and she concluded from her results that the emotions accompanying the contact with suffering people lead to strong emotional tensions. It led to the situation where the individuals, initially very involved in their work, felt emotionally exhausted and deprived of emotional reactions to the situation of those in need. Based on her further studies, she learnt that a similar phenomenon, colloquially referred to as burnout, refers to other professions where a caring relation is required between the carer and the person being cared for (Bilska, 2004). In the article titled "Burned out" published in 1976, Maslach (1976) described the conclusions she drew from her studies.

In the 1980s, studies into burnout were already targeted at larger populations. Specially developed questionnaires started to be used. The one with the most significant psychometric properties is the Maslach Burnout Inventory (MBI), prepared by Ch. Maslach and her co-worker Susan Jackson (Maslach, Jackson, 1981; Sęk, 2000). Till this day, the inventory is

used by individuals verifying the phenomenon of burnout. The instrument was compiled on the basis of studies and the approach to the problem of professional burnout.

At the close of the 1980s, the topic of professional burnout reached Poland. In 1990, an international conference on this phenomenon was organised in the Jagiellonian University in Kraków. It was organised thanks to professor Tadeusz Marek from the Institute of Applied Psychology at the Jagiellonian University (Podobińska, 2022). The meeting led to the commencement of scientific studies into the issue of professional burnout, which contributed to the publication of a multi-author publication edited by Helena Sęk, titled "Professional burnout. Causes, mechanisms, prevention" (Sęk, 2000; Maslach, Leiter, 2011).

Some agreement can be seen among researchers as to one of the symptoms of professional burnout: physical, emotional and mental exhaustion, associated with the lack of energy, feeling of depression and a negative attitude towards oneself, work and life (Sęk, 2000; Pines, 2000; Schaufeli, Maslach, Marek, 2017; Weber-Rajek, Sygit-Kowalkowska, Radzimińska, Ossowski, 2017; Madej, Makara-Studzińska, 2019).

3. Methods

The initial study was carried out in April 2020 on a group of 53 respondents as such a number of individuals expressed willingness to fill out the survey form. Not everyone could be enrolled because the questions were directed only to people working at the time. The study aimed to collect opinions on the professional burnout syndrome in Polish workplaces in the West Pomeranian Voivodeship. The attitude of the respondents to the performed work was examined and the causes leading to professional burnout and their consequences were analysed. The aim was to prove the stated hypothesis that professional burnout is a serious problem affecting a lot of employees in Polish workplaces.

The survey was conducted by means of an online survey form. The method allowed to quickly examine a large group of individuals without the need for additional direct contact, which also made it easier to carry out the study during the COVID-19 pandemic. Thanks to an anonymous survey form, the respondents could give honest answers, which was conducive to the reliability of the opinion analysis. The survey consisted of 28 questions, which also included questions about personal details. The survey form could be filled in only by working people as the questions referred directly to the profession pursued by the respondents. A great part of the questions were closed questions, there were 5 open questions and some closed questions included the option to add an extra explanatory answer. During the construction of the survey form, the following factors were specified: atmosphere at work, nature of work and seniority, work organisation, applied motivators and symptoms and effects of burnout.

4. Results - professional burnout and COVID-19: case study

The respondents were at various age. Individuals at the age 21 through 67 participated in the study. The respondents were divided into 5 age groups: 21 through 26, i.e. people who are usually students; 27 through 32, i.e. people who have already completed their studies and are mostly working full-time; 33 through 38, i.e. working people having their families, bank loans and usually permanent jobs; 39 through 44, i.e. people with a long professional experience; and above 44. The largest age group participating in the study was the 21 through 26 age group (41%). The above 44 age group was the smallest (8%).

Presenting the division of the analyzed group by gender, 66% of the respondents were women and 34% were men. Over a half of the respondents had higher education, 40% – secondary education, and 2% – vocational education. Answers regarding the seniority in the given organisation indicated that the most people worked in the given workplace for up to 2 years (34%) and the fewest people – from 6 to 8 (11%).

The largest group of respondents worked in large enterprises employing over 250 people (55%) and the smallest – in small (13%) and medium-sized enterprise (13%).

The evaluation of the respondents leads to the conclusion that the survey form was filled out mostly by people at a young age, who were starting their professional career, and people at the age 33 through 38, who already have considerable experience, which is reflected by their seniority. Most people worked in large corporations where one can encounter the phenomenon of professional burnout.

Willing to obtain data on the professional burnout syndrome in workplaces, the respondents were asked detailed questions about their attitude to work. The different answers were also presented graphically in order to facilitate the analysis of individual opinions.

To the first question, which assessed whether the respondents were burdened with their work, 68% of them answered that they were and 32% of them – that they were not.

In the next question about whether the respondents felt stressed when performing their work duties, they could select the frequency rate of stress. The highest group, i.e. 38%, declared that stress accompanied them several times a week and the smallest group, i.e. 11%, stated that they rarely felt stressed at work.

The respondents were also asked to determine the degree to which they are satisfied with the performed work. In a range from 1 to 5, where 1 meant "unsatisfied" and 5 meant "very satisfied", most (34%) respondents evaluated their satisfaction as 3.

In the question determining whether the respondents worked longer than what their contracts provided for, the most frequently marked answer (34%) was that they did overtime several times a month. 17% of the respondents claimed that they did overtime several times a week.

Furthermore, a question was asked about contacts with co-workers. The question referred to support from other employees in the workplace. The respondents were to determine whether they felt supported by others or not. Most of them, i.e. 68%, stated that they felt such support and 32% claimed that there was no such support in their workplace.

11% of the respondents put in their own answers and stated that the following is significant:

- satisfaction with the profession, but not the type of the performed work,
- the performed work that satisfies the ambitions, but the related work responsibility overwhelms the individual,
- work that is not fully satisfying and if possible, they would do something different,
- the work is at odds with the interests of the individual,
- the willingness of expand knowledge of the pursued profession, but in a different workplace.

In the analysis of work-related fatigue, the respondents were to specify the degree of fatigue. In a range from 1 to 5, where 1 meant "no fatigue" and 5 meant "constant fatigue", the respondents evaluated their satisfaction as 3.4 on average. The most respondents (36%) determined it as 4 and the fewest (9%) - at 1.

One of the questions also examined the respondents' attitude to work. In a range from 1 to 5, where 1 meant "negative attitude" and 5 meant "positive attitude", the respondents evaluated their satisfaction as 3.3 on average. The most respondents (32%) determined it as 4 and the fewest (11%) - at 1.

Moreover, the respondents were asked whether they observed any negative symptoms related to burnout in themselves. They could choose from 13 different symptoms and mark several answers simultaneously. In addition, field for their own comments was set apart. The highest number of answers indicated the sensation of irritation and unwillingness to work -66% and 35\%, respectively. In the field for their own opinions, the respondents added nervousness and boredom and 6% did not observe any symptoms, as depicted in Figure 1.

Continuing the topic of the professional burnout syndrome, the respondents were asked the most common causes of burnout according to them. The most questions pointed to the lack of appreciation, and insufficient earnings – 66% and 62%, respectively. This is shown by Figure 2. The lowest number of the respondents marked the cause of too high ambitions – 13%. As in the previous question, it was possible to add one's own opinion, where the respondents stated that the causes also include: excessive bureaucracy, different earnings for the same seniority and position and unequal division of duties.

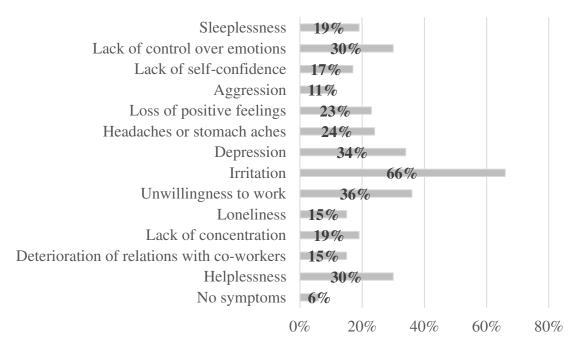


Figure 1. Symptoms of professional burnout observed in the respondents. Source: own study.

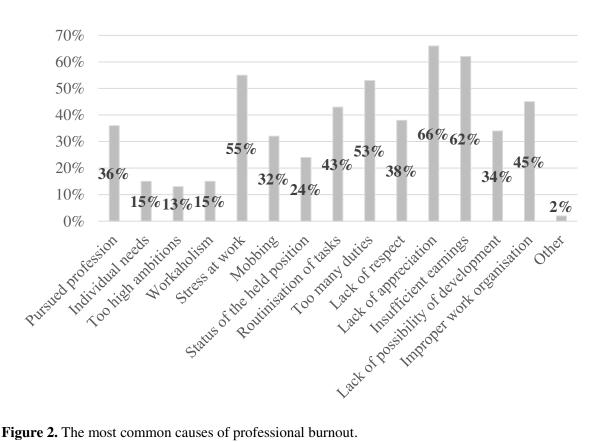


Figure 2. The most common causes of professional burnout. Source: own study.

In another question, the respondents were asked to evaluate their performance against their organisation. In a range from 1 to 5, where 1 meant "poor performance" and 5 meant "the best performance", the respondents evaluated their satisfaction as 4 on average. The most respondents (47%) determined it as 4 and the fewest (24%) – at 5. None of the respondents marked number 1 and 2, which indicated poor performance.

Figure 3 illustrates the answers given to the question of whether the respondents thought about their professional duties after they left their workplace. Most respondents (41%) answered that it happened to them to think about them and the fewest respondents (24%) stated that they did not think about their professional duties after work.

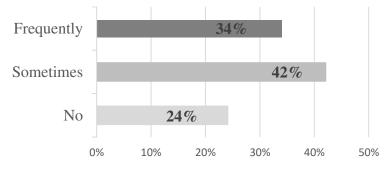


Figure 3. Thinking about professional duties outside work. Source: own study.

To the question about the sensation of anxiety in contact with others, 21% of the respondents stated that they felt anxiety in contact with others and 79% answered that they did not.

All respondents were also asked how many times they had used sick leave in the previous year. 43% of the respondents had not used any and 23% had used it over 3 times. The smallest group of respondents marked the answer that they had gone on sick leave only once (15%).

Another question of note was the one about where the respondents sought help if they had problems at work. The highest number of the respondents (60%) answered that they ask their family for help and the lowest number of respondents reported to a specialist and their employer. In addition, it was possible to add one's own opinion, where the respondents stated that they did not seek help but dealt with their difficulties along and that they did not share their problems or that they did not have time to worry about their professional problems.

The answer to the last closed question was illustrated in Figure 4. The question mostly regarded the awareness of the phenomenon of professional burnout. The respondents were asked whether the problem of burnout affected them. Most of them (43%) answered that the issue of burnout did not. 23% stated that they suffer from professional burnout and 34% did not know whether they were affected by the phenomenon.

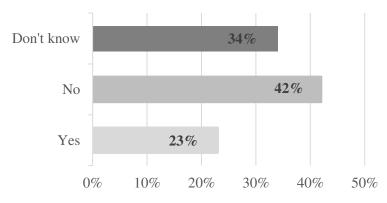


Figure 4. Thinking about professional duties outside work. Source: own study.

The survey was to indicate the frequency, symptoms and consequences of professional burnout in Polish workplaces. Each respondent provided answers according to his or her profession, seniority and professional experience. In the key question regarding whether the respondents felt that they suffered from professional burnout, most of them answered in the negative, which was a positive response and showed that the syndrome did not affect most members of the society. However, 23% of the respondents claimed that they suffered from the problem and 34% did not know whether they were affected by it or not, which – unfortunately – shows that these individuals could suffer from burnout, but they were not aware of it or did not have the knowledge of what symptoms and consequences it was connected with. Such conclusions about a part of the respondents are also confirmed by their other answers, where – in the question about work overload – 89% of them did not know whether they were affected by the syndrome and answered that they felt overburdened with work. In addition, in the question about the observed symptoms, the same respondents (each one of them) marked more than 2 out of all listed symptoms of professional burnout.

5. Discussion

The analysis of the answers gathered in relation to professional burnout indicated that the individuals working in large workplaces are most often affected by professional burnout. Unfortunately, working in large corporations is connected with never-ending rush and expectation of high performance, all accompanied by stress. In the question about stress, only 11% of the respondents pointed out that they rarely felt stress. The other respondents were burdened with stress at least once a week, which is disconcerting as it is related to mental and physical strain for the given individual. Unfortunately, in the first survey question, about professional burden, as many as 68% of the respondents stated that they struggled with the problem. How employees evaluate the burden they experience is a significant aspect. If high load is understood as a difficulty and a barrier in performing work, it integrates with

commitment and motivation in a sceptical manner. If, however, the duties and load imposed by work are seen as a challenge that the individual wishes to live up to, it is positively correlated with commitment to work.

A large part of the respondents struggling with burdening worked in professions requiring constant contact with the client. The most common positions were hotline consultant, client advisor, sellers and couriers. Most of these people were young, between 22 to 26 years of age. This means that young people with high ambition and eagerness are, unfortunately, at risk of burning out quickly.

The examined attitude to work of the respondents was neither positive nor negative. The respondents delineated a border between these two extreme answers, just like in the question about the satisfaction from the performed work. This may result from many factors, for instance the nature of the performed duties, the atmosphere at work, remuneration or the pursued profession.

The survey form included an open question where the respondents were asked to describe the nature of their duties. Most of them characterised their duties as boring and monotonous, which – unfortunately – is not conducive to the willingness to perform them as the time spent at work seems longer and the employee does not expand his or her knowledge in any way, thus failing to grow. There was a smaller group of positive answers characterising the professional duties as interesting, developing and innovative. However, attention also needs to be drawn to the answers describing the tasks performed at work as mentally burdening, exceeding the capacity of the employee, stressful, tiring and exhausting. Unfortunately, the performance of tasks that affect the given individual negatively lead to consequences not only for the employee, but also for the organisation. Such individuals make more mistakes, suffer from extra stress and are distracted as well as they sustain additional costs and bring losses on the organisation. To finish the tasks or solve the problems or related mistakes, many people perform their professional duties at home or outside their working hours. In one of the questions, 72% of the respondents answered that they worked longer than what their contracts provided for and 75% of them sometimes thought about their professional duties outside work. Therefore, some respondents declared in one of the questions that they felt fatigued with work. Overworking leads to various health consequences, which has a negative effect on the wellbeing of the employee. One of the questions shows that 57% of the respondents used at least one sick leave in 2019 and it is possible that it was related to the excess of work. In such a situation, contact with the employer is important so that duties can be determined which will be adapted to the employee and his or her work time. In the question that follows the respondents were asked to describe the contact with their employer. More individuals presented the relation as stressful, rare, hard, weird and, first and foremost, limited and devoid of understanding for the employee. A smaller group declared that the contact is good and free. Proper contact with the employer not only boosts work performance, but it also has a significant psychological importance. The employees who perceive their employers as trustworthy and

65

willing to help and seek solutions will not have doubts whether or not to notify their superior of difficulties, which will make work organisation easier and improve the attitude of the employee. Contact not only with the superior, but also with the co-workers is significant. In the question regarding support from other co-workers, 68% of the respondents answered that their communication with co-workers is proper and that they feel supported by them. However, 32% of the respondents answered that they did not have such support. In the question concerning where the respondents sought help in the case of professional problems, most answers regarded family and friends outside work. Unfortunately, bringing professional problems into the private life is not a good solution because along with it, negative emotions and thoughts are brought as well. In addition, negative emotions and stress lead to conflicts in family relations the loss of general life satisfaction. Improper relations in the organisation affect the atmosphere and comfort at work. Unfortunately, the individuals who are not supported by their employer or co-workers, become burdened with all tasks and duties without control or help. Some people can be overwhelmed by such a situation and they will have a negative attitude towards their work or - because of the lack of knowledge - they will make mistakes, which will decrease their performance. A negative effect of such emotionally and mentally burdening situations is the feeling of anxiety during contact with others. In the question where the respondents were asked whether they felt such anxiety, most answered in the negative, but 21% admitted that had such anxiety. Unfortunately, this is a serious problem which leads to loneliness, helplessness, low self-confidence and isolation from others, which are the main symptoms of professional burnout.

In order to check the opinions and knowledge of the respondents, they were asked to mark the symptoms which according to them are the most common in the professional burnout syndrome. Most answers involved the lack of appreciation and insufficient earnings. Examining the satisfaction of the respondents from the earnings, it might be concluded that employees are not satisfied with their remuneration. Individuals holding higher rank positions, such as accountants or forwarders, were satisfied with their remuneration. In addition, one of the questions shows that some organisations did not have any motivating tools that would support the work in the given workplace. In addition, 47% of the respondents answered that work did not fulfil their expectations and ambitions.

6. Conclusions

Professional work is an immensely important part of human life. In addition, nowadays it is difficult to keep moderation in the face of never-ending haste and fight for the best position as this is related to social prestige. Usually, excessive time spent on work at the expense of private life also leads to effects that are disastrous for the individual. An important role is played by the attitude of both the employee and the workplace, which should create proper work conditions. Professional burnout is dangerous for the individual, causing negative effects, but it also negatively affects the atmosphere at work and the employee's performance, which is also unfavourable for the employer. The consequences of burnout are suffered not only by the employee, but also by the employer – through decreased performance of the employee, increased number of mistakes made by him or her and costs resulting from absence. Burnt out individual are a threat to the development and effectiveness of the organisation.

As proven by the conducted studies, a vast majority of employees struggle with the professional burnout syndrome. Even if the given individual does not identify the syndrome in himself or herself, it can be diagnosed on the basis of its symptoms and attitude to work and private life. This is shown not only by Polish studies, but also by investigations from all over the world. Unfortunately, the problem affects young people extensively, who are full of positive energy to work and high ambitions but become discouraged from further developing their professional life. Causes of professional burnout are highly individual, but analyses of the problem made it easier to determine a range of factors increasing the risk of burnout. These are aspects integrated with the character and temperament of the employee, his or her style of functioning in the workplace and aspects related to the organisation, including the motivation system, manners and managing styles.

The aim of the paper was achieved on the basis of the literature and the survey carried out on a group of individuals. The study confirmed the hypothesis that the Polish workplaces show a high frequency of professional burnout and that this is a serious problem having a negative impact on all working individuals. Thanks to the analysis of the study, it can be concluded that a large group of people are professionally burnt out and that there are also individuals who exhibit symptoms preceding burnout and – because of the lack of knowledge – they cannot determine themselves whether the problem at hand affects them. The causes and symptoms of the syndrome were presented, which are connected with negative consequences for the employee and the entire workplace environment. It was also proven that burnout occurs more often in large workplaces and in professions involving contacts with clients. It was also shown that a considerable number of employers and employees do not possess knowledge of the issue and that the syndrome is frequently disregarded.

Acknowledgements

The project is financed within the framework of the program of the Minister of Science and Higher Education under the name "Regional Excellence Initiative" in the years 2019-2022; project number 001/RID/2018/19; the amount of financing PLN 10,684,000.00.

References

- 1. Bilska, E. (2004). Jak Feniks z popiołów, czyli syndrom wypalenia zawodowego. *Niebieska linia*, *No. 4*.
- 2. Burisch, M. (1989). *Das Burnout-Syndrom. Theorie der inneren Erschöpfung*. Berlin-Heidelberg: Springer-Verlag.
- 3. Erenkfeit, K., Dudzińska, L., Indyk, A. (2012). Wpływ środowiska pracy na powstanie wypalenia zawodowego. *Medycyna środowiskowa, Vol. 3, No. 15*, pp. 121-128.
- 4. Freudenberger, H. (1974). Staff Burnout. Journal of Social Issues, No. 30.
- 5. Litzke, S.M., Schuh, H. (2007). *Stres, mobbing i wypalenie zawodowe*. Gdańsk: GWP sp. z o.o.
- Madej, A., Makara-Studzińska, M. (2019). Wypalenie zawodowe wśród grupy pracowników ochrony osób i mienia. *Problemy Higieny i Epidemiologii, Vol. 100, No. 1*, pp. 18-22.
- 7. Mańkowska, B. (2017). Wypalenie zawodowe. Gdańsk: Grupa Harmonia.
- 8. Maslach, Ch. (1976). Burned-Out. Human Relations, Vol. 5, No. 9.
- 9. Maslach, Ch., Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, *No.* 2.
- 10. Maslach, Ch., Leiter, M.P. (2011). Prawda o wypaleniu zawodowym. Warszawa: PWN.
- 11. Maslach. Ch. (2000). Wypalenie w perspektywie wielowymiarowej. In: H. Sęk (Ed.), *Wypalenie zawodowe: przyczyny, mechanizmy, zapobieganie*. Warszawa: PWN, pp. 13-31.
- 12. Pines, A.M. (2000). Wypalenie w perspektywie egzystencjalnej. In: H. Sęk (Ed.), *Wypalenie zawodowe: przyczyny, mechanizmy, zapobieganie*. Warszawa: PWN, pp. 32-57.
- Podobińska, E. (2022). Wypalenie zawodowe od A do Z. Retrieved from www.nauka.uj.edu.pl/aktualnosci/-/journal_content/56_INSTANCE_Sz8leL0jYQen/ 74541952/140683548, 20.05.2022.
- 14. Schaufeli, W.B., Maslach, Ch., Marek, T. (2017). *Professional Burnout. Recent Developments in Theory and Research*. Washington, DC: Taylor & Francis.
- 15. Sęk, H. (2000). Uwarunkowania i mechanizmy wypalenia zawodowego w modelu społecznej psychologii poznawczej, In: H. Sęk (Ed.), *Wypalenie zawodowe: przyczyny, mechanizmy, zapobieganie*. Warszawa: PWN, pp. 83-112.
- 16. Tucholska, S. (2001). Christiny Maslach koncepcja wypalenia zawodowego: etapy rozwoju. *Przegląd Psychologiczny*, *No. 3*.
- Weber-Rajek, M., Sygit-Kowalkowska, E., Radzimińska, A., Ossowski, R. (2017). Psychologiczne zagrożenia w pracy funkcjonariuszy Służby Więziennej – przegląd literatury. *Studia Prawnoustrojowe, No. 36*, pp. 41-52.
- 18. Zając, C., Kulig-Moskwa, K. (2014). Zarządzanie zasobami ludzkimi w teorii i praktyce. Zeszyty Naukowe Wyższej Szkoły Bankowej we Wrocławiu, No. 8.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

RELATIONS BETWEEN EXPOSURE TO AND ACCEPTANCE OF MOBBING – AN EXPLORATIVE STUDY ON A SAMPLE OF POLISH EMPLOYEES

Katarzyna DURNIAT

Institute of Psychology, Faculty of Historical and Pedagogical Sciences, University of Wrocław, Poland; katarzyna.durniat@uwr.edu.pl, ORCID: 0000-0002-4830-5044

Purpose: The aim of the study was to research how mobbing is experienced and (un)accepted by the employees of Polish organizations, and to check whether there are relations between experiencing and accepting mobbing behaviours.

Design/methodology/approach: A quantitative study was conducted at the turn of 2019/2020 on a heterogeneous sample (N = 470) of Polish employees. The study was carried out with the implementation of the basic, 64-item version of the SDM Questionnaire, which is a validated (accurate, reliable) and normalized Polish psychometric tool for measuring workplace mobbing. It consists of 2 main scales: an SDM-IDM behavioural scale (Cronbach's $\alpha = 0.96$), and an SDM-ODC cognitive-emotional scale (Cronbach's $\alpha = 0.97$). Mobbing un(acceptance) was measured with a 43-item SDM-A scale, which was built upon the behavioural SDM-IDM scale. Due to the skewed scores' distribution, the statistical analyses were conducted with the implementation of non-parametric tests.

Findings: The research results indicate that the acceptance of mobbing behaviours is just marginal between Polish employees, however men are more predisposed than women to accept mobbing in the workplace. Moreover, the research shows that the level of mobbing un(acceptance) is related to the level of mobbing exposure, as well as to the employees' sex. The more the employees are exposed to mobbing behaviours the more they are ready to accept them; this trend is more clear in the case of male than female employees.

Research limitations/implications: One of the limitations of this research is that the direction of the relations between the exposure to and acceptance of mobbing cannot be determined, as the study did not have experimental nor longitudinal design.

Practical implications: The obtained results suggest that employees who work in organizations which turn a blind eye on unethical workplace behaviours or even promote competition and aggression in the workplaces become less sensitive and more tolerant towards negative behaviours and mobbing. Furthermore, the understanding of organizational context and gender differences in mobbing acceptance should help professionals in the process of mobbing assessment and diagnosis, as well as in planning appropriate preventive measures and interventions.

Originality/value: The paper address the existing gap in current scientific literature on the relation between mobbing exposure and acceptance across socio-demographic variables.

Keywords: mobbing/bullying, mobbing exposure, mobbing acceptance, gender, SDM Questionnaire.

Category of the paper: Research paper

1. Introduction

Workplace mobbing, which is a kind of psychological aggression involving persistent, repetitive and prolonged exposure of employees to numerous abusive and intimidating behaviours, seriously and negatively affecting mental and physical health of the targets (Einarsen, Hoel, Zapf, Cooper 2011; Leymann, 1990, 1996), nowadays has become one of the focal points of organizational, ethical and legal concern. Since the pioneering scientific interest in the phenomenon of mobbing (also called *workplace bullying*¹) initiated by Brodsky (1976), Leymann (1990; 1996) and some other, mostly Scandinavian researchers, it has begun to receive growing scientific attention all over the world to become one of the most often researched topics of the last decades (cf. Einarsen et al., 2011; Escartín et al., 2011; León-Pérez, Escartín, Giorgi, 2019; Power et al., 2013; Salin et al., 2019). The studies on the mobbing prevalence indicate that approximately 10% to 17% of employees are exposed to this form of workplace harassment, though the cited mobbing prevalence rates are varied, depending on the methodology and the measurement tools employed in the research (Nielsen, Matthiesen, Einarsen, 2010; León-Pérez et al., 2019; Zapf, Escartín, Einarsen, Hoel, Vartia, 2011).

In 2001, the European Parliament passed a resolution (European Parliament, file 2001/2339) calling on the EU Member States to counteract sexual harassment and mobbing in the workplace. The first legal anti-mobbing act (Journal of Legal Acts, 2003 No. 213, item. 2081) was introduced into the Polish Labour Code in 2004 (Labour Code, amended version in 2004, article 94). In 2007, the EU commission stated unequivocally that "(workplace) harassment and violence are unacceptable" (Framework Agreement on Harassment And Violence at Work, 2007, p. 1). Accordingly, the researchers and practitioners agree that mobbing, being one of the most severe forms of workplace harassment and an extreme psychosocial stressor (Leymann, 1998; Hoel, Zapf, Cooper, 2002; Høgh, Mikkelsen, Hansen, 2011), should not be accepted in any form and at any workplace. However, the results of some scientific research indicate that the (un)acceptability of mobbing behaviours' may differ depending on socio-cultural factors as well as on the employees' gender (Escartín, Salin, Rodríguez-Carballeira, 2011). For example, the results of some studies (Giorgi, Leon-Perez, Arenas, 2015; Escartin et al., 2011; Loh, Restubog, Zagenczyk, 2010; Pawer et al., 2013) suggest that mobbing is more tolerated in countries and organizations with high power distance,

¹ Nowadays these two terms are used interchangeably in scientific and popular discourse, despite their different, original meaning.

as well as in more masculine cultures. There are also studies (Durniat, Mañas, 2017; Escartín et al., 2009, 2011; Giorgi et al., 2015) showing that a behaviour which is perceived harmful and unaccepted in one organization or country may be perceived as neutral and legible in another national or organizational setting. Moreover, some researchers (Bloisi, Hoel 2008; Durniat, 2015b; Parzefall, Salin, 2010) claim that in the organizations where mobbing is widespread, employees "get used" to the exposure to unethical, mobbing behaviours, start to tolerate them or even consider them as a "norm" or part of the organizational culture; which is very dangerous. Furthermore, there is some scientific evidence (Salin, 2003, 2011) showing that men have higher acceptance of and resistance to negative mobbing behaviours, along with a lower tendency to label their negative conduct in the workplace as mobbing. Salin's research (2011) also revealed that the interaction between the gender of the observer, the victim, and the perpetrator indicated whether a case was labelled as mobbing or not. Moreover, women expected more negative organizational consequences of mobbing, thus they perceived it as a more severe and unacceptable workplace behaviour. Further empirical findings (Escartín et al., 2011) support the conclusion that female employees are more sensitive to mobbing behaviours than their male counterparts. Some scholars claim that unequal levels of social power in organization, and discrimination of women makes female employees more preoccupied with and more sensitive to workplace mobbing (Escartín et al., 2011). Other research (Crothers, Lipinski, Minutolo, 2009; Escartín et al., 2011) proved that men feel less threatened by mobbing behaviours and perceive them as more acceptable than women do. This kind of results may be explained in the light of the social rules theory and gender role socialization (Ely, Padavic, 2007), which indicate that societal expectations induce different roles and norms of accepted behaviour for men and women. Therefore, male employees who are socially trained to be more dominant and aggressive may feel less threatened by the exposition to workplace mobbing and may perceive such conduct as more acceptable than female employees (Crothers et al., 2009; León-Pérez at al., 2019).

A review of the scientific research results on the acceptance of mobbing behaviours suggests that we already have some conclusive findings in this field, though there are still some unanswered questions and gaps that need to filled. Thus, the aim of this paper is to address the gap which exists in current scientific literature on the relation between the level of mobbing exposure and acceptance across socio-demographic variables, such as sex, age, position, and seniority of employees, sector and branch of employment.

2. Research questions

This study, which is mostly an exploratory research, aims to answer a number of questions connected with the exposure to and acceptance of workplace mobbing. Among the most important questions discussed in this paper are the following:

- 1. What is the intensity of exposure to workplace mobbing among the investigated employees?
- 2. What is the level of mobbing (un)acceptance among the investigated employees?
- 3. Is there a relation between the level of exposure to mobbing and accepting mobbing behaviours in the workplace?
- 4. Are there any relations between the level of mobbing exposure, mobbing (un)acceptance and socio-demographic variables (sex, age, sector and branch of employment, position held and seniority)?

3. Socio-demographic sample characteristics

The research was conducted in Poland at the turn of 2019 and 2020 on a sample of 500 participants selected from a population of adult employees working in a variety of companies located in Wrocław and its surroundings. As 6% of the data was incomplete, it was discarded and the analyses were carried out on a data coming from 470 respondents (218 men and 241 women). The detailed sociodemographic data of the researched sample is provided below in Table 1. The participation in the study was voluntary and anonymous. The respondents were tested individually or in small groups, outside the potentially threatening workplace. The respondents were informed that the study was carried out only for academic purposes, and that they can withdraw from the participation at any time.

Demogr	Demographic category		%	Demographic category		Count	%
Sex	woman	241	51,3%	Sector	public	100	21,3%
	man	218	46,4%		private	343	73%
	missing data	11	2,3%		missing data	27	5,7%
Age	up to 25 years	100	21,3%	Position	director	17	3,6%
	26-35 years	137	29,1%		supervisor	60	12,8%
	36-45 years	118	25,1%		specialist	126	26,8%
	above 45 years	112	23,8%		subordinate	241	51,3%
	missing data	3	0,6%		missing data	26	5,5%

Table 1. Socio-demographic data of the sample (N = 470; 2019/2020)

Branch	industry	135	28,7%	Seniority	up to 1 year	37	8,1%
	commerce	78	16,6%		above 1 to 3 years	85	18,7%
	services	86	18,3%		above 3 to 6 years	61	13,4%
	administration	41	8,7%		above 6 to 10 years	65	13,8%
	education	27	5,7%		above 10 years	207	44%
	health service	13	2,8%		missing data	15	3,2%
	others	79	16,8%				
	missing data	11	2,3%				

Cont. table 1.

Source: Own research, Katarzyna Durniat.

4. Psychometric instruments

Mobbing experience was measured with a basic version of the SDM Questionnaire, a validated, original Polish psychometric tool which has been developed and tested in Polish socio-organizational circumstances since 2005 (Durniat, Kulczycka, 2006). The tool was rooted in international mobbing literature and empirical evidence coming from Polish exploratory, qualitative research (dozens of interviews with the mobbing victims) followed by quantitative exploratory research, focusing on assessment of the items' theoretical validity, tests of scales' structure (EFA) and reliability analysis (Durniat, 2020a, 2020b; Durniat, Kulczycka, 2006). The basic version of the SDM test consists of 64 items constituting two main scales: (i) the SDM-IDM scale (behavioural indicators; 43 items; a Cronbach 0.956; e.g.: 'I am avoided and ostracized by others at work', 'I am the object of humiliating gestures and glances') used for measuring exposure to mobbing behaviours and the SDM-ODC scale (emotional, psychosomatic and cognitive indicators; 21 items; α Cronbach 0,97; e.g.: 'The atmosphere at work makes me feel exhausted', 'I have the feeling that some people at work want to get rid of me') which completes the psychological picture of mobbing interaction. The SDM-IDM scale is divided into three, more specific subscales (a Cronbach: 0.927; 0.932; 0.803). All the tests' scales are highly and positively correlated. The Polish tool is equipped with a five-point, ordinal answer scale, reflecting the frequency of the exposition to particular mobbing behaviours or feelings (from 1 - never to 5 - very often). Mobbing is diagnosed on the basis of the cumulative SDM-IDM scale results, while the SDM-ODC is treated as an auxiliary scale. The SDM questionnaire was empirically tested in numerous mobbing studies providing consistent results of the test's structure, scales' reliability and construct validity (Durniat, 2020a). The SDM Questionnaire was normalized on a sample of Polish employees (N = 1852), what makes the tool suitable for both group and individual research. Due to non-parametric scores' distribution the norms for all test's scales and subscales were determined based on scores' density distribution and percentiles (Durniat, 2020b, p. 42).

Furthermore, the 43-item SDM-A scale was used to measure the level of mobbing behaviours' (un)acceptance. The content and construction of this scale is built upon the SDM-IDM scale, whose items were grammatically transformed and adapted to measuring the level of mobbing behaviours' acceptance (c.f. Durniat, Mañas, 2017). In this study each of items constituting the SDM-A was assessed on a three-point ordinary scale (from 1 - acceptable, through 2 - sometimes acceptable to 3 - completely unacceptable). The cumulative result of the SDM-A is the indicator of mobbing (un)acceptance.

5. Distribution of results and statistical solution

In the first step, the descriptive statistics were calculated for both scales used in the study (SDM-IDM and SDM-A). As can be seen in Table 2, both scales are characterised by skewed data distribution. In the case of the SDM-IDM scale there is a clear dominance of low scores (positive skewness), while in the case of the SDM-A scale there is a clear dominance of high scores (negative skewness).

Table 2.

```
Descriptive statistics of the SDM-IDM scale and SDM-A scale (N = 470; 2019/2020)
```

Scale	М	CI -95%	CI 95%	Md	Min	Max	Q1	Q3	IQR	SD	Sk	Ku
SDM-IDM	62.39	60.06	64.71	51	43	188	45	69	24	25,64	2.019	4.07
SDM-A	120.59	119.36	121.82	126	43	129	120	128	8	13,56	-2.89	9.49

Note. SDM-IDM = scale of exposure to mobbing behaviours; SDM-A = scale of mobbing behaviours' (un)acceptance; N = total sample size; M = mean; CI = confidence interval; Md = median; Min = minimum; Max = maximum; Q1 = first quartile; Q3 = third quartile; IQR = interquartile range; SD = standard deviation; Sk = skewness; Ku = kurtosis.

Source: Own research, Katarzyna Durniat.

Due to the skewed distribution of the measured variables only non-parametric tests were used in the study. The statistical analyses were done with a significance alpha level of at least 0.05 with the implementation of the IBM SPSS Statistics, 24 version program.

6. Exposure to mobbing behaviours across socio-demographic variables

The level of the exposition to mobbing was calculated on the basis of overall SDM-IDM scale results with reference to the SDM-IDM scale norms indicated in the literature (Durniat, 2020b). Following that, the sample was divided into three groups: respondents not being exposed to mobbing (low scores, up to 61 points); respondents falling into a mobbing risk group (with average scores, between 62 to 81 points); and respondents exposed to mobbing in the

workplace (with high scores, above 81 points). Table 3 presents the SDM-IDM scale results, in reference to the whole sample and broken down by sex of the respondents.

Table 3.

Exposition to mobbing behaviours - result for the whole sample (N = 470) *and broken down by respondents' sex*

Categorisation of the	SDM-IDM scale results (ex	posure to mobbing	Res	pondents'	sex
	behaviours)		women	men	total
Categories of the SDM-	of the SDM- Low scores (no mobbing		171	137	308
IDM overall scale results	M overall scale results exposure)		55,5%	44,5%	100,0%
		% sex	71,0%	62,8%	67,1%
		% total	37,3%	29,8%	67,1%
Average scores (risk of mobbing)		Count	36	39	75
		% mobbing category	48,0%	52,0%	100,0%
	% sex	14,9%	17,9%	16,3%	
		% total	7,8%	8,5%	16,3%
	High scores (expose to	Count	34	42	76
	mobbing)	% mobbing category	44,7%	55,3%	100,0%
		% sex	14,1%	19,3%	16,6%
		% total	7,4%	9,2%	16,6%
T	otal	Count	34	42	76
		% mobbing category	44,7%	55,3%	100,0%
		% sex	14,1%	19,3%	16,6%
		% total	7,4%	9,2%	16,6%

Source: Own research, Katarzyna Durniat.

The results obtained in this study (c.f. Table 3) proved that 16,6% of the researched Polish employees were exposed to workplace mobbing (high scores in the SDM-IDM scale). No statistically significant differences were discovered in exposure to mobbing with respect to: sex ($\chi 2(2) = 3.572$; p > 0.5), position ($\chi 2(6) = 10.959$; p > 0.5), seniority ($\chi 2(8) = 8.674$; p > 0.5), sector ($\chi 2(2) = 3.572$; p > 0.5), and branch of employment ($\chi 2(12) = 10.010$; p > 0.5). However, significantly more respondents from the age bracket between 26-35 years than those from other age groups where highly exposed to workplace mobbing ($\chi 2(6) = 14.801$; p = 0.022).

7. Mobbing (un)acceptance across socio-demographic variables

Negative skewness and clear dominance of high scores in the SDM-A scale (c.f. Table 2) suggests that the acceptance of mobbing behaviours is just marginal. Based on the SDM-A scores' distribution and percentiles, it was possible to distinguish two groups of respondents in relation to the level of mobbing behaviours (un)acceptance: group 1 (up to 10-th percentile: 104 points): respondents with borderline acceptance of mobbing and group 2 (above10-th percentile): respondents firmly unaccepting mobbing. Further statistical analyses were carried out on nominal data: 2 categories of mobbing (un)acceptance across socio-demographic variables and 3 categories of mobbing exposure broken by the participants' sex.

Generally, the vast majority of the respondents (90%) definitely do not accept mobbing behaviours in the workplace, while a small proportion of them (10%) are on the verge of mobbing behaviours' acceptance. The results of the Chi-square test indicate that there are no statistically significant relations between mobbing (un)acceptance and respondents' age ($\chi 2(3) = 3.712$; p > 0.5) position held in organization ($\chi 2(3) = 0.881$; p > 0.5), seniority ($\chi 2(4) = 4.636$; p > 0.5), sector ($\chi 2(1) = 0.41$; p > 0.5), and branch of employment ($\chi 2(6) = 4.342$; p > 0.5). However, there exists a relation between mobbing acceptance and respondents sex ($\chi 2(1) = 6.439$; p < 0.01). Significantly more men (30; 13,8%) than women (16; 6.6%) are ready to accept (sometimes) mobbing behaviours.

8. Mobbing behaviours' un(acceptance) in relation to mobbing exposure

The distribution of the frequency of the respondents' responses (divided into 3 groups, according to norms of the SDM-IDM scale; generally and broken down by sex) across 2 levels of mobbing (un)acceptance (on the bases of the SDM-A scale results) are presented in Table 4.

Table 4.

Exposition to mobbing behaviours (3 levels) across 2 levels of mobbing (un)acceptance (SDM-A) broken by respondent's sex (N = 470; 2019/2020)

Exposure to mob	bing behaviours (SD	M-IDM) across sex	Mobbing be	haviours (un)acc (SDM-A)	eptance
			borderline acceptance	unacceptance	total
WOMEN:	low scores	Count	4	167	171
	(no mobbing	Count expected	11,4	159,6	171,0
Categories of the	exposure)	% mobbing exposure	2,3%	97,7%	100,0%
SDM-IDM overall		% mobbing	25,0%	74,2%	71,0%
scale result		(un)acceptance			
		% generally	1,7%	69,3%	71,0%
		Standardised residual	-2,2	.6	
	average scores	Count	4	32	36
	(risk of mobbing)	Count expected	2,4	33,6	36,0
		% mobbing exposure	11,1%	88,9%	100,0%
		% mobbing	25,0%	14,2%	14,9k%
		(un)acceptance			
		% generally	1,7%	13,3%	14,9%
		Standardised residual	1,0	3	
	high scores	Count	8	26	34
	(exposure to	Count expected	2,3	31,7	34,0
	mobbing)	% mobbing exposure	23,5%	76,5%	100,0%
		% mobbing	50,0%	11,6%	14,1%
		(un)acceptance			
		% generally	3,3%	10,8%	14,1%
		Standardised residual	3,8	-1,0	

Cont. table 4.

Cont. table 4.	1				
	generally	Count	16	225	241
		Count expected	16,0	225,0	241,0
		% mobbing exposure	6,6%	93,4%	100,0%
		% mobbing	100,0%	100,0%	100,0%
		(un)acceptance			
		% generally	6,6%	93,4%	100,0%
MEN	low scores	Count	4	133	137
	(no mobbing	Count expected	18,9	118,1	137,0
Categories of the	exposure)	% mobbing exposure	2,9%	97,1%	100,0%
SDM-IDM overall		% mobbing	13,3%	70,7%	62,8%
scale results		(un)acceptance			
		% generally	1,8%	61,0%	62,8%
		Standardised residual	-3,4	1,4	
	average scores	Count	9	30	39
	(risk of mobbing)	Count expected	5,4	33,6	39,0
		% mobbing exposure	23,1%	76,9%	100,0%
		% mobbing	30,0%	16,0%	17,9%
		(un)acceptance			
		% generally	4,1%	13,8%	17,9%
		Standardised residual	1,6	-,6	
	high scores	Count	17	25	42
	(exposure to	Count expected	5,8	36,2	42,0
	mobbing)	% mobbing exposure	40,5%	59,5%	100,0%
	0,	% mobbing	56,7%	13,3%	19,3%
		(un)acceptance)	-)	-)
		% generally	7,8%	11,5%	19,3%
		Standardised residual	4,7	-1,9	-)
	generally	Count	30	188	218
	<i>c</i> .	Count expected	30,0	188,0	218,0
		% mobbing exposure	13,8%	86,2%	100,0%
		% mobbing	100,0%	100,0%	100,0%
		(un)acceptance	100,070	100,070	100,070
		% generally	13,8%	86,2%	100,0%
BOTH SEXES	low scores	Count	8	300	308
(overall)	(no mobbing	Count expected	30,9	277,1	308,0
(overall)	exposure)	% mobbing exposure	2,6%	97,4%	100,0%
Categories of the	exposure)	% mobbing	17,4%	72,6%	67,1%
SDM-IDM overall		(un)acceptance	17,470	72,070	07,1%
scale results		% generally	1,7%	65,4%	67,1%
scule results		Standardised residual	-4,1	1,4	07,1%
			-4,1	62	75
	average scores (risk of mobbing)	Count			75
	(fisk of modoling)	Count expected	7,5	67,5	75,0
		% mobbing exposure	17,3%	82,7%	100,0%
		% mobbing	28,3%	15,0%	16,3%
		(un)acceptance	2.00	10.50	16.00
		% generally	2,8%	13,5%	16,3%
		Standardised residual	2,0	7	
	high scores	Count	25	51	76
	(exposure to	Count expected	7,6	68,4	76,0
	mobbing)	% mobbing exposure	32,9%	67,1%	100,0%
		% mobbing	54,3%	12,3%	16,6%
		(un)acceptance			
		% generally	5,4%	11,1%	16,6%
		Standardised residual	6,3	-2,1	

Cont. ta	able 4.
----------	---------

Generally	Count	48	422	470
	Count expected	48,0	422,0	470,0
	% mobbing exposure	10,2%	89,8%	100,0%
	% mobbing	100,0%	100,0%	100,0%
	(un)acceptance			
	% generally	10,2%	89,8%	100,0%

Source: Own research, Katarzyna Durniat.

Generally, the Chi-square test results ($\chi 2(2) = 67.367$; p < 0.001) demonstrate that there is a relation between the exposure to and acceptance of mobbing behaviours in the workplace. For men and women (together), in a subgroup of respondents not being exposed to mobbing we observe a statistically significant, clear lack of mobbing behaviours' acceptance $(\chi^2(2) = 67.367; p < 0.001, borderline mobbing acceptance: O = 8, E = 30.9, sdresid. -4.1;$ unacceptance: O = 300, E = 277.1, sdresid. = 1.4). With respect to a subgroup with average mobbing exposure, we observe significantly more respondents who are borderline accepting mobbing than we would if the two variables were not related (borderline mobbing acceptance: O = 13, E = 7.5, sdresid. 2). In a subgroup highly exposed to mobbing, there are definitely more people who are ready to accept mobbing behaviours and less people unaccepting mobbing behaviours than one would expect if the two variables were not dependent to each other (borderline mobbing acceptance: O = 25, E = 7.9, sdresid. 6.1; unacceptance: O = 200, E = 180, sdresid. = -2.1). Thus, we can observe a general trend indicating a direction of the relationship between the exposure to and acceptance of mobbing behaviours: the stronger the exposure, the greater the tendency to accept mobbing behaviours. The same trend is observable in both gender subgroups, although it is stronger in a subgroup of men than in the case of women. In a subgroup of women who are not exposed to mobbing, we observe a statistically significant, strong lack of acceptance for mobbing behaviours (borderline mobbing acceptance: O = 4, E =11.4, sdresid. -2.2; unacceptance: O = 167 E = 159.6, sdresid. = 0.6). In a subgroup with an average mobbing exposure, there are no statistically significant differences in the acceptance and non-acceptance of mobbing behaviours (borderline mobbing acceptance: O = 8, E = 2.3, sdresid. 1.3; unacceptance: O = 32 E = 33.6, sdresid. = 0.3). Among women exposed to mobbing, there is a statistically significant increase of respondents borderline accepting mobbing behaviours, however, in this subgroup the number of women not accepting mobbing is consistent with the expected values ($\chi 2(2) = 21,911$; p < 0.001, borderline mobbing acceptance: O = 8, E = 2.3, sdresid. 3.8; unacceptance: O = 26, E = 31.7, sdresid. = -1.0). In the case of men, among those who are not exposed to mobbing, there is a statistically significant, clear lack of acceptance for mobbing behaviours, similarly as it was in women's group. In the mobbing risk subgroup of men, there are no statistically significant difference between borderline acceptance and non-acceptance of mobbing behaviours (borderline mobbing acceptance: O = 9, E = 5.4, sdresid.1.6; unacceptance: O = 30 E = 33.6, sdresid. = -0.6). Nevertheless, in the subgroup of men exposed to mobbing, there is statistically significantly more respondents ready to accept mobbing behaviours and significantly fewer

respondents who do not accept mobbing behaviours than expected ($\chi 2(2) = 41,678$; p < 0.001, borderline mobbing acceptance: O = 17, E = 5.8, sdresid. 4.7; unacceptance: O = 25, E = 36.2, sdresid. = -1.9).

9. Summary

The results of the study conducted on Polish employees indicate that workplace mobbing behaviours, as expected, are generally unaccepted, no matter the respondents' age, seniority or position in the organization, branch, and sector of employment. Nonetheless, the results also indicate that men are more prediposed than women to accept mobbing behaviours in the workplace, which is in line with the findings of previous, gender-oriented mobbing research (e.g. Escartín et al., 2011; Salin, 2003, 2011) and in vain of the theory of gender role socialization (Ely, Padavic, 2007). Moreover, this research reveals that there is a relation between the exposition to and the acceptance of mobbing in the workplace. This relation exists in both sex groups. The findings demonstrate the overall trend showing that the more the employees are exposed to mobbing behaviours the more they are ready to accept this kind of negative workplace conduct. Nevertheless, this trend is more clear in the case of male than female employees. Thus, the research also demonstrates that men are more prone than women to accept negative workplace behaviours, especially if they themselves are exposed to workplace mobbing. Thus, the overall study results not only support the relevance of gender in the process of mobbing behaviours' perception and acceptance but they also confirm the hypothesis of the role of the casual interpretation and the influence of organizational context for the acceptance of mobbing behaviours (Durniat, 2015, Giorgi, Leon-Perez, Arenas, 2015; Parzefall, Salin 2010). Thus, it seems that mobbing victims try to determine the severity and (un)acceptability of unethical workplace behaviours to in light of their own experience of the exposition to mobbing and the prevailing organizational patterns of behaviours. Nevertheless, women seem to be less susceptible to be influenced by this social mechanisms and contextual justification of workplace mobbing acceptability. However, the results obtained in this study could also be interpreted the other way round: that the employees who are less assertive and more accepting the unwanted behaviours more often become the mobbing targets. Actually, the direction of relation revealed in the study cannot be determined, as the research did not have experimental nor longitudinal design; what clearly is a limitation.

10. Practical implications

The findings of this study have a number of practical implications, meaningful both for mobbing prevention and intervention. First of all, the managers and HR specialists should understand their responsibility of and prior role in creating ethical workplace environment. As it was pointed out by Victor and Cullen (1988) "organizations shape the ethical or unethical behaviour of their employees" (after: Giorgi et al., 2015, p. 5). The results of this study imply that employees perceive and assess mobbing behaviours' acceptability in the context of their exposure to mobbing in the workplace. Unfortunately, the higher the exposure to mobbing, the more accepting they become towards unethical behaviour. Thus, it is very dangerous when organizations turn a blind eye on the presence of workplace mobbing or even promote competition and aggression, what makes the employees kind of "immune" and less sensitive towards unethical workplace behaviours. Furthermore, the practitioners should be aware that gender differences in mobbing behaviours acceptance may refrain the male managers or HR specialists from intervention when receiving mobbing complaints from female employees, as they may underestimate the meaning of these behaviours for women. Finally, the understanding of organizational context and gender differences in mobbing behaviours' acceptance should help professionals in the complex process of mobbing assessment and diagnosis, as well as in planning appropriate preventive measures, anti-mobbing workshops and interventions.

Acknowledgements

I would like to express my gratitude to Wojciech Witkowski, an Assistant Professor at the University of Wrocław, for much appreciated statistical and linguistic consultations over this paper.

References

- 1. Brodsky, C. (1976). The Harassed Worker. Lexington, MA: D.C. Heath and Company.
- 2. Durniat, K. (2015). Organizational and socio-organizational mobbing antecedents. *Przedsiębiorczość i Zarządzanie, Vol. 16, No. 3, Iss. 3,* pp. 25-41.

- 3. Durniat, K. (2020a). Development and psychometric properties of the Polish basic version of the SDM Questionnaire for measuring bullying. *International Journal of Occupational Safety and Ergonomics*, *Vol. 26, Iss. 3*, pp. 603-616.
- 4. Durniat, K. (2020b). Normalizacja polskiego kwestionariusza SDM do diagnozy mobbingu w miejscu pracy. In: D. Molek-Winiarska (Ed.), *Organizacje w obliczu wyzwań społeczno-technologicznych. Wybrane problemy praktyk HR* (pp. 36-44). Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- 5. Durniat, K. (2021). Methodological, ethical and legal problems of measuring and counteracting workplace mobbing, *EWOP In Practice*, *Vol. 15, Iss. 1*, pp. 36-53.
- 6. Durniat, K., Kulczycka, A. (2006). Operacjonalizacja mobbingu w kontekście badań międzykulturowych. *Prace Naukowe Akademii Ekonomicznej, No. 1132,* pp. 458-467.
- Durniat, K., Mañas, M.A. (2017). The Experience and Acceptance of Mobbing and Negative Workplace Behaviours in Poland and Spain – Comparative Study Results. *Przedsiębiorczość i Zarządzanie, Vol. 18, No. 7, Iss. 3*, pp. 5-23.
- 8. Einarsen, S., Hoel, H., Zapf, D., Cooper, C.L. (2011). The concept of bullying and harassment at work: The European tradition. In: S. Einarsen, H. Hoel, D. Zapf, C.L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research, and practice* (pp. 3-39). Boca Raton: CRC Press.
- 9. Ely, R., Padavic, I. (2007). A feminist analysis of organizational research on sex differences. *Academy of Management Review*, *32*, pp. 1121-1143.
- Escartín, J., Rodríguez-Carballeira, A., Zapf, D, Porrúa, C., Martín-Peña, J. (2009). Perceived severity of various bullying behaviours at work and the relevance of exposure to bullying. *Work and Stress, Vol. 23, No. 3,* pp. 191-205.
- Escartín, J., Salin, D., Rodríguez-Carballeira, A. (2011). Conceptualizations of workplace bullying. Gendered rather than gender neutral? *Journal of Personnel Psychology*, *Vol. 10, No. 4*, pp. 157-165.
- Escartín, J., Zapf, D., Arrieta, C., Rodríguez-Carballeira, A. (2011). Workers' perception of workplace bullying: A cross-cultural study. *European Journal of Work and Organizational Psychology, Vol. 20, Iss. 2*, pp. 178-205.
- 13. European Parliament/Legislative Observatory Procedure file. 2001/2339(INI). Harassment at the workplace (2001). Retrieved from https://oeil.secure.europarl.europa.eu/oeil/popups/ ficheprocedure.do?lang=en&reference=2001/2339(INI), 15.03.22.
- 14. Framework Agreement On Harassment And Violence At Work, Commission of the European Communities, Brussels (2007). Retrieved from https://eur-lex.europa.eu/ LexUriServ/LexUriServ.do?uri=COM:2007:0686:FIN:EN:PDF, 15.03.2022.
- Giorgi, G., Leon-Perez, J.M., Arenas, A. (2015). Are bullying behaviors tolerated in some cultures? Evidence for a curvilinear relationship between workplace bullying and job satisfaction among Italian workers. *Journal of Business Ethics, Vol. 131, Iss. 1*, pp. 227-237.

- 16. Hoel, H., Zapf, D., Cooper, C.L. (2002). Workplace bullying and stress. In: P.L. Perrewe, D.C. Ganster, (Ed.), *Historical and Current Perspectives on Stress and Health* (Research in Occupational Stress and Well Being, Vol. 2) (pp. 293-333). Bingley: Emerald Group Publishing Limited.
- Høgh, A., Mikkelsen, E.G., Hansen Å.M. (2011). Individual consequences of Workplace Bullying/Mobbing., In: S. Einarsen, H. Hoel, D. Zapf, C.L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: Developments in theory, research, and practice* (pp. 107-128). Boca Raton: CRC Press.
- 18. Journal of Legal Acts, 14th of November, 2003 [Labour Code and some other acts]. No. 213: item 2081 (2003).
- 19. Labour Code, amendment of the 1st of May 2004, Art. 94, § 2, as cited in: Journal of Legal Acts, No. 213: item 2081 (2003).
- 20. León-Pérez, J.M., Escartín, J., Giorgi, G. (2019). The Presence of Workplace Bullying and Harassment Worldwide. In: P. D'Cruz, E. Noronha, G. Notelaers., C. Rayner (Eds.), *Concepts, Approaches and Methods. Handbooks of Workplace Bullying, Emotional Abuse and Harassment* (pp. 55-86). Singapore: Springer.
- 21. Leymann, H. (1990). Mobbing and Psychological Terror at Workplace. *Violence and Victims*, *Vol. 5, No. 2*, pp. 119-126.
- 22. Leymann, H. (1996). The content and development of mobbing at work. *European Journal* of Work and Organizational Psychology, Vol. 5, No. 2, pp. 165-184.
- 23. Nielsen, M., Matthiesen S.B., Einarsen, S. (2010). The impact of methodological moderators on prevalence rates of workplace bullying. A meta-analysis. *Journal of Occupational and Organizational Psychology*, *Vol. 83, Iss. 4*, pp. 955-979.
- 24. Parzefall, M., Salin, D. (2010). Perceptions of and reactions to workplace bullying: A social exchange perspective. *Human Relations*, *Vol. 63, No. 6*, pp. 761-780.
- 25. Power, J.J.L., Brotheridge, C.M., Blenkinsopp, J., Bowes-Sperry, L., Bozionelos, N., Buzady, Z., Chuang, A., Drnevich, D., Garzon-Vico, A., Leighton, C., Madero, S.M., Mak, W., Mathew, R., Monserrat, S.I., Mujtaba, B.G., Olivas-Lujan, M.R., Polycroniou, P., Sprigg, C.A., Axtell, C., ... Nnedumm, A.U.O. (2013). Acceptability of workplace bullying: A comparative study on six continents. *Journal of Business Research, Vol. 66, No. 3*, pp. 374-380.
- 26. Salin, D. (2003). Bullying and organizational politics in competitive and rapidly changing work environments. *International Journal of Management and Decision Making*, *Vol. 4, Iss. 1*, pp. 35-46.
- 27. Salin, D. (2011). The significance of gender for third parties' perceptions of negative interpersonal behaviour: Labelling and explaining negative acts. *Gender, Work, and Organization, Vol. 18, Iss. 6, pp. 571-591.*
- 28. Salin, D., Hoel, H. (2013). Workplace bullying as a gendered phenomenon. *Journal of Managerial Psychology, Vol. 28, No. 3,* pp. 235-251.

- 29. Slain, D., Cowan, R., Adewumi, O., Apospori, E., Bochantin, J., D'Cruz, P., Djurkovic, N., Durniat, K., Escartín, J., Guo, J., Išik, I., Koeszegi, S.T., McCormack, D., Monserrat, S.I., Zedlacher, E. (2019). Workplace Bullying Across the Globe: A Cross-Cultural Comparison. *Personnel Review*, Vol. 48, No. 1, pp. 204-219.
- 30. Victor, B., Cullen, J.B. (1988). The organizational bases of ethical work climates. *Administrative Science Quarterly, Vol. 33, No.1*, pp. 101-125.
- 31. Zapf, D., Escartin, J., Einarsen, S., Hoel, H., Vartia, M. (2011). Empirical findings on prevalence and risk groups of bullying in the workplace. In: S. Einarsen, H. Hoel, D. Zapf, C.L. Cooper (Ed.), *Bullying and harassment in the workplace: Developments in theory, research, and practice* (pp. 75-105). Boca Raton: CRC Press.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

IMPACT OF ORGANIZATIONAL IDENTIFICATION ON UNETHICAL PRO-SUPERVISOR BEHAVIOR: MODERATING ROLE OF CHARISMA

Tomasz GIGOL

Szkoła Główna Handlowa w Warszawie; tgigol@sgh.waw.pl, ORCID: 0000-0001-7018-4552

Purpose: Investigating the relationship between the organizational identification of employees and their inclination toward unethical pro-supervisor behavior in the context of a leader's charisma.

Design/methodology/approach: Quantitative study (N = 389) on a population representing different businesses in Poland. An analysis of correlation and moderation was carried out. The conceptual framework of the theory of social identification was applied.

Findings: The leader's charisma was found to be a moderator of the impact of staff's organizational identification on unethical pro-supervisor behavior. When the leader's charisma is high, greater identification with the organization translates into a lower inclination toward unethical pro-supervisor behavior.

Research limitations/implications: The study sample was not statistically representative, and the study was cross-sectional. Similar research should be conducted in the future that covers the supervisor-subordinate dyads.

Practical implications: Attention should be paid to unethical pro-supervisor behavior when developing ethical codes and good practices in companies. Positive aspects of charisma should be considered when evaluating a leader's competencies.

Originality/value: This paper helps better understand unethical pro-supervisor behavior determinants and indicates the role of charisma in the process.

Keywords: unethical pro-supervisor behavior, unethical pro-organizational behavior, organizational identification, inspiring charisma, transformational leadership.

Category of the paper: Research paper.

1. Introduction

Staff members' unethical behaviors are a vital issue in management science and business practice. Unethical behavior that results from a poorly manifested will to act for the organization's benefit is included in this group. Examples include the intentional delaying of payments to suppliers exceeding the contractual deadlines (Kreczmańska-Gigol, 2012) and

falsifying the exhaust gas emissions from car engines by Volkswagen Corporation (Siano et al., 2017). In the short term, these actions can be beneficial to the organization, but in the long term, they pose a risk of severe adverse consequences, including but not limited to loss of reputation or liability for damages (Crête, 2016). This kind of behavior is called unethical proorganizational behavior (Umphress, Bingham, 2011), whereby unethical pro-supervisor behavior is its own specific variety (Johnson, Umphress, 2019). Employees can demonstrate unethical behaviors, such as lying to protect their supervisors or exaggerating the supervisor's work to help positively assess the supervisor's performance (Johnson, Umphress, 2019).

Expecting high performance from employees and placing great trust in them is a differentiating factor of charismatic leaders (Shamir, House, Arthur, 1993). The impact of the leader's charisma on subordinates is sometimes perceived as ethically ambiguous (Zhang et al., 2020), even though charisma makes a vital component of transformational leadership that belongs to normative (ethical) theories of leadership (Wren, 2006).

Organizational identification can be described as the convergence of individual and organizational values (Riketta, 2005). Overidentification can sometimes occur, leading to unethical behavior of the staff (Dukerich, Kramer, Parks, 1998). Organizational identification contributes to intensifying unethical pro-supervisor behavior (Johnson, Umphress, 2019). This is why the author of the current paper decided that investigating the relationship between the staff's organizational identification and inclination to unethical pro-supervisor behaviors constitutes a significant scientific issue. Charismatic leadership, in a range of varieties, gradually loses significance due to corruption scandals related to its overuse. That is why the study's author considered it an interesting research issue to check if the supervisor's charisma contributes to unethical pro-supervisor behavior in the context of organizational identification. The paper attempts to answer the questions above in light of original qualitative studies.

2. Literature review and development of hypotheses

2.1. Organizational identification and unethical pro-organizational behavior

Organizational identification is based on the theory of social identification (Tajfel, Turner, 1986). It is typically described as a convergence of individual and organizational values (Riketta, 2005). Organizational identification is defined as "perceiving unity with the organization or belonging to the organization" (Ashforth, Mael, 1989, p. 34). As a result of organizational identification, employees who strongly identify with the workplace follow organizational values and the employer (Ashforth, Mael, 1989). Nonetheless, there are some negative aspects of organizational identification; e.g., it was discovered that when the organizational identification level is high, overidentification can occur, which can lead, for

instance, to unethical pro-organizational behavior (Caprar, Walker, Ashforth, 2022; Dukerich, Kramer, Parks, 1998). The impact of organizational identification can be manifested by employees' rationalizing their unethical decisions (Conroy et al., 2017), especially if the decisions go along with a conviction that the organization is ready to pay back (Umphress, Bingham, Mitchell, 2010).

Umphress and Bingham (2011) noticed that employees could behave unethically to provide benefits to other entities, including but not limited to supervisory bodies or immediate supervisors. Employees' relationships with their supervisors are among the most influential relationships at work, and supervisory bodies are the primary and significant aspect of organizational life (Sluss, Aschworth, 2008). Employees can be willing to engage in unethical behaviors, such as hiding information that could put the supervisor's reputation at stake. In addition to such behaviors, unethical pro-supervisor behavior also includes omissions (Johnson, Umphress, 2019).

The results of research by Bryant and Merritt (2019) revealed that a high-quality relationship of social exchange between the leader and subordinate can increase the readiness to exhibit unethical behavior beneficial for the leader. A close relationship between the leader and the subordinate is significantly related to the subordinate's readiness for unethical pro-organizational behavior (Wang, Li, 2019). Positive impacts and phenomena such as organizational identification and organizational commitment can increase engagement in unethical pro-supervisor behaviors among some employees (Johnson, Umphress, 2019). Therefore, the following research hypothesis was proposed:

Hypothesis 1. The employee's identification with the organization contributes to the increase in the employee's engagement in unethical pro-supervisor behavior.

2.2. Inspiring charisma, organizational identification and unethical pro-supervisor behavior

Charismatic leaders model behavior for subordinates by being an example to follow. They demonstrate with their behavior what they require from their subordinates. Moreover, they can build their image of exceptional people having extraordinary skills. They communicate distant and ideological rather than pragmatic objectives for the organization. Another differentiating feature of charismatic leaders' behavior is expecting very high performance from employees and putting much trust in them (House, 1976). Consequently, charismatic leadership contributes to an emotional commitment to the leader, i.e., boosting the staff's motivation, increasing their self-esteem and believing that the goals will be reached (Shamir, House, Arthur, 1993).

Charisma, in this sense, is among the foundations of the transformational leadership concept. An idealized example to follow that is combined with inspiring motivation is called inspiring charisma. These factors are highly correlated and very much like the behavior described as charismatic leadership (Bass, Riggio, 2006, pp. 24-25). This is why they are referred to as charisma further in the study.

An idealized role model is manifested by treating the leader as an example to follow and a respected and admired person. Subordinates can rely on such a leader because she or he represents high ethical standards. The leader takes shared risk with their team and is an integrated personality. The organization's objective and vision take precedence over the leader's personal goals. Inspiring motivation, in turn, means the leader motivates and inspires their followers by establishing ambitious challenges. Leaders often cocreate the vision with their followers and outline an attractive vision of the organization or team's future. The leader openly communicates the expectations of engaging in joint activities and inspires the team spirit this way (Gigol 2015, pp. 70-75).

The research results indicate the impact of two components of transformational leadership: inspiring motivation and idealized impact (i.e., the factors being components of inspiring charisma) on the increase in the number of unethical pro-organizational behaviors among employees (Graham, Ziegert, Capitano 2015). Emotion-engaging leadership entails the risk that employees might be tempted to contribute to the company's success in a commonly regarded unethical way (Effelsberg, Solga, Gurt, 2014).

In contrast, some research results have not confirmed leadership's direct impact on the staff's unethical pro-organizational behavior (e.g., Gigol, 2020), including charismatic leadership (Lee, Choo, Jeon, 2016). Cheng, Wei and Lin (2019) stated that supervisors' responsible leadership affects subordinates' attitudes in the process of social learning. It should be emphasized that the paper's author did not find any significant studies on the impact of charisma on unethical pro-supervisor behavior. Hence, the second hypothesis was formulated as follows:

Hypothesis 2. The leader's charisma is a moderator of the impact of employee identification with an organization on engaging in unethical pro-supervisor behavior.

3. Research methods and tools

3.1. Research procedure and respondents

The research was completed in two rounds. The first round involved employees of stateowned companies. This group was supposed to constitute half of the respondents. The respondents represented large capital groups in logistics, power engineering, and mining and metalworks. The rest of the respondents represented various companies and economic sectors; 49.1% of the respondents worked for state-owned companies, 23.7% worked for companies with Polish capital, 22.4% were employed in companies with foreign capital, and 4.1% did not know the ownership of the company they worked for. Most of the studied population worked for medium-sized and large-sized companies, 61.6% of which had a headcount of over 250 people, and 20.8% employed between 50 and 249 people. The questionnaires in the second group were collected during training sessions and of postgraduate sessions in three universities of economics in the Mazowieckie region. The complete anonymity of the respondents was ensured. Then, the questionnaires were collected, and the results were digitalized and analyzed statistically using IBM SPSS Amos 25.0.0 software.

Three hundred eighty-nine (389) persons participated in the study: 204 women (52.4%) and 172 men (44.2%). Thirteen respondents (3.3%) did not indicate their gender. Table 1 summarizes the frequency distribution for the respondents' age and education level. Persons aged 20-29 years constituted the largest group. Most respondents (85.9%) had a tertiary level education.

Table 1.

Age	n	%	Education	п	%
20-29 years	155	39.8	Tertiary	334	85.9
30-39 years	87	22.4	Secondary	47	12.1
40-49 years	111	28.5	Vocational	3	0.8
50-60 years	18	4.6	No data	5	1.3
60 and more years	3	0.8	Total	389	100
No data	15	3.9			
Total	389	100			

Respondents' age and education.

 \overline{n} – number of respondents; % - share in the study sample.

Table 2 summarizes the frequency distribution for the respondents' positions and seniority in the company. Most people worked at specialist positions. Employees working for the company for at least seven years constituted the largest group.

Table 2.

Respondents' positions and job seniority in the company

Job seniority	п	%	Position	N	%
Less than one year	82	21.1	Manager/Director	90	23.1
1 to 3 years	103	26.5	Specialist/Lead Specialist	183	47.0
3 to 5 years	36	9.3	Salesman	8	2.1
5 to 7 years	28	7.2	Blue-collar worker	13	3.3
7 and more years	133	34.2	Administration worker	51	13.1
No data	7	1.8	Production worker	2	0.5
Total	389	100	Other	32	8.2
			No data	10	2.6
			Total	389	100

n – number of respondents; % - share in the study sample.

3.2. Research tools

Then, the applied research tools were verified because validation is a vital part of scientific projects (Czakon, 2019). To that end, a performance analysis was carried out, and factor loadings of the questionnaires were determined.

3.2.1. Charisma

Table 3 summarizes the values of the obtained factor loadings for each item in the questionnaires. The inspiring charisma questionnaire is a part of the MLQ 6-S questionnaire investigating transformational leadership (Bass, Avolio, 1992); it was derived from a previous publication by the current study's author (Gigol, 2015).

Table 3.

Values of factor loadings obtained in an exploratory factor analysis of inspiring charisma

Questionnaire item	Factor loading
5. I am proud to be associated with her or him.	0.91
3. I have complete faith in her or him.	0.89
1. She or he makes me feel good to be around her or him.	0.87
6. She or he helps me find the meaning of my work.	0.85
4. She or he provides appealing images about what we can do.	0.78
2. She or he can communicate in simple words what we could and should do.	0.78

The values of factor loadings for all analyzed items were higher than 0.70, which indicates a very good structure of the research tool (Hair et al., 2019, p. 153).

3.2.2. Unethical pro-supervisor behavior

The questionnaire investigating unethical pro-supervisor behavior (Umphress, Bingham, Mitchell, 2010) was translated in consultation with three researchers working with human resources (HR). Table 4 summarizes the values of the obtained factor loadings for each questionnaire item.

Table 4.

Values of factor loadings obtained in an exploratory factor analysis concerning unethical pro-supervisor behavior

Questionnaire item	Factor loading
4. Because it benefited my supervisor, I have withheld negative information about my	0.86
supervisor's performance from others.	0.80
3. Because it helped my supervisor, I have exaggerated the truth about my supervisor's	0.82
performance to others.	0.82
5. Because it helped my supervisor, I have misrepresented the truth to make my supervisor	0.80
look good.	0.80
2. Because my supervisor needed me to, I have not revealed to others a mistake he or she	0.78
made that would damage his or her reputation.	0.78
1. Because it was needed, I have concealed information from others that could be damaging	0.71
to my supervisor.	0.71
6. Because my supervisor needed me to, I spoke poorly of another individual who was a	0.62
problem for my supervisor.	0.02

The lowest value of factor loading was obtained for Item 6. However, this value significantly exceeded the minimum level, which means that the scale can be regarded as sufficiently reliable (Hair et al., 2019, p. 153).

3.2.3. Organizational identification

A single-item measure of social identification (SISI) was used for studying organizational identification (Postmes, Haslam, Jans, 2012). It has good credibility, high reliability and high validity. Moreover, it is equally reliable for other approaches and definitions of organizational identification (Postmes, Haslam, Jans, 2012). The statement in the questionnaire was "I identify with my company". A seven-point Likert scale was applied.

4. Results

4.1. Descriptive statistics of the analyzed variables

A statistical analysis of the research was carried out. Table 5 summarizes descriptive statistics for the analyzed interval variables. The summary was completed with the Kolmogorov–Smirnov test to verify the assumption of normal distribution of the analyzed variables and the Cronbach's alpha reliability coefficient values.

Table 5.

	М	SD	Min	Max	Ζ	Р	Α
Unethical pro-supervisor behaviors	1.65	0.75	1.00	5.00	0.19	0.001	0.86
Organizational identification	5.05	1.67	1.00	7.00	0.19	0.001	-
Charisma	3.31	1.03	1.00	5.00	0.07	0.001	0.92

Descriptive statistics of the studied variables

M – mean value; SD – standard deviation; min – minimum value; max – maximum value; Z – Kolmogorov– Smirnov test value; p – statistical significance; α – coefficient of Cronbach's alpha reliability coefficient.

Statistically significant deviations from normal distribution were discovered for all analyzed variables. All the obtained measurement reliability coefficients were adequately high.

Table 6 shows the Pearson (r) correlation coefficients between the analyzed variables determined with a bootstrapping method. The statistically significant correlations are highlighted.

Table 6.

Correlation coefficients between the analyzed variables determined with a bootstrapping method

	1.	2.	3.		
1. Unethical pro-supervisor behavior	-				
2. Organizational identification	-0.095÷0.097	-			
3. Charisma	-0.093÷0.121	0.303÷0.498	-		
The statistically significant completions are marked in hold					

The statistically significant correlations are marked in bold.

The leader's charisma did not correlate with unethical pro-supervisor behavior. The leader's charisma was correlated with organizational identification. Organizational identification, in turn, did not correlate with unethical pro-supervisor behavior.

4.2. Charisma versus organizational identification and unethical pro-supervisor behaviors

The bootstrapping method was used to study moderation (Hayes, 2013). The study sample (N = 389) was numerous enough to study the moderation effect (MacKinnon, Coxe, Baraldi, 2012). The model was verified with the Hayes Process macro in model No. 1 (Hayes, 2013) using SPSS software. Charisma was analyzed as the moderator of the relationship between organizational identification and unethical pro-supervisor behaviors. Moderation effects were verified by analyzing the statistical significance of interaction effects between the moderator, i.e., charisma, and the explaining variable, i.e., organizational identification. The results are summarized in Table 7. A statistically significant interaction effect was obtained in the model where organizational identification was analyzed as the explaining variable and unethical prosupervisor behaviors were the explained variable. The relationship between organizational identification and unethical pro-supervisor behaviors was statistically insignificant at the low charisma level, i.e., one standard deviation below the average, $B = -0.07 \div 0.19$; at the average charisma level it was at the average level for the entire study sample, $B = -0.17 \div 0.06$; and negative at the high charisma level, i.e., one standard deviation above the average, $B = -0.32 \div 0.02$. At a high charisma level, the higher the organizational identification level is, the lower the level of unethical pro-supervisor behaviors is. The results are summarized in Table 7 and illustrated in Figure 1.

Table 7.

Explaining variable	Moderator	Explained variable	Interaction effect	Interaction effect
Organizational identification	Charisma	Unethical pro- supervisor behavior	Organizational identification x Unethical pro-supervisor behaviors	-0.20÷-0.01

Results of moderation analysis

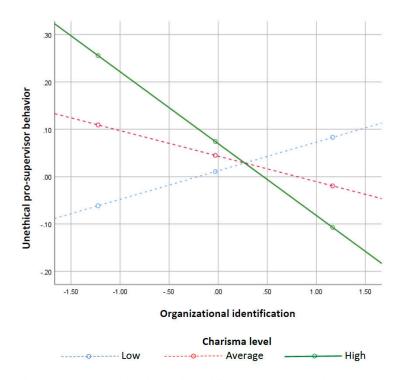


Figure 1. Relationship between organizational identification and unethical pro-supervisor behavior in a group of people with low, average and high levels of direct supervisors' charisma.

5. Discussion and research limitations

If the results were analyzed exclusively based on correlation analysis, it could be concluded that only the impact of the leader's charisma on the subordinates' organizational identification was demonstrated, as summarized in Table 6 and pointed out in the reference literature. Nonetheless, studies on charisma as the moderator of the relationship between organizational identification and unethical pro-supervisor behavior suggest that the relationship varies for different levels of the supervisor's charisma. A high level of the supervisor's charisma reverses the relationship between organizational identification and inclination toward unethical pro-supervisor behavior. However, it does not apply to unethical pro-organizational behavior, as demonstrated in many examples of research (e.g., Gigol, 2020).

One should be careful about drawing generalized conclusions from the research, as the study sample was not statistically representative, and the study was cross-sectional. More in-depth knowledge of the subject matter should be acquired through long-term research on supervisor-subordinate dyads.

6. Conclusions

The study suggests that there are bright sides of charisma. A leader who inspires action builds an emotional bond with the employee. The leader is perceived as an involved person and an integrated personality and does not cause an increase in unethical pro-supervisor behavior resulting from a high level of identification with the organization. In this sense, inspiring charisma belongs to ethical theories of leadership.

References

- 1. Ashforth, B., Mael, F. (1989). Social identity theory and the organization. *Academy of management review*, *Vol. 14, Iss. 1*, pp. 20-39, doi: 10.5465/amr.1989.4278999.
- 2. Bass, B., Avolio, B. (1992). *Multifactor Leadership Questionnaire MLQ-6S*. Redwood City: Mind Garden.
- 3. Bass, B., Riggio, R. (2006). *Transformational Leadership*. Mahwah: Lawrence Erlbaum Associates.
- 4. Bryant, W., Merritt, S. (2021). Unethical pro-organizational behavior and positive leader– employee relationships. *Journal of business ethics, Vol. 168, Iss. 4*, pp. 777-793, doi: 10.1007/s10551-019-04211-x.
- Caprar, D., Walker, B., Ashforth, B. (2022). The Dark Side of Strong Identification in Organizations: A Conceptual Review. *Academy of Management Annals*, doi: 10.5465/annals.2020.0338.
- Cheng K., Wei F., Lin Y. (2019). The trickle-down effect of responsible leadership on unethical pro-organizational behavior: The moderating role of leader-follower value congruence. *Journal of business research*, *Vol. 102*, pp. 34-43, doi: 0.1016/j.jbusres.2019.04.044.
- Conroy, S., Henle, C., Shore, L., Stelman, S. (2017). Where there is light, there is dark: A review of the detrimental outcomes of high organizational identification. *Journal of organizational behavior*, *Vol. 38, Iss.* 2, pp. 184-203, doi: 10.1002/job.2164.
- Crête, R. (2016). The Volkswagen scandal from the viewpoint of corporate governance. *European journal of risk regulation*, Vol. 7, Iss. 1, pp. 25-31, doi: 10.1017/S1867299X0000533X.
- 9. Czakon, W. (2019). Walidacja narzędzia pomiarowego w naukach o zarządzaniu. *Przegląd Organizacji, Vol. 4*, pp. 3-10, doi: 10.33141/po.2019.04.01.

- Dukerich, J., Kramer, R., Parks, J. (1998). The dark side of organizational identification. In: D. Whetten, P. Godfrey (Eds.), *Identity in Organizations: Building Theory Through Conversations* (pp. 245-256). Thousand Oaks: Sage.
- 11. Effelsberg, D., Solga, M., Gurt, J. (2014). Transformational leadership and follower's unethical behavior for the benefit of the company: A two-study investigation. *Journal of business ethics*, *Vol. 120, Iss. 1*, pp. 81-93 doi: 10.1007/s10551-013-1644-z.
- 12. Gigol, T. (2015). Kryzys przedsiębiorstwa a przywództwo. Warszawa: Difin.
- 13. Gigol, T. (2020). Influence of authentic leadership on unethical pro-organizational behavior: The intermediate role of work engagement. *Sustainability*, *Vol. 12, Iss. 3*, 1182, doi: 10.3390/su12031182.
- 14. Graham, K., Ziegert, J., Capitano, J. (2015). The effect of leadership style, framing, and promotion regulatory focus on unethical pro-organizational behavior. *Journal of business ethics*, *Vol. 126, Iss. 3*, pp. 423-436, doi: 10.1007/s10551-013-1952-3.
- 15. Hair, J., Black, W., Babin, B., Anderson, R. (2019). *Multivariate data analysis*. Andower: Cengage.
- 16. Hayes, A. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York: Guilford Publications.
- 17. House, R. (1976). Theory of Charismatic Leadership. In: J. Hunt, L. Larson (Eds.), *Leadership: The Cutting Edge* (pp. 189-207). Carbondale: Southern Illinois University.
- Johnson, H., Umphres, E. (2019). To help my supervisor: Identification, moral identity, and unethical pro-supervisor behavior. *Journal of business ethics*, *Vol. 159, Iss. 2*, pp. 519-534, doi: 10.1007/s10551-018-3836-z.
- 19. Kreczmańska-Gigol, K. (2012). The threat of payment gridlocks in Poland and business ethics. *Journal of management and financial sciences*, *Vol. 10*, pp. 34-46.
- Lee, K., Choo, S., Jeon, S. (2016). The influence of transformational leadership on unethical pro-organizational behavior – mediating effect of organizational identification. *Journal of digital convergence*, *Vol. 14, Iss.* 2, pp. 83-98, doi: 10.14400/JDC.2016.14.2.83.
- MacKinnon, D., Coxe, S., Baraldi, A. (2012). Guidelines for the investigation of mediating variables in business research. *Journal of business and psychology*, Vol. 27, Iss. 1, pp. 1-14, doi: 10.1007/s10869-011-9248-z.
- Postmes, T., Haslam, S., Jans, L. (2013). A single-item measure of social identification: Reliability, validity, and utility. *British journal of social psychology*, *Vol. 52, Iss. 4*, pp. 597-617, doi: 10.1111/bjso.12006.
- 23. Riketta, M. (2005). Organizational identification: A meta-analysis. *Journal of vocational behavior*, *Vol. 66, Iss.* 2, pp. 358-384, doi: 10.1016/j.jvb.2004.05.005.
- Shamir, B., House, R., Arthur, M. (1993). The Motivational Effects Of Charismatic Leadership: A Self-Concept Based Theory. *Organization science*, *Vol. 4, Iss.1*, pp. 577-594, doi: 10.1287/orsc.4.4.577.

- 25. Siano, A., Vollero, A., Conte, F., Amabile, S. (2017). "More than words": Expanding the taxonomy of greenwashing after the Volkswagen scandal. *Journal of business research*, *71*, pp. 27-37, doi: 10.1016/j.jbusres.2016.11.002.
- 26. Sluss, M., Ashforth, B. (2008). How relational and organizational identification converge: Processes and conditions. *Organization Science*, Vol. 19, Iss. 6, pp. 807-823, doi: 10.1287/orsc.1070.0349.
- 27. Tajfel, H., Turner, J. (1986). The social identity theory of intergroup behavior. In: S. Worchel, W. Austin (Eds.), *Psychology of Intergroup Relations* (pp. 7-24). Chicago: Nelson-Hall.
- 28. Umphress, E., Bingham, J. (2011), When employees do bad things for good reasons: Examining unethical pro-organizational behaviors. *Organization science*, *Vol. 22, Iss. 3*, pp. 621-640, doi: 10.1287/orsc.1100.0559.
- 29. Umphress, E., Bingham, J., Mitchell, M. (2010). Unethical behavior in the name of the company: The moderating effect of organizational identification and positive reciprocity beliefs on unethical pro-organizational behavior. *Journal of applied psychology, Vol. 95, Iss. 4*, pp. 769-780, doi: 10.1037/a0019214.
- 30. Wang, Y., Li, H. (2019). Moral leadership and unethical pro-organizational behavior: A moderated mediation model. *Frontiers in psychology*, Vol. 10, 2640, doi: 10.3389/fpsyg.2019.02640.
- 31. Wren, J. (2006). A quest for a grand theory of leadership. In: G. Goethals, G. Sorenson (Eds.), *The Quest for a general theory of leadership* (pp. 1-38). Northampton: Edward Elgar.
- 32. Zhang, X, Liang, L, Tian, G, Tian, Y. (2020). Heroes or Villains? The Dark Side of Charismatic Leadership and Unethical Pro-organizational Behavior. *International Journal* of Environmental Research and Public Health, Vol. 17, Iss. 15, 5546, doi: 10.3390/ijerph17155546.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

THE SIGNIFICANCE OF LEADER TRANSGRESSION FOR THE PSYCHOLOGICAL SAFETY OF EMPLOYEES WITH A HIGH LEVEL OF SENSORY SENSITIVITY

Milena GOJNY-ZBIEROWSKA

University of Economics in Katowice; milena.gojny@ue.katowice.pl, ORCID: 0000-0002-5385-9324

Purpose: The psychological safety of employees is a state that has a positive effect on the efficiency of their work and the effectiveness of the entire organisation. Events bringing a feeling of danger that are outside the control of us as individuals, that is the pandemic and now the war beyond our eastern border, have decreased the sense of safety in whole societies. Such a situation gives rise to the need to identify the conditions that shape psychological safety so that they can be intentionally modelled within the organizations. The purpose of this paper is to present the analysis of the individual conditions that impact the level of psychological safety when facing the transgressive behaviour of the leader.

Design/methodology/approach: This article is theoretical and presents the results of literature analysis.

Findings: The result of the analysis is a proposed relationship between a superior's transgression and an employee's psychological safety, along with the moderating role of the employee's sensory processing sensitivity, and the locus of control.

Practical implications: A proposal has been presented here for reducing the effect of a leader's transgressive behaviour (taking into account the dimensions of severity and frequency) on employees' psychological safety. HRM practices implementing a strategy of inducing psychological safety should take into account protection of employee limits in order to reduce the possibility of transgressive behaviour occurring. It is also important to create optimal working conditions for people with raised sensory processing sensitivity.

Originality/value: The paper addresses the question of individual conditions of a sense of safety based on an identified research gap. Recent years have seen an increase in interest among researchers in the topic of employee psychological safety, its antecedents and its consequences for behaviours within an organisation. The current situation is unprecedented and have decreased the sense of safety so the discussion presented in the paper is original and has a great value.

Keywords: Psychological Safety, Sensory Processing Sensitivity, Transgression, Locus of Control, High Sensory Sensitivity.

Category of the paper: Conceptual paper.

1. Introduction

The two years of the Covid-19 pandemic resulted in deterioration in the psychological health of people around the world. Data collected so far indicates an increase in mental health issues, especially neurotic conditions and mood disorders (depression) (anxiety disorder, depression, post-traumatic stress disorder and psychological distress), which are caused by increased fear, and a loss of a sense of safety and control (GUS, 2020; Pierce et al., 2021). The observed continuing distress and anxiety, the feeling of helplessness at the inability to escape, and even panic attacks, despair and a sense of hopelessness constitute acute pandemic stress disorder and are connected to the loss of the psychological safety (Heitzman, 2020). With the ongoing war in progress nearby, it can be assumed that feelings of danger, fear and stress will grow in countries bordering Ukraine. Lack of control over the changing reality, perceived as unsure or threatening, as well as the permanent psychological tension, both require significant adaptative skills and engage defence mechanisms. One of these is the search for a safe place in which people can maintain good, safe interpersonal relations (Heitzman, 2020). A counterbalance to the unpredictable outside world and the resulting sense of danger can be a predictable and safe workplace (Heitzman, 2020).

This article will present an analysis of the current state of knowledge in the field of psychological safety, and the research gap resulting from this analysis. Further research directions will be proposed. Psychological safety is currently a highly relevant topic and is of importance due to its significance for organisations. The research topic is a response to the identified need to reinforce employees' sense of psychological safety in the context of our changing reality and alarming data on its effect on people's mental health. The analysis extends beyond the study of organisations and is based heavily on psychology. The research proposals presented in the article are a development of the theory of the sense of psychological safety, and the resulting development of the general concept related to the psychology of the person in organisations. In addition, the phenomenon of transgression in superior-employee relations is as yet poorly described, and the proposal describing the importance of leader transgression on the feeling of safety contributes to the theory of leadership.

2. Psychological safety of the employee in organisations

In classic needs theories describing the motivating mechanisms of the individual, one of the basic needs identified is that of safety. Satisfying the need for safety creates the conditions for realising needs of a higher order, such as the need for belonging, recognition or self-achievement (Maslow, 1954). Psychological safety is a concept that grew out of psychology

and is used in the field of organisational behaviours, and is attracting ever more attention from management researchers. Psychological safety is a cognitive state that is the result of assessment of the surroundings as accepting and friendly, an environment in which it is safe to take risks, e.g. interpersonal risk, in which making a mistake does not result in social ostracism (Edmondson, 1999). Research into the feeling of safety is on four levels, individual, group, organisational and superior-employee dyads. On the individual level, the majority of research shows the relation between the feeling of safety and organisational behaviours, such as thriving (Jiang et al., 2019), identification with the organisation (Liu et al., 2015), effectiveness (Obrenovic et al., 2020), innovativeness (Sun, Huang, 2019), creativity and knowledge sharing (Wang, Liu, Zhu, 2018). Safety gives employees the courage to undertake activities (Chen et al., 2019), engage in voice behaviours (Xu et al., 2017). Similarly to deprivation, the need for safety decreases cognitive abilities and effectiveness of action (Maslow, 1954), and low psychological safety lowers vitality and the learning processes that go to make up thriving at work (Jiang et al., 2019).

The group level emphasises the differences between teams at the level of psychological safety, even within the same organisation. The most frequently cited definition of a feeling of psychological safety in its original version refers to the belief shared by team members in a given group that it is possible to openly express one's opinions and emotions (Edmondson, 1996). The group level is often connected to team atmosphere, team effectiveness (Edmondson, 1999; Akan, Jack, Mehta, 2020), learning as a team (Edmondson, 1999; Jha, 2019), team creativity (Greenbaum et al., 2020), identification with the team (Johnson and Avolio, 2019), and the quality of decisions taken as a team (Zhou, Zhu, Vredenburgh, 2020). Aggregation of the feeling of psychological safety at the organisation level enables analysis of its relation with other organisational attributes such as effectiveness (Baer, Frese, 2003), change and culture (Cataldo, Raelin, Lambert, 2009). The feeling of psychological safety is a state that conditions an employee's adaptive mechanisms with regard to changes occurring in the organisation. From an organisational perspective, research has also been conducted into the significance of strategies and organisational practices, for example in the field of human resources management, in building a feeling of psychological safety within an organisation (Agarwal, Ferndale, 2017). Of key importance for an employee's feeling of psychological safety are their relations with their employer, the characteristics of the leader and the style of leadership. Research into subordinate-superior pairs has revealed that the matching personalities of both in terms of high proactiveness leads to a higher level of psychological safety in the employee (Xu et al., 2019). A high level of psychological capital in the leader strengthens the psychological safety of the employee (Wang, Chen, Zhu, 2021), as does the prosocial motivation of the leader, which is an additional predictor of a feeling of safety in the leader themselves (Frazier, Tupper, 2018).

Figure 1 presents a map of the co-occurring keywords that appear most frequently in literature on the topic of the feeling of psychological safety. The graphical representation of the network of connections was created using the VOS Viewer programme. The strength of the connections between the variables is expressed by the distance between them in the figure, and the frequency of occurrence of a given variable by the size of font and the circle indicating it. The lines between the variables indicate the relations between them described in the literature. The closer two values are to one another, the stronger the connection between them (Van Eck, Waltman, 2019). To create the map, words were used that appeared in the title, abstract and keywords found in a selected collection of over 900 articles from the Web of Science database. Effectiveness appears most frequently in relation with psychological safety, and is also in closest proximity. Having equally strong relations with psychological safety are: sharing knowledge, atmosphere, and transformational, ethical and servant leadership. Additionally, leadership styles that are paternalistic, abusive, authentic, inclusive and empowering feature as key variables in the feeling of psychological safety, which shows how important the style of management and type of leadership are in this context. The analysis also shows the connections between psychological safety and learning, innovativeness, creativity and knowledge sharing, that is cognitive activity on the part of employees and whole teams. Organisational culture and atmosphere provide a broader context for psychological safety. The culture can create a safe environment through its component values, norms and rituals, thus strengthening the feeling of safety. Atmosphere, as visible in the connections map, is a dimension in closer relation to the feeling of safety. In the literature, there is the concept of atmosphere of psychological safety, defined as an atmosphere that is conducive to overcoming anxiety and fear of failure (Wang et al., 2019). As shown in research, it is also strongly connected to an atmosphere for taking the initiative (Carmeli et al., 2013). Individual factors that are induced by psychological safety include not only creativity (Liu et al., 2016; Wang, Liu, Zhu, 2018) but, as illustrated in the connections map, also motivation to work, involvement, trust, prosocial behaviour and satisfaction with work.

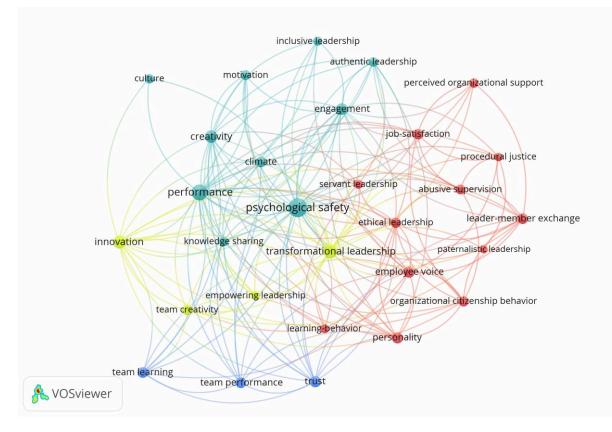


Figure 1. Keyword co-occurrence mapping of the psychological safety in literature. Source: own elaboration using VOS Viewer software.

3. Relationship between a leader's transgression behaviours and an employee's psychological safety

The majority of research into the effect of a leader on an employee's psychological safety focuses on positive styles of leadership such as authentic, empowering, transformational, ethical and servant. This may at least in part result from the fact that recent years have seen a blossoming of theories in the field of positive research on organisations, also in the theory of leadership. Leader transgression is defined as a (dysfunctional) behaviour contrary to the accepted societal principles, norms and practices in a given organisation (Shapiro et al., 2011). The perception of a leader's behaviour as transgressive or not is linked to the individual character of the relations between the superior and the employee, the conditions of such relations and its assumptions (Epitropaki, 2020, p. 11). The effects of transgression are, among others, the intention to leave, withdrawal (Shapiro et al., 2011), loss of trust towards the leader and damage to employee well-being (Byrne, Barling, Dupre, 2014). There is a lack of research into the effects of transgression itself and its consequences for organisational behaviours. The majority of studies on transgression focus on the importance of the properties of transgression and possible correctional strategies for the leader. The relationship between the

superior and the subordinate is a relationship between two people, in which trust and a feeling of safety are built through mutual respect, support and positive action. For this reason, it can be assumed that transgressive behaviour will decrease this feeling of support.

Proposal 1: A leader's transgressive behaviour decreases the psychological safety of the employee.

From the perspective of the effects of transgression, of key importance are features such as frequency, severity and whether correctional action has been taken by the leader, and if so what action. These properties also have an effect on the superior-employee relationship, on trust in this relationship and whether it will be rebuilt (Byrne, Barling, Dupre, 2014). The greater the severity of the leader's negative behaviour towards the employee, the more often this behaviour occurs, and the more likely that the feeling of safety will be lower.

Proposal 2: Employee psychological safety will decrease along with the severity of a leader's transgressive behaviour.

Proposal 3: Employee psychological safety will decrease along with the frequency of a leader's transgressive behaviour.

4. The moderating role of sensory processing sensitivity and the locus of control

Personality traits and psychosocial competences have an influence on how we interpret the behaviours of others and the reality surrounding us, as well as on how we react in a given situation and how we behave. In their research into the antecedents of psychological safety, Edmondson and Mogelof (2006) discovered that people with a higher level of neuroticism experienced lower psychological safety. Individual differences in perception of the surroundings can have an effect on whether a given behaviour is interpreted as threatening, transgressive or not (Epitropaki et al., 2020). Sensory processing sensitivity is a trait linked to personality conditions of perceiving reality, and is a feature that is relatively long-lasting and at least partly conditioned genetically (Assary et al., 2019). People with high sensory sensitivity are characterised by deeper processing of the stimuli they are exposed to and a lower level of arousal resulting from them. These properties mean a greater sensitivity to aesthetic experiences, art and beauty, but also the undergoing of unpleasant experiences and a lower level of arousal as a result of sensory stimuli. People with a higher level of sensory sensitivity feel overwhelmed by external and internal stimuli much more quickly than others (Aron, Aron, 1997), and are more attentive to subtleties (Graven et al., 2019). Sensory processing sensitivity is connected to neuroticism, that is negative emotionality and introversion (Aron, Aron, 1997).

Sensory processing sensitivity is not a disorder, but in people with high sensitivity, negative stimuli increase the likelihood of anxiety (Meredith et al., 2016), depression (Bakker, Moulding, 2012), problems with regulating emotions (Brindle et al., 2015), a higher level of stress (Bakker, Moulding, 2012), and a lower level of subjective happiness (Sobocko, Zelenski, 2015). For this reason, people with heightened sensory processing sensitivity may on the one hand be more sensitive to a superior's gestures, and more quickly assess them as threatening and exceeding certain limits. On the other hand, such behaviour in a leader may trigger more negative emotions in them than for other employees. In addition, this group of subordinates may have greater difficulties freeing themselves from a bad impression about the employer after their transgressive behaviour or forgetting about it. These three mechanisms provide a basis for:

Proposal 4: The negative relationship between a transgressive superior and the psychological safety of the employee will be intensified the higher the level of sensory processing sensitivity in the employee.

Transgressive behaviour is initiated by the superior, while the employee has no control over the situation. Internal control gives a feeling of agency and subjectivity in relations with others. Research into the importance of the locus of sense of control for the relationship between negative factors and their consequences at the individual level, indicates that it weakens the negative effect, for example, of stress on psychological well-being (Daniels, Guppy, 1994). In confronting a leader's transgression, an employee with internal control has greater possibilities for influencing their emotional state, maintaining a distance and building a feeling of psychological safety based on their own resources. For this reason, a feeling of control can reduce the negative effect of a superior crossing the line, and therefore the last proposal is:

Proposal 5: The negative relationship between a transgressive superior and the psychological safety of the employee will be more intensified for people with an external locus of control.

5. Summary

The article deals with an important and topical issue. The psychological safety of employees is beneficial for organisations and has a positive effect on employee efficiency (Obrenovic et al., 2020), team effectiveness (Akan, Jack, Metha, 2020), as well as the effectiveness of the entire organisation (Baer, Frese, 2003). Although recent years have brought an increase in interest among researchers in the topic of employees' feeling of safety, its antecedents and consequences for behaviours in organisations, it is only the latest world events that have made us aware of its role in the psychological balance and mental health of every individual person. A proposal has been presented here for reducing the effect of a leader's transgressive behaviour (taking into account the dimensions of severity and frequency) on employees' psychological

safety. Two factors that moderate this relationship have also been proposed. The first is sensory sensitivity to the surroundings, which is a trait that has only recently been described, and as research has shown, affects a significant proportion of the population. Research into the distribution of this trait among the population allows estimates to be made that around 20-30% of people have high sensory processing sensitivity (Lionetti et al., 2018; Greven et al., 2019). As a result, on average one in five people belongs to the group with a raised level of this trait. This means that HRM practices implementing a strategy of inducing psychological safety should take into account protection of employee limits in order to limit the possibility of transgressive behaviour occurring and its negative effect on the feeling of safety. It is also important to create optimal working conditions for people with raised sensory processing sensitivity. The second factor is the locus of the sense of control. Employees with internal control will be more resistant to the negative consequences of a superior's transgressive behaviour on the feeling of safety. For this reason, empowering employees can become one of the HRM practices that supports the preserving of psychological safety despite a leader's transgression.

Acknowledgements

The article is the result of work conducted as part of grant number 2017/27/B/HS4/02172 financed by the National Science Centre.

References

- 1. Agarwal, P., Farndale, E. (2017). High-performance work systems and creativity implementation: the role of psychological capital and psychological safety. *Human Resource Management Journal, Vol. 27, No. 3*, pp. 440-458.
- 2. Akan, O.H., Jack, E.P., Mehta, A. (2020). Concrescent conversation environment, psychological safety, and team effectiveness: examining a mediation model. *Team Performance Management: An International Journal. Vol. 26, No. 1/2*, pp. 29-51
- 3. Aron, E.N., Aron, A. (1997). Sensory-processing sensitivity and its relation to introversion and emotionality. *Journal of personality and social psychology, Vol. 73, No. 2.*
- 4. Assary, E., Vincent, J.P., Keers, R., Pluess, M. (2017). *Gene-environment interaction and psychiatric disorders: review and future directions*. Paper Presented at the Seminars in Cell Developmental Biology.

- Baer, M., Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. Journal of Organizational Behavior: *The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, Vol. 24, No. 1*, pp. 45-68.
- Bakker, K., Moulding, R. (2012). Sensory-processing sensitivity, dispositional mindfulness and negative psychological symptoms. *Personality and individual differences, Vol. 53*, *No. 3*, pp. 341-346.
- Brindle, K., Moulding, R., Bakker, K., Nedeljkovic, M. (2015). Is the relationship between sensory-processing sensitivity and negative affect mediated by emotional regulation?. *Australian Journal of Psychology, Vol. 67, No. 4*, pp. 214-221.
- 8. Cataldo, C.G., Raelin, J.D., Lambert, M. (2009). Reinvigorating the struggling organization: The unification of Schein's oeuvre into a diagnostic model. *The Journal of applied behavioral science, Vol. 45, No. 1*, pp. 122-140.
- 9. Chen, S., Jiang, W., Zhang, G., Chu, F. (2019). Spiritual leadership on proactive workplace behavior: the role of organizational identification and psychological safety. *Frontiers in psychology*, *Vol. 10*.
- 10. Daniels, K., Guppy, A. (1994). Occupational stress, social support, job control, and psychological well-being. *Human Relations, Vol. 47, No. 12*, pp. 1523-1544.
- 11. Edmondson, A.C. (1996). Learning from mistakes is easier said than done: group and organizational influences on the detection and correction of human error. *Journal of Applied Behavioural Sciences, Vol. 32, No. 1*, pp. 5-28.
- 12. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly, Vol. 44, No. 2*, pp. 350-383.
- Edmondson, A.C., Mogelof, J.P. (2005). Explaining psychological safety in innovation teams: Organizational culture, team dynamics, or personality. In: L. Thompson, H. Choi, (Eds.), *Creativity and innovation in organizational teams* (pp. 109-136). Mahwah, NJ: Erlbaum.
- 14. Epitropaki, O., Radulovic, A.B., Ete, Z., Thomas, G., Martin, R. (2020). Leader-follower transgressions, relationship repair strategies and outcomes: A state-of-the-science review and a way forward. *The Leadership Quarterly, Vol. 31, No. 1*.
- Frazier, M.L., Tupper, C. (2018). Supervisor prosocial motivation, employee thriving, and helping behavior: A trickle-down model of psychological safety. *Group & Organization Management, Vol. 43, No. 4*, pp. 561-593.
- Greenbaum, R.L., Bonner, J.M., Mawritz, M.B., Butts, M.M., Smith, M.B. (2020). It is all about the bottom line: Group bottom-line mentality, psychological safety, and group creativity. *Journal of Organizational Behavior*, Vol. 41, No. 6, pp. 503-517.

- Greven, C.U., Lionetti, F., Booth, C., Aron, E.N., Fox, E., Schendan, H.E., ... Homberg, J. (2019). Sensory processing sensitivity in the context of environmental sensitivity: A critical review and development of research agenda. *Neuroscience & Biobehavioral Reviews, Vol.* 98, pp. 287-305.
- 18. Heitzman, J. (2020). Wpływ pandemii COVID-19 na zdrowie psychiczne. Psychiatria Polska, Vol. 54, No. 2, pp. 187-198.
- 19. Jha, A. (2019). Financial reports and social capital. *Journal of Business Ethics, Vol. 155, No. 2*, pp. 567-596.
- 20. Jiang, Z., Hu, X., Wang, Z., Jiang, X. (2019). Knowledge hiding as a barrier to thriving: The mediating role of psychological safety and moderating role of organizational cynicism. *Journal of Organizational Behavior, Vol. 40, No. 7,* pp. 800-818.
- 21. Liu, W., Zhang, P., Liao, J., Hao, P., Mao, J. (2016). Abusive supervision and employee creativity: The mediating role of psychological safety and organizational identification. *Management Decision*.
- 22. Maslow, A. (1954). Motivation and Personality. New York: Harper and Row.
- 23. Meredith, P.J., Bailey, K.J., Strong, J., Rappel, G. (2016). Adult attachment, sensory processing, and distress in healthy adults. *The American Journal of Occupational Therapy*, *Vol. 70, No. 1.*
- 24. Obrenovic, B., Jianguo, D., Khudaykulov, A., Khan, M.A.S. (2020). Work-family conflict impact on psychological safety and psychological well-being: A job performance model. *Frontiers in psychology, Vol. 475.*
- 25. Pierce, M., McManus, S., Hope, H., Hotopf, M., Ford, T., Hatch, S.L., ... Abel, K.M. (2021). Mental health responses to the COVID-19 pandemic: a latent class trajectory analysis using longitudinal UK data. *The Lancet Psychiatry, Vol. 8, No. 7,* pp. 610-619.
- 26. Shapiro, D.L., Boss, A.D., Salas, S., Tangirala, S., Von Glinow, M.A. (2011). When are transgressing leaders punitively judged? An empirical test. *Journal of Applied Psychology, Vol. 96, No. 2.*
- 27. Sobocko, K., Zelenski, J.M. (2015). Trait sensory-processing sensitivity and subjective well-being: Distinctive associations for different aspects of sensitivity. *Personality and individual differences, Vol. 83*, pp. 44-49.
- Sun, Y., Huang, J. (2019). Psychological capital and innovative behavior: Mediating effect of psychological safety. *Social Behavior and Personality: an international journal, vol. 47, No. 9*, pp. 1-7.
- 29. Van Eck, N.J., Waltman, L. (2019). VOSviewer Manual. Leiden: Leiden University.
- 30. Wang, J., Long, R., Chen, H., Li, Q. (2019). Measuring the psychological security of urban residents: Construction and validation of a new scale. *Frontiers in psychology, Vol. 2423*.
- 31. Wang, Y., Chen, Y., Zhu, Y. (2021). Promoting innovative behavior in employees: The mechanism of leader psychological capital. *Frontiers in Psychology, Vol. 3797.*

- 32. Wang, Y., Liu, J., Zhu, Y. (2018). Humble leadership, psychological safety, knowledge sharing, and follower creativity: a cross-level investigation. *Frontiers in Psychology, Vol. 1727.*
- 33. Xu, M., Qin, X., Dust, S.B., DiRenzo, M.S. (2019). Supervisor-subordinate proactive personality congruence and psychological safety: A signaling theory approach to employee voice behavior. *The Leadership Quarterly, Vol. 30, No. 4*, pp. 440-453.
- 34. Zhou, W., Zhu, Z., Vredenburgh, D. (2020). Emotional intelligence, psychological safety, and team decision making. *Team Performance Management: An International Journal*.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

EMPLOYEE PROPENSITY TO PROFESSIONAL DEVELOPMENT AND ITS MEASUREMENT

Alena IVANOVA

SGH Warsaw School of Economics, Institute of Human Capital; aivanov@sgh.waw.pl, ORCID 0000-0003-3082-1558

Purpose: The aim of the publication is to attempt to define and operationalise the term employee propensity to professional development as well as to present the tool for measuring it.

Design/methodology/approach: To achieve the goals the author conducted Polish, English and Russian literature review and online survey (CAWI). The survey sample was 600 people (303 women and 297 men).

Findings: It is clear based on results that the tool is characterised by a high level internal cohesion (Cronbach $\alpha = 0,908$), the accuracy of measurement is relatively high and will allow for valid conclusions. Satisfactory levels of Kaiser-Mayer-Olkin coefficient of adequacy of the choice of variables confirm the above.

Originality/value: The fact that diagnosis of employee propensity to professional development does not require specialist psychological knowledge is a significant asset of the developed research tool. Thus, there are no additional costs for the organisation related with employment or contracting adequate specialist.

Keywords: professional development, propensity to professional development, management, indicator.

Category of the paper: research paper.

1. Introduction

Professional development is a process that takes place during most of human life and consists of the development of professional interests and skills which in turn is to widen and/or deepen knowledge and skills in a given area. Propensity to professional development plays an important role in that process and is conducive to, among many, one's activity aiming at gaining and deepening knowledge.

Organisational development is closely related with the development of its employees. Current dynamics of change in the environment is so high that the issue of employee professional development directed at specific needs of the organisation and determining employees whose development can increase its human capital value are getting particularly significant for the success of the organisation.

The article attempts at the definition and operationalisation of the term *employee propensity to professional development* as well as presentation of the tool for measuring it.

2. Chosen definitions of "propensity" in philosophy, economics, psychology, and management and quality sciences

The term *propensity* is relatively rarely used in literature and is not clearly defined. The analysis of Polish, English and Russian sources indicates that propensity is often considered equivalent with some personality traits which are conducive to interest, action and drive towards a defined direction in a method characteristic for a person (Doszyń, 2013). The term *propensity* can also be used in literature without explanation. Researchers indicate only its "direction", i.e. define what is the purpose of propensity, e.g. propensity to share knowledge (Walczak, 2021), propensity to success (Hozer, Doszyń, 2004), propensity to risk (Tyszka, Domurat, 2004). Some authors explain propensity as willingness to negative behaviours (counterproductive) like theft at work, sabotage, purposefully being late or inappropriate performance of one's duties (Szostek, 2018).

From the philosophical perspective human propensities subjectify human attitudes towards thoughts, actions, things etc. (Doszyń, 2008). Kant considered human propensities equivalent to will based on sensory perceptions. According to Shaftesbury propensities are motives explaining human behaviours (Shaftesbury, 1999).

The term propensity can also be found in economic literature, most often in the context of extreme propensity to consumption, saving and import.

In his treatise entitled *The Wealth of Nations* Smith lists among stable characteristics of human nature a human propensity to beneficial exchange which is the source of the division of labour resulting from the development of personal skills, agility and knowledge (Przybyła, 2005; Smith, 2020). The definition of propensity to consumption was introduced to macroeconomic research by Keynes. According to Hozer and Doszyń (2004) the analysis of human propensities is of great significance in the recognition of the economic capital of a country or region. During studies on human propensities in the economic process researchers concluded that propensity is an attitude of something or someone towards something or someone resulting in the increase of probability of particular events.

In psychology there is no cohesive understanding of the term propensity. However, a lot of researchers believe it to be one of the most significant detriments of human development which awakens dormant forces, mobilises to action and deliberate recognition of the value of those actions (Miasishchev, 2011; Leits, 1976). In the theory of individual psychological differences by Teplov (1954) propensity was defined as a tendency to engagement in particular actions. Propensity as an attitude towards action exists because of interests and attractiveness of that action, as far as it gives happiness (Iljin, 2009). Other researchers also define propensity as an attitude, i.e. a relatively constant propensity to positive or negative assessment of a given social or physical object (Wojciszke, 2003).

The analysis of literature on management indicates that *propensity* is viewed in various ways. Juchnowicz declares propensity to development as one of employee attitudes interacting with employee professional satisfaction which is one of the components of employee competence potential (Juchnowicz, 2014). Glińska-Neweś (2010) lists propensity to sharing knowledge as one of attitudes resulting from mutual trust. Stelmaszczyk defines propensity to sharing knowledge as a person's attitude towards the issues of knowledge transmission (Stabryła, Wawaka, 2014). Propensity to development is one of employee attitudes which has a particular influence on the value of intellectual capital of the organisation in the world of fast changes and lack of stability (Springer, 2011; Lewicka, 2010).

Authors of scientific and research publications on management are relatively often concerned with the issue of propensity to risk. Sitkin and Pablo as well as Sitkin and Weingart indicate that propensity to risk is determined by personal preferences concerning risk, one's prior experiences related with successes or failures in taking risks. Propensity to risk can be modified if influenced by new experiences (Yates, 1992; Brockhaus, 1980; Sitkin, Pablo, 1992; Sitkin, Weingart, 1995). Some authors, e.g.: Glinka and Gudkova, Rachwał, list propensity to risk as one of the characteristics of an entrepreneurial employee (Kuratko, Hodgetts, 1992; Bieniok, 1998; Rachwał, 2004; Koźmiński, 2005; Glinka, Gudkova, 2011). Whereas Jajuga views it as an attitude of a person who decides to take a risk (Jajuga, 2007).

However, usually researchers do not give a definition of *propensity* but use it mainly to define affiliation (direction) with something, i.e. propensity to something. For example: propensity to team work, propensity to support others, propensity to constant increasing challenges and combatting difficulties (Filipowicz, 2014), propensity to risk (Flaszewska et al., 2013), propensity to change (Kaleta, 2004), propensity to acquire and share new knowledge (Kłak, 2010).

Apart from the above listed kinds of propensity, scientific publications also list propensity to trust defined by Dyne et al. (2000) as a dimension of personality which conditions readiness for trust or the lack of it. Jaklik and Łaguna (2015) recognise it as every person's individual and inborn characteristic often a determinant of employee behaviours in an organisation, which, among others, include making risky decisions, getting adjusted in new place of work, new team etc.

Propensity to professional development is the object of this publication. It plays significant roles in the process of professional development which takes place throughout most of one's life and consists of the development of one's professional interests and skills which is to lead to widening/ deepening knowledge and skills in a given area.

Based on management literature and achievements of other scientific fields *employee* propensity to professional development is understood as employee attitude characterised by a relatively stable, general employee will for developmental activities.

3. Methods of measuring propensity

The following methods of measuring propensity can be listed: frequency, trigonometric and survey.

Measuring propensity with the use of frequency method consists of calculating the frequency of occurrence and can be presented as follows:

$$s = \frac{m}{n} \tag{1}$$

where:

s – frequency measure of propensity,

m – number of cases of a given event,

n – number of cases in general.

Propensities are also interpreter trigonometrically as "inclination". The inclination is measured by calculating the α angle between hypotenuse and adequate cathetus (figure 1).

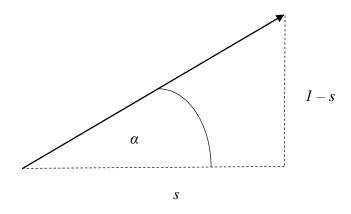


Figure 1. Trigonometric interpretation of propensity (inclination). Source: Doszyń, 2013, p. 16.

 α angle is a trigonometric measure of propensity inclination, which can be calculated according to the following dependency:

$$tg\alpha = \frac{1-s}{s} \tag{2}$$

where:

 α angle tangent – measure of propensity,

s – fraction of events (persons) experiencing propensity.

 α angle between 0° - 90°. If α = 90°, there is no propensity. If α decreases, propensity grows (Hozer, Doszyń, 2004, pp. 33-36).

One cathetus measures the fractions of events in a sample where the event of interest occurs (s). Second cathetus measures the fractions of events in a sample where the event of interest does not occur (1 - s). The less events where event of interest occurs, the greater the propensity.

Human propensities can also be measured with the use of surveys or tests. The measurement of propensity through surveys is carried out based on respondents' answers from a questionnaire. The assessment is done with the use of scale which is usually modified by researchers and adjusted to scientific issue and the means of understanding propensity.

The measurement of propensity in management sciences is usually done based on respondent's personal assessment via survey method. Gathered data are analysed based on appropriate methods of statistical inference.

Management literature does not give ready models of a research tool which allows to measure employee propensity to professional development. Literature studies allow to identify only the methods of assessing employee focus on professional development (Januszkiewicz, 2009) and readiness for learning and professional development in the workplace (Różański, 2014) – categories also used to characterise employee developmental characteristics, as well as propensity to professional development.

It should be stressed that Różański and Januszkiewicz assess development-oriented attitudes in the context of educational activity of adults, i.e. within the framework of andragogy. Therefore the presented method of assessment is supportive of research on the characteristics of employee developmental maturity. Whereas the analysis of propensity consisting only of the knowledge concerning relative frequency of events or the calculation of shares incredibly simplifies the understanding of the role of propensity in the creation of casual links, especially those referring to human behaviours. Therefore methods of measuring propensity presented cannot be conducive to emerging employees engaged in the improvement of competences and be a basis of the decision-making process, for example in the case of investments in employee professional development.

 $\langle \mathbf{n} \rangle$

4. Proposal for the Method of Measuring Employee Propensity to Professional Development

All the presented definitions of propensity suggest there is no conclusive meaning and thus can be considered as conceptual notion. According to the definition employee propensity to professional development is the basis and a category directly observed and thus cannot be directly measured. The indicator of propensity to professional development is an individual meter.

Professional literature agrees that propensity is a ternary structure. It consists of three related components: cognitive, behavioural and emotional (Mądrzycki, 1977; Mika, 1982).

Assumptions and conclusions from studies¹ presented above became the basis of operationalisation of employee propensity to professional development (table 1).

Table 1.

Elements and operationalisation of propensity to professional development

Elements of propensity	Operationalisation of propensity
1	2
	I know which qualifications/skills influence my work efficiency
	I am aware which qualifications/skills I should refine in order to reach my development goals
Cognitive	I recognise when my professional knowledge becomes outdated
	I recognise when a change of the realisation of tasks would allow me for the improvement of
	my work efficiency
	I was actively searching for possibilities to develop my qualifications/skills within the last 12
	months
Behavioural	Development of qualifications/skills allows me to undertake increasingly more complicated
Dellavioural	tasks
	I am searching for methods to realise my tasks in order to be more effective.
	I develop my qualifications/skills regardless of efforts it takes.
	Development of qualifications/skills is a source of joy for me
Emotional	Development of qualifications/skills gives me satisfaction
Emotional	I look forward to the perspective of possible development of qualifications/skills
	The effects of the development of qualifications/skills give me a sense of pride

Source: Own calculations.

¹ Research project no. 2018/31/N/HS4/01212 *Wpływ pozytywnych zachowań pracowników w organizacji na ich skłonność do rozwoju zawodowego* financed from the resources of National Science Centre.

5 degree Likert scale² was used to measure propensity, according to which the respondent has to answer to 12 statements (table 1, column 2). The calculation of the indicator consists of summing point values given by each respondent to every statement³. Maximum value amounts to 60 points. The higher the final results, the higher the respondent's propensity to professional development.

5. Results of the Validation of research tool

The research⁴ was carried out on 17-22 March 2021 with the use of CAWI. 3000 persons working in Poland and chosen randomly via SW panel were invited to participate. 1370 persons applied for participation. 600 persons (303 women and 297 men) qualified for the study because they fulfilled the requirement of being in the process of developing their professional development (e.g. trainings, language courses, post-graduate studies, temporary work in other department/ higher grade) within previous 12 months.

Majority (63.3%) of respondents had higher education, almost 1/3 had secondary education and 5.8% had basic vocational education.

Respondents varied according to the size of company. The percentage of persons employed in big companies (over 250 employees) amounted to 23%, were employed in medium enterprises (50-249 employees) – 32.2%, 30% of respondents were employed in small companies (10-49 employees), and 14.7% of respondents were employed in micro companies.

According to job division a majority of respondents were employed as non-managerial staff (61.7%), managerial staff amounted to 32.2% and 6% of respondents declared to be owners of companies.

The most numerous group consisted of respondents with working experience of 1-5 years in their current place of work (40.0%), whereas the least numerous group consisted of persons employed in their current place of work for 1 year (11.3%).

In accordance with the sector of employment 63.3% of respondents were employed in the private sector, 33.3% - public sector and 3.3% in NGOs.

The results of the analysis of correlation with the use of Spearman coefficient indicate a very weak interdependence between propensity to professional development and "personal characteristics". However, the sign of correlation coefficient is a very interesting feature (table 2).

² Likert scale is used to measure propensity to professional development through the assessment of presented statements with 5 point scale as follows: 1 - definitely not; 2 - rather not; 3 - neither yes nor no; 4 - rather yes; 5 - definitely yes.

³ The validity of the use of summary scale confirms the correlation between the points of the scale.

⁴ Research project no. 2018/31/N/HS4/01212 "*Wpływ pozytywnych zachowań pracowników w organizacji na ich skłonność do rozwoju zawodowego"* financed from the resources of National Science Centre.

Table 2.

	I	Personal characteristics	Sign of correlation coefficient	Correlation coefficient
	Gender	Woman (1) Man (2)	negative	-0,16**
Propensity to professional development (scale of 12 to 60 pts.)	Age	18-24 years old (1) 25-29 (2) 30-34 (3) 35-39 (4) 40-44 (5) 45-49 (6) 50-54 (7) 55-59 (8) 60-64 (9) 65-69 years old (10)	positive	0,01
	Education	basic vocational (1) secondary (2) higher I degree (BA, engineer) (3) higher II degree (MA) (4) higher III degree (PhD) (5)	positive	0,08
	Level	non-managerial (1) managerial (2) ownership (3)	negative	-0,01
	Working experience in current place of work	up to 1 year (1) over 1 year to 5 years (2) 6-10 years (3) over 10 years (4)	negative	-0,03
	Company size	micro (up to 9 employees) (1) small (10-49 employees) (2) medium (50-249) (3) big (over 250 employees) (4)	negative	-0,02
	Sector	private (1) public (2) NGOs (3)	negative	-0,03

** Correlation significant on the level of 0.01 (bilaterally).

Source: own calculations.

The value of Cronbach α for the whole scale in the study amounted to 0,908 (table 3).

Table 3.

Reliability statistics

Elements of propagity/acreat	Cronbac	Number of	
Elements of propensity/aspect	pilot study ⁶	research ⁷	entries
Cognitive element	0,784	0,774	4
Behavioural element	0,752	0,795	4
Emotional element	0,891	0,875	4
Scale in total	0,864	0,908	12

Source: own calculations.

⁵ Cronbach alfa can assume values depending on the situation: from 0-1 with appropriate and common value of the coefficient being at least 0,6 and 0,9 at best.

⁶ Pilot study conducted on 24 October-10 November 2020.

⁷ Research conducted on 17-22 March 2021.

The results of the research confirm the accuracy of the scale as well as indicate its high internal cohesion even though the scale is short.

The results of the analysis of theoretical relevance in table 4 indicate good theoretical accuracy of the scale.

Table 4.

Kaiser-Mayer-Olkin and Bartlett's test of sphericity

KMO measure		0,922
Bartlett test for Sphericity	Approx. Chi-square	3436,806
	df	66
	relevance	0,000

Source: own calculations.

6. Summary

In the light of all the ways of understanding propensity presented in the article it is clear that the notion is the object of inquiry of various scientific branches – philosophy, psychology, economics, management etc. The problem with a clear and precise definition of the term does not only concern those sciences but also the representatives of those sciences. The reason being that the subject matter is multidisciplinary and complex. Therefore the term *propensity* is defined depending on scientific discipline and research needs.

It should be added that the interdisciplinarity of the concept of propensity creates a considerable scientific and research potential for its better understanding. But it can also cause difficulties in the approach to its measurement and with the interpretation of research results.

Despite ambiguity, both in understanding and definition of propensity, common features can be earmarked:

- propensity can change under the influence of external (environmental) and internal (within the person) factors,
- propensity can be a source of motivation to take action,
- propensity can facilitate forecasting reactions and explain person's actions,
- propensity can be shaped to some extent,
- propensity can be measured.

The author's method of measurement presented in the article, which incorporates the interpretation of propensity as particular attitude – and consists of such components as knowledge of the subject matter (like knowledge of competences necessary to perform tasks in a given job, need of development and knowledge of one's own level of competences), emotions accompanying the process of learning and development and behaviour towards the subject matter – allows for studying and treating propensity to professional development comprehensively.

Analyses proved the internal cohesion defined by Cronbach α , which allows to determine homogeneity of the scale, i.e. the level of one construct, amounted to 0,908, which indicates high level internal cohesion. Whereas the accuracy of measurement, i.e. assessment of the level of assumed variables measured by the tool, is relatively high and will allow correct conclusions. Satisfactory value of the indicator of adequacy of the choice of variables by Kaiser-Mayer-Olkin, as well as the results of Bartlett test of sphericity, are also a confirmation.

As one of the cognitively interesting directions of research on the issue of employees' propensity for professional development from the perspective of human capital management, it may be important to identify the key factors motivating employees to undertake development activities, taking into account their generation. It may also be important to study and identify such organisational conditions that are conductive to the increasing of employees' will for learning and developmental activities.

The fact that diagnosis of employee propensity to professional development does not require specialist psychological knowledge is a significant asset of the developed research tool. Thus, there are no additional costs for the organisation related with employment or contracting adequate specialist.

References

- 1. Bieniok, H. (Ed.) (1998). *Podstawy zarządzania przedsiębiorstwem*. Katowice: Wydawnictwo Akademii Ekonomicznej.
- 2. Brockhaus, R. (1980). Risk Taking Propensity of Entrepreneurs. *The Academy of Management Journal, No 23(3),* pp. 509-520, doi: 10.2307/255515.
- 3. Doszyń, M. (2008). *Statystyczno-ekonometryczna analiza skłonności ludzkich*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- 4. Doszyń, M. (2013). *Skłonności w ekonomii. Ujęcie ilościowe*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- 5. Filipowicz, G. (2014). Zarządzanie kompetencjami: Perspektywa firmowa i osobista. Warszawa: Wolters Kluwer.
- 6. Flaszewska, S., Lachiewicz, S., Nowicki, M. (Eds.) (2013). *Społeczne i organizacyjne czynniki rozwoju przedsiębiorczości*. Łódź: Wydawnictwo Politechniki Łódzkiej.
- 7. Glinka B., Gudkova, S. (2011). *Przedsiębiorczość*. Warszawa: Oficyna Wolters Kluwer business.
- 8. Glińska-Neweś, A. (2010). Pozytywny potencjał organizacji jako prorozwojowa architektura zasobów przedsiębiorstwa. In: M.J. Stankiewicz (Ed.), *Pozytywny Potencjał Organizacji. Wstęp do użytecznej teorii zarządzania.* (pp. 37-48) Toruń: Dom Organizatora.
- 9. Hozer, J., Doszyń, M. (2004). Ekonometria skłonności. Warszawa: PWN.

- 10. Iljin, E.P. (2009). Psihologiya tvorchestva, kreativnosti, odarennosti. Piter: SPb.
- 11. Jajuga, K. (2007). Koncepcja ryzyka i proces zarządzania ryzykiem wprowadzenie. In: K. Jajuga (Ed.), *Zarządzanie ryzykiem*. Warszawa: PWN.
- Jaklik, A., Łaguna, M. (2015). Zaufanie w organizacji. Analiza sposobów ujęcia i modeli teoretycznych. *Psychologia Społeczna, No. 4 (35)*, pp. 369-382, doi: 10.7366/ 1896180020153501.
- 13. Januszkiewicz, K. (2009). *Rozwój zawodowy pracownika. Szansy i zagrożenia.* Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 14. Juchnowicz, M. (2014). *Satysfakcja zawodowa pracowników kreator kapitału ludzkiego*. Warszawa: PWE.
- 15. Kaleta, A. (2004). *Strategia przedsiębiorstwa*. Retrieved from http://www.ue.wroc.pl/p/ zagranica/summerschool/strategia_przedsiebiorstw_a.kaleta_2.pdf/, 15.01.2022.
- 16. Kłak, M. (2010). Zarządzanie wiedzą we współczesnym przedsiębiorstwie. Kielce: Wydawnictwo Wyższej Szkoły Ekonomii i Prawa im. prof. Edwarda Lipińskiego w Kielcach.
- 17. Koźmiński, A.K. (2005). Zarządzanie w warunkach niepewności. Warszawa: PWN.
- 18. Kuratko, D.F., Hodgetts, R.M. (1992). *Entrepreneurship: A contemporary approach*. Fort Worth: Dryden Press.
- 19. Leits, N.S. (1976). Ob izuchenii problemy sklonnostey v rusle idey B.M. Teplova. *Voprosy psihologii, No. 5,* pp. 45-54.
- 20. Lewicka, D. (2010). Zarządzanie kapitałem ludzkim w polskich przedsiębiorstwach. Warszawa: PWN.
- 21. Mądrzycki, T. (1977). *Psychologiczne prawidłowości kształtowania się postaw*. Warszawa: WSiP.
- 22. Miasishchev, V.N. (2011). Psychologia otnosheniy. Moskva: MODEK. MPSI.
- 23. Mika, S. (1982). Psychologia społeczna. Warszawa: PWN.
- 24. Przybyła, H. (2005). Adam Smith prekursor etyki gospodarczej. *Studia Ekonomiczne*. *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach*, *No. 35*, pp. 11-49.
- 25. Rachwał, T. (2004). Cele i treści kształcenia przedsiębiorczości w szkołach ponadgimnazjalnych. In: J. Brdulak, M. Kulikowski (Eds.), *Przedsiębiorczość stymulatorem rozwoju gospodarczego*. Warszawa: Instytut Wiedzy.
- 26. Różański, A. (2014). *Rozwój zasobów ludzkich w organizacji*. Lublin: Politechnika Lubelska.
- 27. Shaftesbury, A.A.C. (1999). *Characteristics of Men, Manners, Opinions, Times, etc.* Cambridge: Cambridge University Press.
- 28. Sitkin, S., Pablo A. (1992). Reconceptualizing the Determinants of Risky Behavior. *The Academy of Management Review, No. 17*, pp. 9-38, doi.org: 10.5465/amr.1992.4279564.

- Sitkin, S., Weingart, L. (1995). Determinants of risky decision-making behavior: A test of the mediating role of risk perceptions and propensity. *Academy of Management Journal*, *No. 38*. p.p 1573-1592, doi.org: 10.2307/256844.
- 30. Smith, A. (2020). Badania nad natura i przyczynami bogactwa narodów. Warszawa: PWN.
- 31. Springer, A. (2011). Wybrane czynniki kształtujące satysfakcję pracowników. *Problemy zarządzania*, *Vol. 9, No. 4(34)*, pp. 162-180.
- 32. Stabryła, A., Wawak, S. (Eds.) (2014). *Problemy zarządzania organizacjami w społeczeństwie informacyjnym*. Kraków: Mfiles.pl.
- 33. Szostek, D. (2018). Poczucie sprawiedliwości organizacyjnej a skłonność pracowników do zachowań kontrproduktywnych. *Organizacja i kierowanie, No. 3(182)*, pp. 129-144.
- 34. Van Dyne, L., Vandewalle, D., Kostova, T., Latham, M., Cummings, L. (2000). Collectivism, Propensity to Trust and Self-esteem as Predictors of Organizational Citizenship in a Non-work Setting. *Journal of Organizational Behavior*, Vol. 21, Iss. 1, No. 1, pp. 3-23, doi:10.1002/(SICI)1099-1379(200002)21:1<3::AID-JOB47>3.0.CO;2-6.
- 35. Walczak, W. (2009). Zarządzanie wiedzą w przedsiębiorstwie. *Ekonomika i organizacja przedsiębiorstwa*, *No. 12*, pp. 3-10.
- 36. Walczak, W. (2012). *Wpływ kultury organizacyjnej na skłonność do dzielenia się wiedzą*. Retrieved from http://www.e-mentor.edu.pl/artykul/index/numer/43/id/899, 10.01.2022.
- 37. Wojciszke, B. (2003). Postawy i ich zmiana. In: J. Strelau (Eds.), *Psychologia*. Gdansk: GWP.
- 38. Yates, J.F. (Ed.) (1992). Risk-taking Behavior. New York: John Wiley and Sons.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

TRUST AS THE RESOURCE AND INFORMAL INSTITUTION IN ECONOMIC ACTIVITY AFTER 1988

Sławomir KAMOSIŃSKI

Kazimierz Wielki University Bydgoszcz; slawomirkamosinski@ukw.edu.pl, ORCID: 0000-0001-9314-4991

Purpose: The aim of the paper is to determine the level of trust of entrepreneurs in public life institutions and legal regulations, and to describe the way this affects the quality of business activity in Poland.

Design/methodology/approach: The study herein was conducted basing on the qualitative research method. For this paper, the interviews were applied conducted by the author with entrepreneurs from 2017 to 2021. Besides, the author analysed also the interviews given by entrepreneurs (within 1998-2020) to the press, mainly of economic character. Moreover, the data was applied herein that had been collected by organizations monitoring activity of entrepreneurs and source materials published by the Polish Government and Parliament.

Findings: All conclusions following from the entrepreneurs' experiences constitute a good base for catalogue of faults that amplify distrust of entrepreneurs in the institutions of public administration and judicial authorities. The faults, include, first of all, lack of permanent cross-party strategy of economic policy, designed and executed by subsequent governing groups. The next fault is fading social dialogue between entrepreneurs and the governing bodies. The quality of law implemented in Poland is dependent on consultation with entrepreneurs. They are the group that shall apply the legal regulations in practice. Respect to legislation is built through entrepreneurs' participation in its formation on every stage. Constancy and stability of legislation constitute the basic demand of entrepreneurs. Perspective of legislative stability enables entrepreneurs to create a certain idea of how the company shall operate within a longer timeframe.

Research limitations/implications: The analysis is based on respondents' subjective declarations.

Practical implications: The article provides useful knowledge for politicians at the level of governmental and local authorities on the need to build trust of public institutions in entrepreneurs and entrepreneurs in public institutions. Trust is a factor that strengthens the effectiveness of economic activity.

Originality/value: Analysis of a wide range of factors influencing entrepreneurs' trust in public institutions and public institutions in entrepreneurs.

Keywords: trust in economic activity, deficit of trust, formal and informal institutions, entrepreneur.

Category of the paper: Research paper.

1. Introduction

In 1997 Francis Fukuyama stated that trust shaped social capital and influenced the socalled "road to prosperity". This is the hidden force supporting all market processes. High level of trust gives the entrepreneurs additional energy to conduct their business activity and set up relations with the company environment. This has a cultural character and "is not created according to the rigid system of rules and regulations but basing on ethical habits and mutual moral obligations characteristic for every member of society" (Fukuyama, 1997, pp. 18-19).

In business activity the concept of trust means the inner conviction and confidence of entrepreneur on this day that future might be designed and predicted. This facilitates relations with co-workers, shareholders, and collaborators. The entrepreneur trusts formal institutions, believes in their good will, hopes he/she will not be deceived or misled. The opposite to trust is distrust. Crisis of confidence and an increase in distrust results in the disequilibrium in system of values. Its immediate result is a negative impact on economic relations, for instance, decrease in the rate of growth and development of bureaucratic procedures that generate higher transactional costs.

Many researchers have tried to work out the abovementioned research issue. From the point of view of institutional economy it has been analysed, among others, by: Joanna Godłów-Legiędź (2020), Jerzy Wilkin (2016), Zbigniew Staniek (2017), Marek Bugdol (2010), E. Mączyńska (2014), Piotr Pysz (2014), Ewa Gruszewska (2013), Przemysław Hausner (2019), A. Noga, A.K. Koźmiński, K. Piotrowska, K. Zagórski (2020; 2022), Grzegorz Kołodko, and many other Polish scientists that observe some correlation between the deficit of trust (or wider - the deficit of values), and actions taken up in the economic sphere. Interesting conclusions were presented by Walter Eucken (2005), Douglas North (2014), Daron Acemoglu, James Robinson (2014), and Kate Raworth (2021).

This paper presents factors that might cause consolidation or even deepening of the crisis of trust of entrepreneurs in formal institutions in Poland within the years 1989-2021. This aspect is significant, as trust of entrepreneurs affects the range of investments taken up by them, and the quality of entrepreneurs' relations with society. Therefore, the aim of the paper is to determine the level of trust of entrepreneurs in public life institutions and legal regulations, and to describe the way this affects the quality of business activity in Poland. Walter Eucken posed the fundamental question: "How did this happen that in the last decades a reduced tendency to invest was very often observed, although the opportunities to do so were really huge?" (Eucken, 2005, p. 327). Kate Raworth suggests: "If you want to manage, learn to communicate." (Raworth, 2021, p. 105). She emphasises that we are generally able to communicate "in very specific ways" and cooperate conditionally.

The study herein was conducted basing on the qualitative research method. For this paper, the interviews were applied conducted by the author with entrepreneurs from 2017 to 2021. Besides, the author analysed also the interviews given by entrepreneurs (within 1998-2020) to the press, mainly of economic character. Moreover, the data was applied herein that had been collected by organizations monitoring activity of entrepreneurs and source materials published by the Polish Government and Parliament.

2. Literature review. Interpretations of institutional economy

Marek Bugdol claimed that trust was "sine qua non for economic cooperation" and "the basis for social interactions, a valuable, precious resource positioned in organization and human relations" (Bugdol, 2010, pp. 17-18). Elżbieta Mączyńska claimed that trust constituted grease for business and for harmonious socio-economic development. If there is no trust, the economic bloodstream gets disrupted, or even contaminated, which, in hand, may "in extreme cases pose the deadly threat" (Mączyńska, 2014, p. 106). The increase in researchers' interest in trust as in economic category (the economic resource and informal institution), according to Michał Michalski, has contributed to a certain breakthrough in economy, the result of which is so-called revolution of trust. (Michalski, 2016, p. 320). Therefore, adding trust to the classical Triade of resources (land, labour, and capital) is not exaggeration. It is trust that constitutes the fourth asset. Its significance in conducting business activity follows from the impact it has on the shape of space-time span of an entrepreneur. It minimizes the risk on this day and gives the entrepreneur a certain perspective for creation of future basing on past experiences.

According to Ewa Gruszewska, trust (...) "derives from individual experiences and analyses of examples of other people" (Gruszewska, 2018, p. 212). From this context we can conclude that the resource of trust and the resource of distrust are the effects of accumulation of past experiences that the entrepreneur cannot get rid of. Most often this is formed through interactions the entrepreneur has with public administration institutions, contractors, or clients. Only the entrepreneur free form negative experiences are able on this day to predict future with optimism. For this reason, trust is one of the crucial stimulants strengthening entrepreneurial attitudes and improving entrepreneurs' performance. Following this reasoning, we see that trust enables entrepreneurs to reduce level of uncertainty and gives them an opportunity to approximate risk related to potential investments. Piotr Sztompka concludes: "...trust and distrust are the ways to deal with uncertain future by formulating positive or negative predictions and undertaking or abandoning certain actions" (Sztompka, 2002, p. 310).

The resource of trust is enhanced by the stable economic policy run by the government authorities. This problem was pointed out by Walter Eucken: "In order to plan larger investments, one needs a certain stability of data", at least within the currency policy, trade, taxes, and payroll. "Restless actions within the economic policy, such as rejecting today what was significant yesterday, create the state of insecurity and, together with distorted price relations, interfere with the execution of many investments. The atmosphere of trust is lacking" (Eucken, 2005, pp. 327-328).

As a result of the radical market reforms after 1988 the condition of Polish economy aroused confusion of a part of the society. The standard of living lowered in many cases. The society had expected prosperity but obtained annoying inflation and increasing unemployment, and thus uncertainty about the future. "Formal bases for the new system were the effects of implementation of solutions proven in countries with a higher level of development. To function in accordance with their aim they had to be supported by informal institutions, approved, and adopted in the Polish society and economy" (Gruszewska, 2014, p. 251). Points of contact between the formal institutions created after 1988 and the informal institutions (having long tradition and being subjects to slow transformations), did not form. What is more, the institutions increasingly drifted apart. Dualism of institutional system (Gruszewska, 2014, p. 251) revealed problems within the institutional law. Newly formed formal institutions collided with the slowly evolving informal institutions. During the first years of transformations, it was important to construct institutional balance that comprised "harmony between the new rules and old ethos." In the opposite situation, observed in Poland, when "the introduced formal rules that do not correspond with the dominating ethos, the costs of introducing new reforms are remarkably high. Moreover, social conflicts intensify, so taking up certain actions is necessary to enforce the compliance with the new rules, against the prevailing tradition" (Godłów-Legiędź, 2020, p. 104). In such circumstances the society was given uncertainty and instability, instead of the expected prosperity and peace. As a result, temptations to break the law appeared, many actions were taken on the fringes of legality. Corruption rose and so did the so-called shady businesses. A new slogan gained popularity greed is good.

Facing the institutional crisis, the society decided that the unwritten social agreement was not executed. In 1989 Poles had a precise image of socialism and capitalism. Capitalism was perceived as a modern, dynamic, and flexible social system, was associated with youth, colourfulness, provision of someone's needs, individualism, crossing the borders, and consumption. Socialism was something opposite. It meant backwardness, stagnation, stiffness, greyness, connections, and isolation (Dunn, 2008, p. 84). So, the institutional inertia was a fact (Mączyńska, 2014, p. 105-106). Quoting Janos Kornai, Elżbieta Mączyńska, observes: "failure to keep a promise has resulted in the loss of trust, not only in people or institutions that break promises, but on a larger scale, as in the domino effect or in a spiral" (Mączyńska, 2014, p. 105). Thus, the origin of distrust culture in Poland can be found in strengthening discrepancies between formal and informal institutions.

3. Research results

Economic policy

There has been a certain tradition in Polish politics consisting in the fact that political parties taking powers as a result of election, tend to break the continuity of economic policy. This generates the feelings of uncertainty and insecurity among entrepreneurs before every election held in Poland. The uncertainty refers to decisions to be taken by politicians and constitutes the main reason, why they are quite concerned about the future of their companies. For many of the entrepreneurs their companies are in fact their lifetime achievement.

Within the years 1989-2021 in Poland the Government was changed nineteen times. That happened, first, due to the applied election calendar that assumed a four-year term of office of the Parliament. In addition, political turmoil, disputes arising in the governing coalitions, which resulted in the government's resignation, were also significant. Excessively frequent changes of directions and tools of economic policy ruled out the chances for creation of a longterm strategy of economic policy (Grabska, 2014, pp. 175-176). As a result, entrepreneurs were, and still are, witnesses of sudden turns in economic policy, which only strengthens their uncertainty and convinces them that politicians cannot be trusted. Walter Eucken proved that "stability is the main factor of economic policy in the system based on competition. Economic policy creates allegedly useful economic frames for the economic process; economic policy persistently sticks to the frames and introduces changes very carefully". At the same time, he warned: "If economic policy is not characterised by sufficient stability, the system based on competition cannot be fully effective" (Eucken, 2005, pp. 328-329). The following opinion of Piotr Sztompka corresponds with the above statement: "The basis of trust in the national context is the feeling of certainty, continuity and stability of the rules of game". One must not change regulations under influence of temporary circumstances or political caprice. A citizen does not live only now. His actions constitute an investment in his own future and of his children's. The more predictable and stable are the rules governing the future, the better" (Sztompka, 2007, p. 16).

Trust in modern economy that is focused on the development, is formed by stable, longterm economic policy for which the tools are steps to be taken by the governing bodies foreseen by entrepreneurs. Such expectation follows directly from the space-time span of entrepreneur.

Table 1.

Institution	1990	1999	2008	2017
European Union	59	43	56	49
Government	n/a	n/a	23	26
Sejm	67	33	20	22
Judiciary	53	42	44	37
Social insurance system	41	39	27	36

Trust of Poles in EU and Polish institutions within 1990-2017 (percent)

Source: Zaufanie do UE i polskich instytucji systemowych/Trust in EU and Polish systemic institution; case-research.eu (access: 16.06.2021).

Crisis of trust in formal institutions in Poland is a fact. The Parliament, the Government, and institutions of social security are the institutions that Poles actually distrust. Ewa Gruszewska accurately observes that a negative evaluation of current policy of central authorities may lead to the state when all subsequent decisions of the authorities will be perceived as apparent and temporary. Therefore, there is no use in being involved. As a result, a division into two categories will be perpetuated: us vs. them (Gruszewska, 2018, p. 212).

It is interesting, however that at the same time an increase of trust in international institutions is observed among the Polish society. It is conditioned by the deficit of trust in the national institutions, following from their lack of stability. According to entrepreneurs and the whole society, the international institutions are stable, and - if needed - will provide aid, being the second line of citizens' defence. Using military terminology, we may refer to them as "backup". They constitute a guarantor that may defence citizen's rights if they come under threat. The international institutions are legitimate under international commitments of Poland. With reference to the above, using marketing terminology, we may say that the European Union is for Poles a brand of much better value and image than the national institutions.

Table 2.

Trust of Poles in NATO, EU, and UN within 2002-2020, according to CBOS (Public Opinion Research Centre)

Year	NATO	European Union	UN
2002	63	49	63
2004	59	46	62
2006	63	62	65
2008	68	73	69
2010	59	60	60
2012	57	58	57
2016	62	56	57
2018	n/a	53	n/a
2020	80	73	72

Source: Wzrost zaufania do NATO, UE i ONZ, "CBOSNEWS, Newsletter 2020, nr 11/Increase of trust in NATO, EU, and UN, "CBOSNEWS, Newsletter 2020, no 11, www.cebos.pl on-line: 16.06.2021.

Legal system vs. trust

Instability of economic policy that has been observed in Poland since end of 1988, has affected a critical approach of entrepreneurs towards the binding legal regulations. James K. Galbraith is convinced that legal regulations governing various areas of modern economy are effective only when individual social groups, including entrepreneurs, trust them. He explains: "Trust is ensured through regulation. This means that in a modern world the regulation is not a burden to the markets but sine qua non of their existence" (Galbraith, 2016, p. 68). According to entrepreneurs, the Polish legal order is anything but stable. The data provided by Ernst&Young and the Sejm's Office of Analyses show that amendments and revisions of legal acts in Poland constitute 60 percent of all acts adopted by the Parliament.

is introduced. The bizarre phenomenon of amending an act during its *vacatio legis* is not rare. Such information proves low quality of the legislative procedures.

In 2018 the Union of Entrepreneurs and Employers indicated that, as regards globalisation of economic processes and overcoming by Poland the so-called middle-income trap, complication of the national tax regime does not favour the business sphere (Raport, 2018, pp. 10-11). It was pointed out that in 2015 the tax acts changed sixty-five times, in 2016 there were fifty-three amendments adopted, whilst in 2017 there were "only" thirty-six of them (Raport, 2018, p. 9). In addition, in a soothing way, it was stated that the basic tax acts were changed in 2017 much rarely then the year before.

Another factor that destroys the credit of Polish legal order is overregulation, or so-called ballooning legislation. Wojciech Rogowski comments on this phenomenon: "A large and increasing number of provisions may hamper extensional relations and disturb relations between separate standards consisting in the legal system. This weakens transparency, certainty, and effectiveness of law, rather than strengthening it, which seems to be the aim of authors of the new regulations. Excessive number and fluctuation of regulations causes a problem of asymmetry of information with everyone who must know the legal regulations and follow them. Vicissitudes of legal regulations may lead to weakening of entrepreneur's awareness of the boundary conditions in management" (Rogowski, 2018). Therefore, a question arises, which groups are privileged, who has lobbied for adopting certain legal regulations and who, using the legislation, has attempted to achieve one's own goals. These are classic examples of institutional chaos that generates legal havoc (Mączyńska, 2014, p. 110).

Non-transparent law signifies an increase of costs of business activity as it creates the need of employing expensive legal services. Micro- and small entrepreneurs treat such services as additional costs and resign from them. This is dangerous phenomenon. An institutional system should be constructed in such way that it would not exclude any groups. Exclusion is followed by increasing distrust.

Overregulation and inconsistency in legal regulations have become annoying to most entrepreneurs. They state: "It's a disaster that law is not given once and for all (...) It can't be that one year you can buy a car small equipped with a cargo partition and deduct the price as the business expense, and the following year you can't, and later you can. Something is wrong. The regulations should be adopted once and for all- either something is permitted or forbidden" (Bukowski, Gadkowska, Prawo, 2014, p. 80). Krzysztof Pawiński in 2019 appealed (...) "let the legislative diarrhoea finally ended. I wish I were not made happy with the stream of legal acts that one cannot even read. Let us implement something rational, for instance: when we adopt a new act, the old one is withdrawn" (Jak podtrzymać polski cud gospodarczy -How to support Polish economic miracle, 2019, p. 101). Observing the abovementioned phenomenon, Zbigniew Jakubas noticed "seems like there is no continuity of Polish state" (Co zmienić w polskim systemie podatkowym - What should we change in the Polish tax system, 2019, p. 107). As regards to legal stability, Wiesław Podraza, owner of Sanplast, indicates that fiscal errors committed by entrepreneurs are often faultless. They are committed as a result of constantly changing legal regulations: "Our companies employ entire finance and accounting departments just to have the record kept properly. The problem in errors is not at all the ill will. As the regulations change so frequently, the errors just might happen. However, fiscal offices do not give us the opportunity to clarify. An average medium-sized company has no tools to defence against the fiscal officers." (Co zmienić w polskim systemie podatkowym - What should we change in the Polish tax system, 2019, p. 107). Entrepreneurs claim that "content of current legal regulations is getting less clear, and the incoming amendments complicate them even more. (...) We must not demand from citizens, including entrepreneurs, that they act in 100 percent according to the fiscal regulations, if the latter are subject to such frequent changes as they do in Poland" (Raport, 2018, p. 12).

Predicting future is made by entrepreneurs on the basis of current legal regulations binding on this day. Lack of permanent statutory solutions is unacceptable. Instability of legislative acts disturbs the vision of future. Making decisions, entrepreneurs enter the risk zone often within the several-year span. It is impossible to start investments in one legal order and complete it in another. Correct reading and understanding this problem by politicians are the keys to creation of atmosphere of optimism and trust among entrepreneurs. Stability in legal space is a guarantee of trust building.

Local self-government

Entrepreneurs constitute one crucial factor of internal development of local self-government units, especially districts. They stimulate local economy, create workplaces, influence the level of local income. Therefore, they are most welcome by local authorities who, owing to entrepreneurs, stimulate qualitative changes in local space. Practice of everyday life, however, proves that even in a small local space, where relations and values are preserved to integrate local community, culture of distrust is an extraordinarily strong resource. Many empirical examples prove it. In 1998 in Lomza, indignant and surprised by the information on planned increase in rates of local taxes, the entrepreneurs started their protest. The entrepreneurs who lost their trust in local authorities pointed to the fact that they paid taxes on real estate equal to the amounts paid in huge agglomerations. Because of fiscal policy run by the authorities of Łomża the entrepreneurs were inclined to shut down their companies and were unwilling to invest. In the petition they submitted it was stated "they felt financial support of the town rests on their companies", and "criteria for determining amounts of fees are detached from local reality" (Es, 1998). As the above example shows, breaking the thin line of trust leading from entrepreneurs to local authorities who, probably without consultations decided to increase the fees, shows how important, when managing local communities, is a dialogue based on substantive arguments.

Local provisions set up by local governments must, similarly to the national ones, be stable. The largest barrier to start investments, following from negligence of local authorities, is the lack of complex plan of spatial planning. From experience of entrepreneurs, it follows that changes in local spatial planning are standard. This was observed, for instance, by creator of cosmetic brand BANDI, Bogda Draniak. In 2016 she recalled the year 2004 in the following way: "We wanted to construct a new plant, but suddenly everything got complicated. We had bought the ground, a fenced plot near Janki (nearby Warsaw), and had almost ready architectural design. Unexpectedly, the spatial plan was changed, and our area was excluded from industrial use. Asia (successor of the company, Joanna Draniak-Kicińska - author's remark) involved herself in the fight with certain offices. (...) Joanna suggested that, despite huge investment expenditure, we should withdraw from the dispute with the authorities and focus on searching for a new, ready-to-use facility (...). She considered time more valuable than money" (Draniak, Draniak-Kicińska, 2016, p. 56).

A gap in communication between a large group of entrepreneurs and local authorities follows from the lack of dialogue on local level. Entrepreneurs are ambushed with decisions on repairs of communication routes in towns that block access to their companies. The repair works crucial, for effective operation of the urban tissue, generate loss for entrepreneurs. People who run their own economic activity point to the fact that local authorities never make any attempt to compensate for the generated loss. Only sometimes is the offer made in the form of decreasing local charges, but to unsatisfactory amount.

Deficit of trust is efficient cause for perceiving the environment, where a particular entrepreneur operates, as a field of battle. There are no stable, permanent, fundamental rules of games set by law.

Social dialogue

In modern economy, one of the ways of constructing the culture of trust is developing the culture of dialogue. The dialogue should particularly comprise space where the governing bodies and entrepreneurs exchange their opinions. Unfortunately, this space requires tweaking. In December 2004 Henryka Bochniarz claimed that dialogue between entrepreneurs and governing authorities did not exist. "How can one manage a private sector in a country that builds market economy without a dialogue with those who are in the sector?" (Bochniarz, 2004, p. 6). According to Henryka Bochniarz, the governing authorities were not able to start a constructive, open, and honest dialogue with that professional group. Lack of dialogue, or a fake one, can be considered a permanent state. Experts state that political discourse in Poland is in its rhetoric characterized by a tendency of emphasizing differences and symbolic discreditation of opponents (Hausner, Marody, 2001, p. 135). Legal regulations set up in an open social dialogue conducted between governments and entrepreneurs, potentially by anchoring them in traditions and customs or the universally understood culture, will be more likely acceptable by the interested parties, and thus will be followed. This is called direct

involvement and social participation mechanism, which means an impact of the interested parties on legislative procedures.

Deficit of dialogue and public consultation observed in our state is noticed in strengthening of phenomenon referred to as the fast-track legislation. Barometer of stability of the legislative environment in Polish economy monitoring the abovementioned phenomenon does not lie. In 2019: "the average period of work on an act was only 69 days. This beat the record of 2016 which was 77 days. That was exactly by 30 days shorter than in 2018 and almost three times shorter than the average time for drawing up an act in 2000" (Barometr stabilności otoczenia prawnego w polskiej gospodarce - Barometer of stability of the legislative environment in Polish economy, 2020). In 2000 one act was proceeded for 201 days in average, in 2006 that lasted only 198, whilst in 2010 the period shortened to 170 days. Within the following years a constant decrease of the period was observed: in 2014 up to 151 days, in 2015 - 122 days, and in 2016 - only 77 days. In 2016 the time for proceeding an act increased up to 106 days and dropped to 69 days in 2019 (Barometr stabilności otoczenia prawnego w polskiej gospodarce - Barometer of stability of the legislative gospodarce - Barometer of stability gospodarce - Barometer of stabili

Table 3.

Year	The average period on proceeding an act (in days)
2000	201
2006	198
2010	170
2014	151
2015	122
2016	77
2017	106
2019	69

Length of legislative procedure in Polish Parliament within 2000-2019

Adopting legal acts by the Polish Parliament through the fast-track legislation has become a standard. This fact has considerably limited substantive discussion on the adopted acts. As a result, each amendment or revision of law referring to entrepreneurs provokes resistance of the latter. The entrepreneurs are suspicious, search for legislative traps set by governing authorities. There is no so-called integration of trust and regulation (Galbraith, 2016, p. 68). And these two spheres should not be parted. In 2019 Mariusz Książek observed: "If we look from the perspective of the last three decades, we notice that only in first two of them politicians created any simplifications for entrepreneurs, and later they only tightened the legislative screw. I cannot recall any implemented solutions that would support businesses. But - as I said - this is the entrepreneur who must adjust to the situation" (Książek, 2019, p. 31). Within the context of the above-quoted statements of entrepreneurs we see that strengthening the resource of trust of entrepreneurs in this important institution through the legal regulations does not look hopeful.

Judicial authority

Personal experience of an entrepreneur is, among others, influenced by his or her contact with judicial system. Duration of judicial process determines entrepreneur's subjective assessment and is a factor that supports or weakens the resource of trust.

Table 4.

Average duration of judicial process in business court cases in both instances within 2007-2018 (months)

Year	Average duration of judicial process in business court cases (months)			
	District Court of First Instance	Regional Court of First Instance		
2007	13	22.4		
2008	10.2	16.0		
2009	9.4	13.5		
2010	10.4	14.2		
2011	10.6	15.1		
2012	12.5	15.8		
2013	14.5	15.8		
2014	16.3	19.1		
2015	13	22		
2016	5.6	8.7		
2017	6.5	9,2		
2018	6.71	9.98		

Source: Raport 2018, Związek Przedsiębiorców i Pracodawców, Warunki prowadzenia firm w Polsce./Union of Entrepreneurs and Employers. Conditions for Conducting Business in Poland. Raport 2018 rok, s. 13; http://isws.ms.gov.pl/pl/baza-statystyczna/opracowania-wieloletnie/, 28.02.2021.

Objective evaluation of the quality of operation of judicial system is provided by the World Bank who, in the year 2018, placed Poland on the 55th position among 189 countries in category of time necessary to enforce contract at the court. In Poland that time was 685 days and cost 19.4% of the value of object of litigation. In case of Poland this position has not changed since 2016 (Raport, 2018, p. 12). This is not an optimistic picture, like the report of Global Competitiveness, according to which in the ranking of judicial independence of 2017 Poland was classified on the 99th position among 137 countries, whilst a year earlier - on the 81st position out of 140 countries (Raport, 2018, p. 13). The quality of operation of judicial system worsens in Poland if we measure duration of judicial processes.

Level of trust - index of economic freedom

Index of Economic Freedom is an external measure of the degree of economic freedom in the world's nations. Among the states with the highest number of points in that list there were: Singapore - on the first place with 89.7 points of 100, New Zealand with 83.9 points (fall by 0.2 p.), Australia 82.4 of 100 (fall by 0.2 p.), Switzerland with 81.9 of 100 (fall by 0.1 p.), and Ireland - 81.4 of 100 (increase by 0.5 p.). Among the "mostly free states" in Europe there were: Great Britain 78/100 (fall by 0.9 p.), Estonia 78.2 (increase by 0.5 p.), Denmark 77.8/100 (fall by 0.5 p.), Lithuania 76.9/100 (increase by 0.2 p.), and Bulgaria

70.4/100 (increase by 0.2 p.). In this ranking Poland was considered "moderately free" and was placed on the 41st position with the index of 69/100 points (increase by 0.6). In the same group as Poland there were also: Spain - with index of 69.9/100, Romania - 69.5/100, Hungary - 67.2/100, Slovakia 66.3/100, France - 65.7/100 and Italy - 64.9/100. (https://www.heritage.org/index/ranking).

4. Disscusion and Conclsions

All conclusions following from the entrepreneurs' experiences constitute a good base for catalogue of faults that amplify distrust of entrepreneurs in the institutions of public administration and judicial authorities. The faults, referred to above, include, first of all, lack of permanent cross-party strategy of economic policy, designed and executed by subsequent governing groups. The next fault is fake and fading social dialogue between entrepreneurs and the governing bodies. The dialogue should be conducted on every level of authority, national and local. The constructive, open, and rational dialogue supported with reasonable arguments is the only chance for mutual agreement and understanding intentions of both parties. Another fault follows from the previous ones. The quality of law implemented in Poland is dependent on consultation with entrepreneurs. They are the group that shall apply the legal regulations in practice. Respect to legislation is built through entrepreneurs' participation in its formation on every stage. The abovementioned faults lead to another one: overregulation and unexpected changes and amendments of legal regulations. Constancy and stability of legislation constitute the basic demand of entrepreneurs. Perspective of legislative stability enables entrepreneurs to create a certain idea of how the company shall operate within a longer timeframe. The next fault, which has not been referred to herein, is the need to build respect for entrepreneurs' work. Mass media and governing bodies cannot perceive entrepreneurs as potential frauds. When referring to entrepreneurs, politicians must not use the language full of distrust and suspiciousness.

Further research of trust as the informal institution and economic resource can be based on the Balanced Development Index (BDI) (Noga, Koźmiński, Piotrowska, Zagórski, 2020, 2022). The Index reflects emotional factors that affect intensity of investments and may provide answers to question, why entrepreneurs refrain from investing even though the conditions are favourable. BDI takes into consideration, among others, public trust in parties, in legal system, in politicians, and in courts, political stability, fight against corruption, and the law and order.

References

- 1. Acemoglu, D., Robinson, J.A. (2014). *Dlaczego narody przegrywają (Why Nations Fail: The Origins of Power, Properity and Poverty).* Warszawa: Zysk i Spółka.
- 2. Barometr stabilności otoczenia prawnego w polskiej gospodarce 2020. Grant Thornton, *Zmienność prawa nadal przytłacza, Edycja 2020*, https://grantthornton.pl/wp-content/ uploads/2020/03/Barometr-prawa-RAPORT-2020-03-05-2020.pdf, 24.02.2021.
- 3. Bielecki, J. (2021). Lata sporów z Brukselą zrobiły swoje. Już tylko połowa Polaków ufa UE. *Rzeczpospolita*, *No. 07.05.2021*, www.rp.pl, 16.06.2021.
- 4. Bochniarz, H. (2004). Szkodliwy klimat, z Henryką Bochniarz prezydent Polskiej Konfederacji Pracodawców Prywatnych rozmawia Anna Mateja. *Tygodnik Powszechny*, *no. 49*.
- 5. Bugdol, M. (2010). *Wymiary i problemy zarządzania organizacją opartą na zaufaniu*. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.
- 6. Bukowski, A., Gadkowska, K., Polak, P. (2014). Zaufanie w strategiach polskich przedsiębiorców. *Studia Socjologiczne*, *No. 3(214)*.
- CBOS Public Opinion Research Center 2002 rok. Jacy jesteśmy? Zaufanie Polaków do ludzi i instytucji publicznych oraz gotowość do współpracy. Komunikat z badań, https://www.cbos.pl/SPISKOM.POL/2002/K_040_02.PDF, 18.02.2021.
- 8. Co zmienić w polskim systemie podatkowym (2019). Forbes, No. 2.
- Czapiński, J. (2019). Polak z góry zakłada, że innymi ludźmi kierują niecne zamiary, rozmawiała Dorota Karaś, 17 listopada 2019, https://trojmiasto.wyborcza.pl/trojmiasto/ 7,35612,25403254,prof-czapinski-polak-z-gory-zaklada-ze-innymi-ludzmikieruja.html?disableRedirects=true, 17.02.2021.
- 10. Draniak, B, Draniak-Kicińska, J. (2016). Markę buduje się na jakości. *Piękne historie. Sukces polskich marek kosmetycznych. Wywiady Lidii Lewandowskiej.* Warszawa: PWN.
- 11. Dunn, E. (2008). *Prywatyzując Polskę. O bobofrutach, wielkim biznesie i restrukturyzacji pracy.* Warszawa: Wydawnictwo Krytyki Politycznej.
- 12. Es (1998). *Protest przedsiębiorców*, 1998-12-17, https://classic.wyborcza.pl/archiwumGW/620659/Protest-przedsiebiorcow, 29.05.2021.
- 13. Eucken, W. (2005). Podstawy polityki gospodarcze. Poznań: Wydawnictwo Poznańskie.
- 14. Fukuyama, F. (1997). Zaufanie. Kapitał społeczny a droga do dobrobytu. Warszawa-Wrocław: PWN.
- Galbraith, J.K. (2016). Ekonomia wstecznego nurtu i nowy pragmatyzm: kryzysy i ewolucja ekonomii. *Ekonomia przyszłości. Wokół nowego paradygmatu Grzegorza W. Kołodko*. M. Bałtowski (ed.). Warszawa: PWN.
- 16. Glinka, B. (2008). Kulturowe uwarunkowania przedsiębiorczości w Polsce. Warszawa.

- 17. Godłów-Legiędź, J. (2020). Polska transformacja w świetle sporów o rynek, sprawiedliwość i ekonomię. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Grabska, A. (2014). Wybrane elementy ładu stanowionego i spontanicznego w polskiej gospodarce okresu transformacji. In: P. Pysz, A. Grabska, M. Moszyński (eds.), *Ład gospodarczy a współczesna ekonomia*. Warszawa: Polskie Towarzystwo Ekonomiczne.
- 19. Gruszewska, E. (2018). Wpływ interakcji instytucji formalnych i nieformalnych na przedsiębiorczość w Polsce. In: A. Ząbkowicz, M. Miszewski, P. Chmielnicki, S. Czech (eds.), *Zrozumieć kapitalizm. Podejście ewolucyjno-instytucjonalne*. Sosnowiec-Kraków: Oficyna Wydawnicza Humanitas.
- 20. Gruszewska, E. (2014). Ewolucja instytucji w Polsce dryf do ładu czy dryf ładu? In: P. Pysz, A. Grabska, M. Moszyński (eds.), Spontaniczne i stanowione elementy ładu gospodarczego w procesie transformacji – dryf ładu czy jego doskonalenie? Warszawa: Polskie Towarzystwo Ekonomiczne.
- 21. Hausner, J., Marody, M. (ed.) (2001). Polski talk show: Dialog społeczny a integracja europejska. EU-monitoring V. Kraków.
- 22. Hausner, J. (2019). Społeczna czasoprzestrzeń gospodarowania. W kierunku ekonomii wartości. Wydawnictwo Nieoczywiste.
- 23. https://www.heritage.org/index/ranking, 21.03.2021.
- 24. Jak podtrzymać polski cud gospodarczy (2019). Forbes, No. 2.
- 25. Koźmiński, A.K. (1998). Odrabianie zaległości. Zmiany organizacji i zarządzania w byłym bloku socjalistycznym. Warszawa: PWN.
- 26. Książek, M. (2019). Nie wstydzę się sukcesu, z Mariuszem Książkiem rozmawiał Filip Kowalik. *Forbes, No. 9.*
- 27. Mączyńska, E. (2014). Ordoliberalizm użyteczność w warunkach nieładu instytucjonalnego. In: P. Pysz, A. Grabska, M. Moszyński (eds.), *Lad gospodarczy a współczesna ekonomia*. Warszawa: Polskie Towarzystwo Ekonomiczne.
- 28. Michalski, M.A. (2016). Kulturowy wymiar ekonomii przyszłości. In: M. Bałtowski (ed.), Ekonomia przyszłości. Wokół nowego paradygmatu Grzegorza W. Kołodko. Warszawa: PWN.
- 29. Noga, A., Koźmiński, A.K., Piotrowska, K., Zagórski, K. (2020). *The Balanced Development Index for Europe's*. New York: Springer.
- 30. Noga, A., Koźmiński, A.K., Piotrowska, K., Zagórski, K. (2022). Czynniki emocjonalne ograniczające inwestycje w europejskich krajach OECD. *Ekonomista*, *No. 2*.
- 31. North, D.C. (2014). Zrozumieć przemiany gospodarcze. Warszawa: PWN.
- 32. Obłój, K. (2017). Praktyka strategii firmy. Jak zarządzać przeszłością, radzić sobie z teraźniejszością i tworzyć przyszłość. Warszawa: Poltext.
- 33. Polska Rada Biznesu (2018). Przedsiębiorca wysłuchany. Czego potrzebuje do rozwoju?

- 34. Raport 2018. Związek Przedsiębiorców i Pracodawców. Warunki prowadzenia firm w Polsce.
- 35. *Raport o sytuacji mikro, małych i średnich firm* (2018). Temat specjalny: Ekspansja zagraniczna polskich firm.
- 36. Raworth, K. (2021). *Ekonomia obwarzanka. Siedem sposobów myślenia o ekonomii XXI wieku.* Warszawa: Wydawnictwo Krytyki Politycznej.
- 37. Rogowski, W. (2018). Zasób i inflacja przepisów prawa w Polsce. *Głos Prawa. Przegląd Prawniczy Allerhanda, t. 1, No. 1-2, poz. 3,* https://glosprawa.pl/artykul-2/zasob-i-inflacja-przepisow-prawa-w-polsce, 24.02.2021.
- 38. Sołowow, M. (2019). Michał Sołowow, Najbogatszy Polak 2019, w szczerej rozmowie o tym, jak dziś buduje się przemysłową potęgę i czym dla niego są pieniądze, rozmawiał Piotr Karnaszewski. *Forbes, No. 3.*
- 39. Staniek, Z. (2017). *Ekonomia instytucjonalna*. *Dlaczego instytucje są ważne*. Warszawa: PWN.
- 40. Sztompka, P. (2002). Socjologia. Analiza społeczeństwa. Kraków: Znak.
- 41. Sztompka, P. (2007). Państwo pasażerów na gapę, z Piotrem Sztompką rozmawiały Katarzyna Janowska i Piotr Mucharski. *Gazeta Wyborcza*, *10-11.02.2007*.
- 42. Wilkin, J. (2016). *Instytucjonalne i kulturowe podstawy gospodarowania. Humanistyczna perspektywa ekonomii.* Warszawa: Wydawnictwo Naukowe Scholar.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

SOCIAL SENSITIVITY AMONG HR BUSINESS PARTNERS AS DETERMINANT OF CSR ATTITUDES

Katarzyna KLIMKIEWICZ^{1*}, Marzena STASZKIEWICZ²

¹ AGH University of Science and Technology; kklimkie@agh.edu.pl, ORCID: 0000-0003-2927-8308 ² AGH University of Science and Technology; mstaszki@agh.edu.pl, ORCID: 0000-0003-3249-9945 * Correspondence author

Purpose: Research is drawing attention to the roles of HR employees in supporting organisations in their efforts to achieve sustainable development. Employees of HR departments are characterised by a relatively high level of social sensitivity, which may indicate their increased commitment to the implementation of CSR. This article aims to analyse attitudes towards CSR among HR specialists and the extent to which the levels of their social sensitivity influence their attitudes towards CSR.

Design/methodology/approach: We look at CSR attitudes through the prism of their cognitive, emotional, and behavioural components. The Bochum Inventory for job-related personality description of Rudiger Hossiep and Michael Paschen (BIP) was used to diagnose the level of social sensitivity. Research was conducted among 25 HR specialists and HR business partners. **Findings**: The research confirmed that the level of social sensitivity positively affects the cognitive and behavioral component of attitudes towards CSR. People with a higher level of social sensitivity tend to understand CSR more in normative terms, show a higher personal level of commitment to CSR and are more likely to take initiatives for CSR activities at work.

Research limitations/implications: Research limitations include the size of the sample and the lack of equivalence among the compared groups. The methodological difficulty resulted from the ambiguity of the concept of empathy as well as from the fact that the involvement and promotion of attitudes that are related to CSR most likely have a polymotitivational character, which may be influenced by other individual, situational, social, or cultural variables that concern both the individual and the organisation.

Practical implications: It can be concluded that the level of personal involvement in CSR - a natural training of empathy that takes place in the organisation – may increase sensitivity to others and arouse motivation to act for the benefit of the environment.

Originality/value: Research makes us look at social sensitivity as a factor that stimulates action and also structures the cognitive system by directing the attention and thinking processes and, thus, as one of the possible predictors for individuals to build attitudes that are related to CSR.

Keywords: HR Business Partner, Corporate Social Responsibility (CSR), social sensitivity, attitudes, personality traits.

Category of the paper: Research paper.

1. Introduction

Corporate social responsibility (CSR) and sustainability have become one of the key trends in setting standards for managerial practices and strategic development. Understanding CSR through the prism of its impact towards its stakeholders, which is promoted by the institutional environment (the European Commission (2011), for example), aims at moving from the traditional understanding of the responsibility of owners and shareholders that has been presented in managerial theories to a broader understanding of the goals and interests that are characteristic of behavioural and stakeholder theories (Przybylska, 2018).

CSR and sustainability are indicated in *Human Capital Trends* (published by Deloitte in 2018) as the key factor for organisational development (Deloitte, 2021). The increasing interest in CSR can also be observed in increasing numbers of publications in scientific journals as well as in the trade press regarding the field of human resource management (Klimkiewicz, Kowalik, 2020). The importance of social sensitivity in shaping CSR attitudes towards managers has also become important in the context of emerging critics around the CSR concept (Kowalski, 2016), which is a starting point for shaping sceptical attitudes towards CSR. Therefore, we pose a question in this article that is related to the attitudes among HR specialists towards CSR and to which extent the levels of their social sensitivity influence their attitudes towards CSR. In the current research, we look at CSR attitudes through the prism of their cognitive, emotional, and behavioural components (Ajzen, Cote, 2011; Klimkiewicz, Oltra, 2017) and present results that were based on research that was conducted among 25 HR specialists and HR business partners.

2. Social sensitivity as predictor of attitudes towards corporate social responsibility

Reflections on social sensitivity most often concern the possibility of diagnosing and shaping it as well as its significance for the quality of human functioning, organisations, and societies. The concept of sensitivity itself has been discussed in the context of its biologically determined aspects (in its relationship with sensory sensitivity and neurosensitivity). It also describes the combined threads that are related to the biological and emotional components of sensitivity, discussing them in terms of selected theories of temperament (Eliasz, 1990; Strelau, 2019). In this context, there are also issues regarding the factors that determine the way we experience it as well as the competences that allow people to effectively manage their own emotions and understand other people's emotions (such as self-regulation, emotional intelligence, and empathy) (Gulla, 2021). It is worth noting that it is the

ability to empathise (the readiness to perceive even the smallest signals in an environment, which requires compassion) that is a prerequisite for the emergence of social sensitivity. In the studies on empathy, three research trends can be found: the first emphasizes its emotional aspect; the second focuses on the cognitive aspect; and the third complementary approach takes these two processes into account. Definitions of empathy that are based on its affective aspect emphasize such states as emotional consonance with another person, so empathy is understood as an emotional response to the perceived emotional experience of others (Stotland, 1963; Mehrabian, Epstein, 1972). Stressing the cognitive component, it is emphasised that an empathic observer is a person who tries to understand the essence of another person's experiences as well as their thoughts and motives for action (Mead, 1934; Dymond, 1950; Hogan, 1969). Currently, however, the term "empathy" is most often used to describe those phenomena that are related to affective responses to the situation of another on the one hand (empathising with the state of another person) and with understanding what this person feels on the other (with a cognitive assumption of roles) (Feshbach, 1975; Fraczek, 1986; Eliasz, 1980; Davis, 2001). One can also find an understanding of empathy that, in addition to the existence of an emotional and cognitive component, also assumes its behavioural aspect that is defined as a "compassionate response to someone's discomfort" (Dolan, Fullam, 2007) or being part of the emotional aspect of "concern" (Decety, Bartel, Uzefovsky, Knafo-Noam, 2015). Although elements such as emotional compassion, compassion and care for another person, or understanding another person's feelings and point of view are emphasized to varying degrees in the definitions of empathy, all attempts to define empathy have one thing in common – an especially important feature; namely, active interest in other people's needs, motives, or problems. By "active interest", one means a specific orientation towards other people that leads to specific actions to improve their well-being and, at the same time, improve their individual social functioning. Particularly noteworthy are helpful behaviours that offer support (in general – altruism). Many authors have combined these behaviours with the ability to empathise with others (Eisenberg, Miller, Schaller, Fabes, Fultz, Shell, Shea, 1989; Batson, 1991; Kaźmierczak, Plopa, 2007). It has been pointed out that it is empathy (the ability to take on someone else's perspective in various social situations) and compassion that have become the predictors of effective help. Thus, people can better understand another person's problems by empathising with his/her situation (Davis, 2001).

Empathy has been indicated as crucial from the point of view of actions that are taken by managers in the field of corporate social responsibility (Cartabuke, Westerman, Bergman, Whitaker, Westerman, Beekun, 2019). Therefore, it is important to estimate to what extent the creation of attitudes in the field of socially responsible behaviours depends on individual factors like emotional sensitivity and are understood as the ability to empathise (Jaworowska, Brzezińska, 2014). This question is particularly justified in the context of people who, in connection with their function in an organisation can influence the formation of attitudes towards CSR among other members of an organisation. HR professionals play an important

role in the development of managers, the selection of training, and the training content; they can also assume the roles of sustainability coaches as related to line managers (Klimkiewicz, Staszkiewicz, 2021). Research shows that the level of empathy of someone who is responsible for training and development is one of the features that distinguishes the representatives of this profession (Sundstrom, Lounsbury, Gibson, Huang, 2016).

In this article, we propose to verify the following hypothesis (along with the related auxiliary hypotheses):

H1: The level of social sensitivity positively affects the attitude towards CSR.

- H1.1: People with a higher level of social sensitivity have a higher level of CSR knowledge.
- H1.2: People with a higher level of social sensitivity perceive CSR to a greater extent in normative terms than in instrumental terms.
- H1.3: People with a higher level of social sensitivity are more likely to positively evaluate CSR activities.
- H1.4: People with a higher level of social sensitivity show a higher personal level of commitment to CSR.
- H1.5: People with a higher level of social sensitivity are more likely to take initiatives for CSR activities at work.

3. Methodology

This research used judgmental sampling and was carried out among specialists in human resource management (HRM). In this study, the Bochum Inventory for job-related personality description of Rudiger Hossiep and Michael Paschen (BIP) was used to diagnose the level of social sensitivity (Jaworowska, Brzezińska, 2014). Due to assure high quality of results the research was conducted under supervision. This assumption strongly limited the number of respondents taking part in the study. This restric BIP is a tool that makes it possible to describe personality in a professional context and is designed to measure those personality dimensions that are important for effective professional functioning in various positions. In the research, one measure from the area of social competences ('social sensitivity') was used to verify the hypotheses. A 'social sensitivity' measure is understood as the ability to empathise by perceiving emotional signals in a social environment. People who score high on this measure are able to receive even weak signals from other people in social situations and easily interpret them. They are empathetic, and they like people. This means that this measure allows us to estimate not so much a readiness to respond with specific behaviour to observed social situations but rather a readiness to perceive even the slightest signals in an environment that require compassion (Jaworowska, Brzezińska, 2014).

The respondents also answered questions about their attitudes towards CSR (Klimkiewicz, Oltra 2017). The indicators referred to three dimensions of attitude towards CSR: cognitive, emotional, and behavioural components (Ajzen, Cote, 2011). Following measures were used:

- Cognitive component:
 - CSR knowledge: a self-assessment of one's level of knowledge in the field of CSR and sustainable development.
 - Understanding CSR (I/N): an instrumental perception of CSR (vs. normative) this means relativising the value of CSR due to the benefits that it brings to an organisation. A normative perception means an attitude that is consistent with principles regardless of the possible consequences for an organisation.
- Emotional component:
 - CSR assessment: a positive-vs.-negative attitude towards CSR that is related to the perception and assessment of the impact of CSR activities on an organisation and its surroundings.
- Behavioural component:
 - CSR involvement: behavioural determinants that indicate the personal involvement of the respondents in CSR; e.g. social engagement, consumer decision-making.
 - CSR initiative: behavioural determinants that indicate involvement in the CSR activities that are undertaken by an employer and initiating CSR activities in a workplace.

The respondents answered questions that were formulated on a five-point Likert scale (1 - "I strongly disagree"; 5 - "I strongly agree"). The reliability of the measures was tested (Table 1).

Table 1.

Reliability levels for used measures

Measure	Cronbach's alpha
CSR Knowledge	0.831
Understanding CSR (I/N)	0.735
CSR Assessment	0.753
CSR Involvement	0.840
CSR Initiative	0.828
Second of Orece started	

Source: Own study.

4. Results

The study involved 25 people -3 men, and 22 women. In all, 33% of the respondents were 25-30 years old, 18.5% were 30-35, 14.8% were 35-40, 22.2% were 40-45, and the rest were more than 45 years old. The work experience is presented in Figure 1.

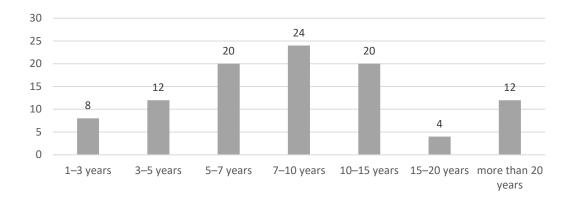


Figure 1. Work experience of respondents [%].

Source: Own study.

More than half of the respondents (52%) worked in companies with more than 1000 employees, while 20% worked in companies (251-1000 employees), 20% in medium-sized enterprises (51-250 employees), and the rest in small and micro enterprises. Most of the respondents were employed in manufacturing companies (40%), HR services (24%), and sales (12%), while the rest represented various industries (automotive, insurance, financial, and logistics). A full 60% of the respondents did not have any managerial experience, while 40% performed or had held managerial positions. Table 2 presents the basic descriptive statistics for the variables that were analysed. It is noteworthy that the level of one's self-assessment of knowledge about CSR was the lowest-rated aspect when compared to the other measures. However, the respondents very clearly indicated a normative understanding of CSR and were more likely to positively assess the concept of CSR (Table 2).

Table 2.

D	escriptive	statistics fo	or analysed	measures
---	------------	---------------	-------------	----------

Measures	Ν	Minimum	Maximum	Mean	Standard deviation
CSR Knowledge	25	1.00	5.00	2.96	1.05
Understanding CSR (I/N)	25	2.25	5.00	4.96	0.61
CSR Assessment	25	3.20	5.00	4.17	0.53
CSR Involvement	25	1.14	4.71	3.19	0.84
CSR Initiative	25	1.00	5.00	3.08	1.14
Social sensitivity (BIP)	25	38	64	52.96	6.248

Source: Own study.

With the results that were obtained by the subjects on the individual measures, a normality of distributions test was carried out using Kolmogorov-Smirnov. Therefore, it was decided that the Rho-Spearman correlation coefficient would be used for the calculation due to the lack of normality of most of the distributions (Table 3).

		Social sensitivity ¹
CSR Knowledge	Rho-Spearman	0.202
	Significance (bilateral)	0.332
	N	25
Understanding CSR (I/N)	Rho-Spearman	0.592**
	Significance (bilateral)	0.002
	N	25
CSR Assessment	Rho-Spearman	0.217
	Significance (bilateral)	0.298
	N	25
CSR Involvement	Rho-Spearman	0.445*
	Significance (bilateral)	0.026
	N	25
CSR Initiative	Rho-Spearman	0.462*
	Significance (bilateral)	0.020
	N	25

Table 3.

Rho-Spearman correlations among analysed measures

Note. * Correlation is significant at level of 0.05 (bilateral); ** Correlation is significant at level of 0.01 (bilateral). Source: Own study.

The H1.1 hypothesis that says that there is a relationship between the level of social sensitivity and the level of CSR knowledge was not confirmed. In turn, Hypothesis H1.2 (referring to the connection of social sensitivity with the normative understanding of CSR) was confirmed. Hypothesis H1.3 (related to the correlation between the level of social sensitivity and the assessment of CSR) was not confirmed. The last two hypotheses (H1.4 and H1.5 (on the intervariation of the level of social sensitivity and behavioural components of attitude towards CSR)) were confirmed. In summary, three out of the five auxiliary hypotheses that made up the main hypothesis were confirmed. Therefore, it can be assumed that the main hypothesis that states that the level of social sensitivity positively affects attitudes towards CSR was partially confirmed.

5. Discussion

The research that has been reported in this article is an attempt to explore the importance of social sensitivity for attitudes towards CSR among HR business partners. According to the research, HR business partners are characterized by a high level of social sensitivity (Sundstrom, Lounsbury, Gibson, Huang, 2016). This was also confirmed by the results of a personality survey using the BIP inventory, which was carried out on representatives of various professions in Poland. HR employees obtained the highest scores on the following measures: social sensitivity, team orientation, openness to relationships, and leadership motivation (Jaworowska, Brzezińska, 2014). The analysis of the personalities of HR business partners also indicates that they achieved some of the highest results in the area of such variables as social sensitivity and openness to relationships (Staszkiewicz, 2021).

The obtained results indicate the important role of social sensitivity in shaping attitudes towards CSR and sustainable development. Research on the importance of empathy for developing ethical competences and the methods of making decisions indicates that this trait may be particularly important in the case of people who are responsible for the development of others, as empathy strengthens their motivation to improve the well-being of others (Pohling, Bzdok, Eigenstetter, Stumpf, Strobel, 2016). An analysis of the obtained research materials allows us to conclude that people with higher levels of social sensitivity are more likely to perceive CSR in normative terms (referring to moral values and accepted ethical standards). The results suggest that the attitudes of HR professionals may be different than those of most line managers. The research that was conducted among Polish managers regarding their attitudes towards CSR indicates a willingness to act according to market expectations. The factor that makes managers recognise the value and importance of CSR for the development of their companies are the image benefits that are obtained from participating in pro-social and pro-environmental activities (Cierniak-Emerych, Mazur-Wierzbicka, Rojek-Nowosielska, 2021, p. 289). This means that HR business partner as manager's coach (Klimkiewicz, Staszkiewicz, 2021) may direct managers towards understanding CSR as an autotelic value. Some studies suggest that the instrumental view of CSR among managers is natural, as it allows them to apply appropriate activities that are aimed at increasing efficiency in their daily work (which is beneficial for a company) (Amaeshi, Adi, 2007). On the other hand, the normative approach leads to value-based leadership; this allows managers to make ethical decisions in any situation, not merely when this comes with specific benefits (Gond, Matten, 2007). In addition, strengthening managers' normative perceptions of CSR can allow them to improve their communication with their employees and other stakeholder groups (Marais, 2012).

The research also allowed us to confirm hypotheses that indicate the correlation between one's level of social sensitivity and the behavioural component of their attitude towards CSR (measured as personal commitment to CSR) and initiatives that are undertaken for CSR in the workplace. In this context, it is also worth bearing in mind that empathy is associated with better social functioning (Kaźmierczak, Plopa, 2007) and is one of the significant motives that leads to pro-social behaviour (Reykowski, 1986). Therefore, it is worth emphasizing that not only is sensitivity to the needs of another person important but it is also an important behavioural aspect in the discussed research; this is manifested through respect for one's dignity, compliance with the principles of social justice and honesty, and taking responsible actions (or even the "intensification of help") (Davis, 2001; Hoffman, 1990; Mirowska, 1994). The literature indicates that people with high levels of empathy have stronger senses of social justice, which contributes to a better recognition of ethical situations and the impact that stakeholders have on an organisation and its financial results (Cartabuke, Westerman, Bergman, Whitaker, Westerman, Beekun, 2019). Research suggests that there is a relationship between the level of empathy and the level of personal involvement in CSR; this is expressed through consumer decisions, interest in exploring a topic, or social activity as a part of volunteering (outside the workplace) as well as the level of employee involvement in the workplace that is expressed through taking initiatives that help protect the natural environment and solve social issues. Similarly, Tian and Robertson's (2019) research shows that people with higher levels of empathy identify more with an organisation if they see it as being socially responsible. These results are important for both the formation of communication and training policies in the field of CSR.

Although awareness of the importance of CSR, is also becoming more and more visible in HR (Deloitte, 2021), the respondents rated the level of their knowledge of CSR relatively low in the sample. This may have been relevant to the results, which did not allow us to confirm the hypothesis of the relationship between the level of social sensitivity and the self-assessment of the knowledge about CSR. However, this may have been due to the fact that knowledge about CSR is not yet widespread in Poland (Cierniak-Emerych, Mazur-Wierzbicka, Rojek-Nowosielska, 2021). The variety of the results in this regard suggests the need for further exploration. The second hypothesis that was not confirmed in our research was the hypothesis of the relationship between the level of social sensitivity and the (positive) assessment of CSR. In the light of the available research results (in particular research that indicates differences in the perception of CSR in Polish society – Furman, Maison, Sekścińska, 2020), it seems that the positive or negative assessment of CSR may depend on many factors (including the level of scepticism. It can be assumed that people with high levels of social sensitivity may have high expectations towards organisations that are engaged in CSR, which may make them more critical about the concept itself. However, these issues require further analysis.

6. Conclusions

The article indicates the importance of social sensitivity and empathy among HR employees (who are responsible for the development of soft skills among decision-makers). The conducted research allowed for a partial confirmation of the primary hypothesis – particularly regarding to the importance of social sensitivity for formulating the cognitive component of CSR and the behavioural component. This makes us look at social sensitivity as a factor that stimulates action and also structures the cognitive system by directing the attention and thinking processes (Oatley, Jankins, 2003) and, thus, as one of the possible predictors for individuals to build attitudes that are related to CSR.

When discussing the obtained results, it can be also concluded that the level of personal involvement in CSR – a natural training of empathy that takes place in the organisation – may increase sensitivity to others and arouse motivation to act for the benefit of the environment. Questions arise here about how so-called sensitive organisations (Kisil, Moczydłowska, 2014) can awaken the social sensitivity of their members.

The obtained results are also important from the perspective of designing organisational processes. Our research has confirmed the importance of social sensitivity as a trait that should be taken into account in selection processes (Pohling, Bzdok, Eigenstetter, Stumpf, Strobel, 2016) – particularly in the case of people who are responsible for the development of other members of an organisation. Summing up the research results one should remember its limitations; these undoubtedly include the size of the sample and the lack of equivalence among the compared groups. The methodological difficulty also resulted from the ambiguity of the concept of empathy (which still remains a complicated construct) as well as from the fact that the involvement and promotion of attitudes that are related to CSR most likely have a polymotitivational character, which may be influenced by other individual, situational, social, or cultural variables that concern both the individual and the organisation (which are not included in this research).

References

- Ajzen, I., Cote, N.G. (2011). Attitudes and the prediction of behavior. In: W.D. Crano, R. Prislin (eds.), *Attitudes and Attitude Change*, *Psychology* (pp. 289-311). New York: Press.
- 2. Amaeshi, K.M., Adi, B. (2007). Reconstructing the corporate social responsibility construct in Utlish, *Business Ethics: A European Review, Vol. 16, No. 1,* pp.134-153, doi.org/10.1111/j.1467-8608.2006.00465.x.
- 3. Batson, C.D. (1991). *The altruism question: toward a social psychological answer*. NJ, Erlbaum: Hillsdale.
- Cartabuke, M., Westerman, J.W., Bergman, J.Z., Whitaker, B.G., Westerman, J., Beekun, R.I. (2019). Empathy as an Antecedent of Social Justice Attitudes and Perceptions. *Journal* of Business Ethics, Vol. 157, No. 3, pp. 605-615, doi: 10.1007/s10551-017-3677-1.
- Cierniak-Emerych, A., Mazur-Wierzbicka, E., Rojek-Nowosielska, M. (2021). Corporate Social Responsibility in Poland, in: S.O. Idowu (ed.), *Current Global Practices of Corporate Social Responsibility* (pp. 287-310). Cham: Springer.
- 6. Davis, M.H. (2001). Empatia. O umiejętności współodczuwania. Gdańsk: GWP.
- Decety, J., Bartel, I.B.-A., Uzefovsky, F., Knafo-Noam, A. (2016). Empathy as a driver of prosocial behaviour: highly conserved neurobehavioural mechanisms across species. *Philosophical Transactions of the Royal Society, Vol. 371(1686),* doi.org/10.1098/ rstb.2015.0077.
- 8. Deloitte (2021). *RAPORT: Trendy HR 2021*. Global Human Capital Trends 2021 Biznes odpowiedzialny a zaburzony porządek świata: przejście od strategii przetrwania do strategii

rozwoju. Retrieved from https://www2.deloitte.com/pl/pl/pages/human-capital/articles/ raport-trendy-hr-2021.html, 2.03.2022.

- Dolan, M., Fullam, R. (2007). Empathy, antisocial behaviour and personality pathology. In: T. Farrow, P. Woodruff (eds.), *Empathy in Mental Ilness* (pp. 33-48). New York: Cambridge University Press.
- 10. Dymond, R. (1950). Personality and Empathy, *Journal of Consulting Psychology, Vol. 14, No. 5*, pp. 343-350, doi:10.1037/h0061674.
- Eisenberg, N., Miller, P.A., Schaller, M., Fabes, R.A., Fultz, J., Shell, R., Shea, C.L. (1989). The role of sympathy and altruistic personality traits in helping: a reexamination. *Journal* of Personality, Vol. 57, No. 1, pp. 41-67, doi: 10.1111/j.1467-6494.1989.tb00760.x.
- 12. Eliasz, A. (1990). Broadening the concept of temperament: From disposition to hypothetical construct. *European Journal of Personality, Vol. 4, No. 4,* pp. 287-302.
- 13. Eliasz, H. (1980). O sposobach rozumienia pojęcia "empatia". *Przegląd Psychologiczny, Vol. 23, No. 3,* pp. 469-483.
- European Commission (2011). A renewed EU strategy 2011-14 for Corporate Social Responsibility, Communication. Retrieved from http://www.eurocommerce.eu/media/ 7237/position-csr renewed_csr_strategy_2011-14-07.03.2012.pdf, 2.03.2022.
- 15. Feshbach, N.D. (1975). Empathy in Children. Some Theoretical and Empirical Considerations. *The Counseling Psychologist, Vol. 5, No. 2*, pp. 25-29.
- 16. Frączek, A. (1986). *Studia nad uwarunkowaniem i regulacją agresji interpersonalnej*. Wrocław: Ossolineum.
- Furman, A., Maison, D., Sekścińska, K. (2020). Segmentation Based on Attitudes Toward Corporate Social Responsibility in Relation to Demographical Variables and Personal Values – Quantitative and Qualitative Study of Polish Consumers. *Frontiers in Psychology, Vol. 11*, pp. 1-12, doi.org/10.3389/fpsyg.2020.00450.
- 18. Gond, J.P., Matten, D. (2007). Rethinking the Business Society Interface: Beyond the Functionalist Trap. *ICCSR Research Paper Series*, *Vol. 44*, *No. 47*, pp.1479-5124.
- 19. Gulla, B. (2021). *Wrażliwość człowieka*. Kraków: Uniwersytet Jagielloński w Krakowie, Biblioteka Jagiellońska.
- Hoffman, M.L. (1990). The contribution of empathy to justice and moral judgment. In: N. Eisenberg, J. Strayer (eds.), *Empathy and its development* (pp. 47-80). New York: Cambridge University Press.
- 21. Hogan, R. (1969). Development of Empathy Scale. *Journal of Consulting and Clinical Psychology, Vol. 20, No. 3*, pp. 307-316, doi:10.1037/h0027580.
- 22. Jaworowska, A., Brzezińska, U. (2014). Bochumski Inwentarz Osobowościowych Wyznaczników Pracy. Podręcznik. Warszawa: Pracownia Testów Psychologicznych PTP sp. z o.o.
- 23. Kaźmierczak, M., Plopa, M. (2007). Skala wrażliwości empatycznej. Przegląd Psychologiczny, Vol. 50, No. 1, pp. 9-24.

- 24. Kisil, A., Moczydłowska, M. (2014). Wrażliwość organizacji jako warunek implementacji koncepcji dobra wspólnego na poziomie zarządzania kapitałem ludzkim. *Myśl Ekonomiczna i Polityczna, No. 4*, pp.157-171.
- 25. Klimkiewicz, K., Kowalik, W. (2020). Changes in the Discourse on Corporate Social Responsibility: A Case Study, the Example of a Trade Journal in the Field of Human Resource Management. *Zarządzanie Zasobami Ludzkimi, Vol. 3-4*, pp. 43-60, doi. 10.5604/01.3001.0014.1669.
- 26. Klimkiewicz, K., Oltra, V. (2017). Does CSR Enhance Employer Attractiveness? The Role of Millennial Job Seekers Attitudes. *Corporate Social Responsibility and Environmental Management, Vol. 24, No. 5*, pp. 449-463, doi:10.1002/csr.1419.
- 27. Klimkiewicz, K., Staszkiewicz, M. (2021). HR biznes partner jako coach społecznej odpowiedzialności przedsiębiorstw i zrównoważonego rozwoju. *Zarządzanie Zasobami Ludzkimi, Vol. 142, No. 5*, pp. 95-116, doi. 10.5604/01.3001.0015.5055.
- Kowalski, R. (2016). Społeczna odpowiedzialność biznesu perspektywa krytyczna, Cracow Review of Economics and Management, No. 5(953), pp. 71-88, doi. 10.15678/ZNUEK.2016.0953.0505.
- 29. Marais, M. (2012). CEO rhetorical strategies for corporate social responsibility (CSR), *Society and Business Review, Vol. 7, No. 3*, pp. 223-243, doi.10.1108/17465681211271314.
- 30. Mead, G. (1934). Mind Self and Society. Chicago: University of Chicago Press.
- 31. Mehrabian, A., Epstein, N. (1972). A Measure of Emotional Empathy. *Journal of Personality, Vol. 40, No. 4,* pp. 525-543, doi. 10.1111/j.1467-6494.1972.tb00078.x.
- 32. Mirowska, M. (1994). Znaczenie empatii dla zachowań odpowiedzialnych. Zeszyty Naukowe WSP w Opolu, Vol. 10, pp. 69-74.
- 33. Oatley, K., Jenkins, J.M. (2003). Zrozumieć emocje. Warszawa: PWN.
- 34. Pohling, R., Bzdok, D., Eigenstetter, M., Stumpf, S., Strobel, A. (2016). What is Ethical Competence? The Role of Empathy, Personal Values, and the Five-Factor Model of Personality in Ethical Decision-Making. *Journal of Business Ethics, Vol. 137, No. 3*, pp. 449-474, doi.0.1007/s10551-015-2569-5.
- 35. Przybylska, K. (2018). Alternatywne cele przedsiębiorstwa w teorii menedżerskiej i behawioralnej, *Cracow Review of Economics and Management, No. 5(977)*, pp. 43-61, doi.15678/ZNUEK.2018.0977.0503.
- 36. Reykowski, J. (1986). Motywacja, postawy prospołeczne a osobowość. Warszawa: PWN.
- 37. Stotland, E. (1963). Empathy, Self-Esteem and Birth Order. *Journal of Abnormal and Social Psychology, Vol. 66, No. 3*, pp. 532-540, doi:10.1037/h0042891.
- 38. Strelau, J. (2019). *Różnice indywidualne. Historia determinanty zastosowanie.* Warszawa: Wydawnictwo Naukowe Scholar.
- 39. Strzelczak, M., Joniewicz, T. (2020). *Menedżerowie CSR 2020*. Retrieved from https://odpowiedzialnybiznes.pl/publikacje/menedzerowie-csr-2020/, 2.03.2022.

- 40. Sundstrom, E.D., Lounsbury, J.W., Gibson, L.W., Huang, J.L. (2016). Personality Traits and Career Satisfaction in Training and Development Occupations: Toward a Distinctive T&D Personality Profile. *Human Resource Development Quarterly, Vol. 27, No. 1*, pp. 13-40, doi.org/10.1002/hrdq.21223.
- 41. Tian, Q., Robertson, J.L. (2019). How and When Does Perceived CSR Affect Employees' Engagement in Voluntary Pro-environmental Behavior? *Journal of Business Ethics, Vol. 155, No. 22,* pp. 399-412, doi.10.1007/s10551-017-3497-3.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

TOWARDS SEARCHING FOR A GAP IN NETWORK RELATIONS FOR SMART SPECIALIZATION STRATEGY – RESULTS OF BIBLIOMETRIC ANALYSIS

Magdalena KOGUT-JAWORSKA

University of Szczecin, Institute of Management; magdalena.kogut-jaworska@usz.edu.pl, ORCID: 0000-0001-8812-374X

Purpose: Over the recent years, the literature on the subject has given much attention to the issues of regional innovativeness. Within this broadly defined concept, the issues covered by research studies and analyses include: enterprises' capabilities to search for new concepts and inventions, cooperation among enterprises, cooperation between the public sphere and enterprises, cooperation between research institutions and enterprises. Effectiveness of those relations translates into the extent to which innovations are generated and absorbed in the regions. The purpose of this study is to identify the significance of regional partnerships in the currently implemented smart specialization strategies and to search for research gaps in the currently conducted studies in that area.

Design/methodology/approach: In order to attain this research goal, the study applied the systematic literature review (SLR) method, also making use of the text mining method and the VOSviewer (bibliometric mapping) tool.

Findings: The research study found that the approach to building network relations within partnerships for smart specialization strategy implementation is changing. Currently, network relations and partnerships are deeply rooted in the EU policies, such as those related to sustainable development, support for European Green Deal implementation, the EU industrial policy strategy, Horizon Europe programme, the Cohesion Policy.

Originality/value: The analyses completed as part of the study have unambiguously confirmed the direction of activity of network relations within smart specialization strategies, and at the same time have shown that this is a niche issue which is entering the stage of intensive development.

Keywords: network relations, regional partnerships, smart specialization strategy, innovativeness, SLR, scientific mapping.

Category of the paper: Research paper; Literature review.

1. Introduction

Partnership is predicated on a conviction that multi-faceted problems may be solved in a situation where various entities with shared needs complement and support each other via joint actions taken within competences that are as close as possible to their core activity. Active cooperation contributes to a synergy effect, where joint initiatives bring significantly bigger benefits compared to individually completed activities (Kogut-Jaworska, 2012, p. 137).

In the context o creating new innovativeness strategies, including smart specialization strategies, which represent the bottom-up approach to development management, the concept of regional partnerships for innovativeness was introduced, denoting broad coalitions of stakeholders from heterogeneous organizations such as regional authorities, companies, and universities, where joint interests constitute the basis for cooperation (Benneworth, 2007, p. 16; Nieth, 2019, p. 204; D et al., 2022). Within the framework of regional partnerships for innovativeness, stakeholders cooperate with each other, design and implement strategies, and as a result promote innovativeness and regional development.

Cooperation between such partners takes place in an atmosphere of sharing ideas about the way of resolving specific matters, identification with common goals, division of competences, means, and risks. Cooperation within the framework of regional partnerships for innovative development of regions is predicated on the two major premises:

- firstly, the impact on innovative development is limited for each entity in the regional economy, however, as part of integrated activity, i.e. cooperation, the impact capabilities are definitely bigger,
- secondly, dialogue, cooperation and partner relations between the entities make it possible to better recognize the needs of all the actors on the economic stage, which enables better adjustment of the range of instruments of impact and of the way of solving any problems related to innovativeness on a regional level (Kogut-Jaworska, 2012, p. 138).

Network relations of regional entities are those between tertiary education institutions, business institutions, social institutions, financial institutions, enterprises, social groups building a social capital, institutions fostering engagement and activation of innovativeness and entrepreneurship. Network relations fall within the area of interest shared by authors of many research studies and analyses being part of the literature on the subject, including in particular (Martins, 2016; Sorama, 2020; Tumbas et al., 2013; Nguyen, Marques, 2022). Internal and external network relations (diffusion), shape the community life standards (regional tolerance), and specify behavior standards for entities, promote and reward regions with high standards of human capital (region's talent) as well as knowledge of innovation flow in the science – business area, i.e. regional innovativeness (Makieła, 2018).

Smart specialization strategies, in turn, are the strategies that until recently were considered to be an iteration of the innovation policy (Mazzucato, 2012; Gianelle et al., 2020; Ghinoi et al., 2021) which developed in Northern Europe over the recent decades (Grillitsch, Asheim, 2018; Gianelle et al., 2020; Gianelle, Guzzo, Mieszkowski, 2020; Trippl, Zukauskaite, Healy, 2020). They constitute the key element of the EU Cohesion Policy based on the concept of the regional innovation system (RIS). The cooperation discourse and development of institutional capabilities that promote it are applied in order to stimulate innovations, entrepreneurship and knowledge creation (this topic is further discussed in: Foray, David, Hall, 2011; Foray, Mowery, Nelson, 2012; Foray, Rainoldi, 2013; Foray, 2015, 2018).

Regional stakeholders, who interact in the region, and network relations also give rise to regional innovation strategies which most often are part of a smart specialization strategy (or its counterpart). However, the approach based on regional smart specialization strategies (RIS3) departs from the assumption that the entities in the subsystem of knowledge application and the subsystem of knowledge generation co-operate actively, thus facilitating regular exchange of knowledge, resources, and human capital (McCann, Ortega-Argilés, 2015). Even though the concept is widely praised, its critics claim that it tends to provide a static picture of random actors and institutions, reducing the analysis to a description of the "system" that resembles an inventory (Nieth, 2019; Uyarra, Marzocchi, Sorvik, 2018). In other words, the systematic approach RIS3 is criticized for presenting the current situation without offering any heuristic tools that help understand how to design changes in the region. It is at that point where regional partnerships come into play, which provide a dynamic form other than the one caused by the static approach to RIS3 (Nieth, 2019).

Research studies regarding various aspects of network relations within the framework of regional partnerships still seem to be fragmentary. On the one hand, hindered access to the literature on development of capabilities in that area may influence the emerging new regional perspective, on the other hand it restrains cognitive capabilities regarding active interactions and cooperation between interested parties, as a contribution to regional progress. Even though researchers take attempts to carry out studies in that regard, there is still a lack of coherent analyses that synthesize both the knowledge about innovation-oriented network relations and experiences derived from implementation of smart specialization strategies.

2. Methodology and research results

The objective of this research study is to assess the research structure regarding network relations within the framework of regional partnerships for smart specialization strategies (RIS3) and to identify any research gaps in that area. Although the literature on the subject reveals a lot of knowledge related to the leading topic, what it still lacks is current exploration

of relations between individual constructs. This study focuses on identification of research themes addressed in the literature on the subject over the past decade (2012-2022) and it is based on the data derived from the Web of Science database – a set of bibliography and abstract databases created by Clarivate Analytics, covering many disciplines of research and intended for both searching information on a given topic and carrying out analyses of issues within specific publications (knowledge mapping).

Analysis of bibliometric data (bibliometrics), along with the tools for knowledge mapping, goes hand in hand with the currently emerging techniques that support observation and anticipation of science development. For example, Poter et al. (Porter et al., 2004, pp. 290-291) in their paper provided characteristics and comparison of as many as 51 detailed methods applied to attain the goals in question. A review of possible ways of measuring and observing the development of science, technology and innovation was extensively presented by (Klincewicz, Żemigała, Mijal, 2012, p. 34). In its principle, analysis of bibliometric data is compliant with the evidence-based policy model predicated on the use of analyses and research results in decision-making processes.

The choice of the bibliometric technique to run the analyses being part of this research study was advocated by its numerous methodological advantages and the assumption that the analyses are (Klincewicz, Żemigała, Mijal, 2012, p.39):

- quantitative objectivized, precise, coherent and hard to be manipulated,
- standardizable which makes it possible to compare the research areas or units of diverse productivity,
- direct easy to interpret,
- based on publications and citations i.e. measurable research outcomes rather than expert opinions on achievements, which are difficult to verify,
- characterized by a short time span from the time of carrying out the analyses to obtaining their results,
- scalable making it possible to analyze both small as well as very big data sets,
- making it possible for independent persons to run the analyses in most cases analyses may be conducted by analysts who do not run their own research studies in the analyzed area, and therefore do not represent interests of any of the assessed entities,
- non-invasive they do not require gathering of data via surveys or interviews, they may be run many times based on the available databases.

In the process-based approach, the systematic literature review (SLR) covered a set of subsequent, closely interrelated phases, including (1) formulation of the research goal and research questions, (2) specification of the database and selecting the literature set, (3) selection and pre-assessment of the data set, (4) analysis and synthesis of the data, and finally (5) results. The aggregate review covered marshalling, organizing, superstructure and also discovering the

knowledge within the existing research gaps, and it was based on the methodology proposed by Klimas et al. (Klimas, Stanczyk, Sachpazidu-Wojcicka, 2020, p. 43).

The analysis of trends observed over the past 10 years in research studies on the topic in question was first based on research & development processes and scholarly achievements presented in 28,688 academic publications, including those connected with the issues of smart specialization (1,575) and of partnership for innovation (27,113). The data distribution for the individual years is presented in Fig. 1.

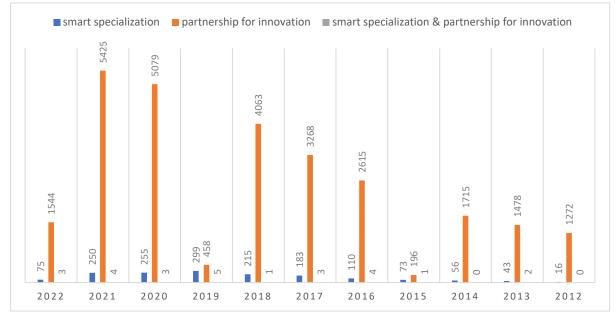
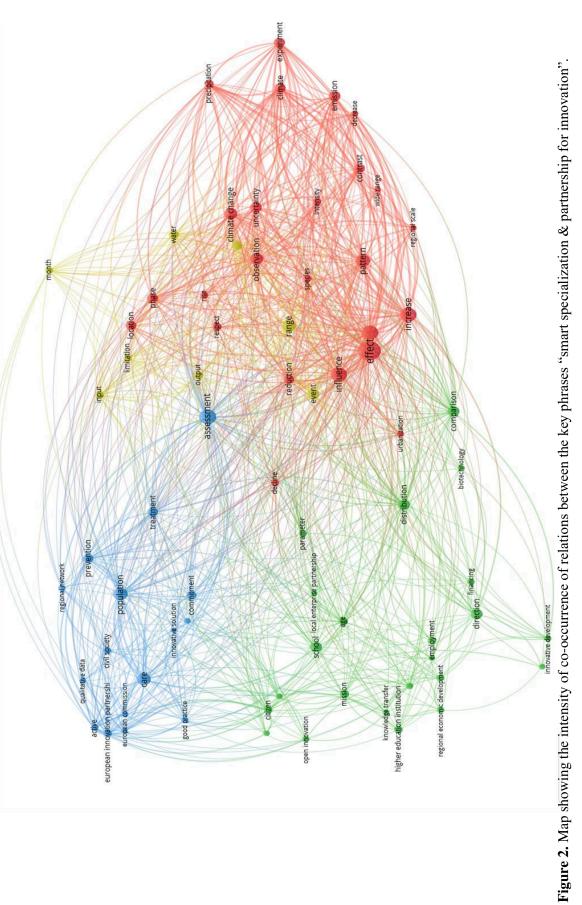


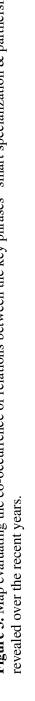
Figure 1. The number of publications dedicated to smart specialization and partnerships for innovations in the 2012–2022 period in the Web of Science database.

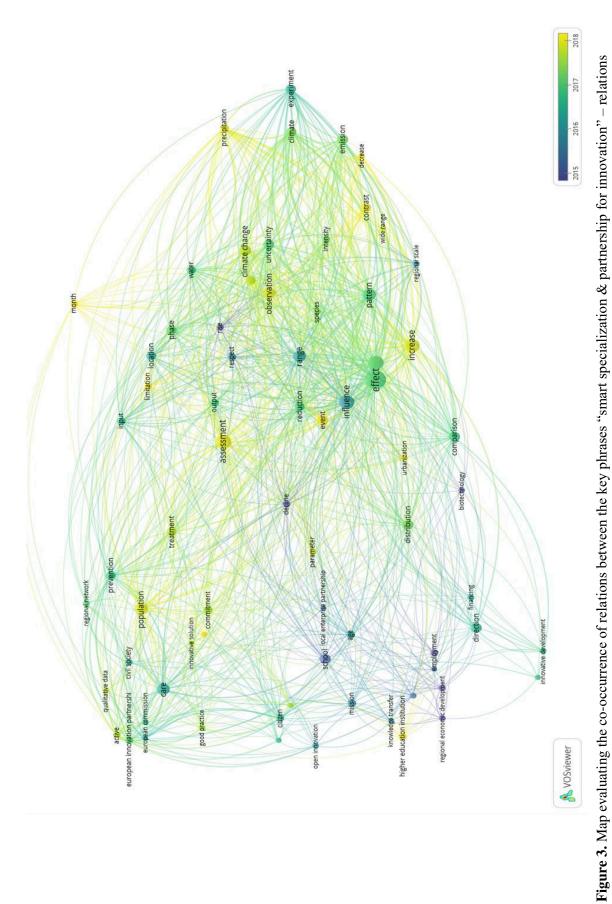
Source: own study based on statistical data provided by WoS.

The second stage of the selection, the so called a posteriori selection, ensuing from the combination of two applied phrases, which significantly reduced the number of publications to be analyzed, was connected with implementation of the criteria for selections that generalize the results. To visualize the synthesis of the research results, the study applied the VOSviewer software tool which is intended for construction and visualization of bibliometric networks (VOSviewer version 1.6.18) – cf. Fig. 2 and 3.









The results of the research positioning and identification of trends in the analyzed area have forced extraction of labels and terms that are factually unconnected with the research area in question, which in consequence made it possible to identify the current interdependencies (co-occurrences) and relations in terms of time (evolution). As part of the analyses, the labels were categorized into clusters, based on occurrence and strength of their interconnections (Table 1). The individual clusters were color-coded; the size of the elements (labels and nodes) presented on the map has shown the frequency of occurrence of a given term, whereas the connections between the network nodes have demonstrated the strength of their co-occurrence in the analyzed set of publications.

As a result, three major clusters were obtained, showing evident affinity and density being the evidence of the existing relations, namely:

- cluster partnership for innovation focused around the issues connected with the triple helix (green color) – covering labels such as: commercialization, distribution, employment, financing, higher education institution, innovative development, knowledge transfer, local community, local enterprise partnership, medium enterprise, open innovation, public administration, regional economic development, smart city;
- cluster partnership for innovation focused around the issues connected with sustainable development (blue color) – covering labels such as: civil society, European Commission, European innovation partnership, innovative solution, population, prevention, regional network, sustainable development goal;
- cluster partnership for innovation focused around the issues connected with climate changes (red color) – covering labels such as: climate, climate change, emission, location, observation, precipitation, regional scale, respect, species, uncertainty, urbanization.

The map evaluating the co-occurrence of relations over time (Fig. 3) has shown that most of the highlighted issues has been discussed in the literature over the recent years, which may be a proof that the issues addressed are being developed or are at the onset of development.

-	-
	nie
	2

	5
	ŝ.
	5
	ド
	5
•	2
	2
	J
۲	~
	2
	Ś
5	2
	2
	\sim
	\circ
	~
	9
	2
	• •
	Ľ,
•	2
1	1
	2
	<u>È</u>
	~
	5
	č-
	1
	0
•	2
	3
	2
	ě
	2
	2
	~
	r interconnection.
	9
	~
	Ø
1	1
	2
٠	3
	5
	2
	2
•	~
1	1
	~
	<u>~</u>
	2
•	2
	uthi
•	vuthi
	withi
•	withi
	S with
	its withi
	hts with
	ghts withi
	ights with
	eights withi
	veights withi
	weights with
L	" weights with
	ur weights with
	eir weights with
	ierr weights withi
	heir weights with
	their weights with
	t their weights with
	id their weights with
	nd their weights with
	and their weights with
	and their weights with
	s and their weights within their interconnections in the so ca
	ils and their weights with
	els and their weights with
	bels and their weights with
	ubels and their weights with
	abels and their weights with
	labels and their weights with
	f labels and their weights with
	of labels and their weights with
	of labels and their weights with
	n of labels and their weights withi
	on of labels and their weights with
	ion of labels and their weights with
	ton of tabels
	ton of tabels
I · · · · · · · · · ·	ton of tabels
	ton of tabels
	ton of tabels
L	ton of tabels
	ton of tabels
	ton of tabels
	pecification of labels and their weights withi

Table 1.Specification of labels and their weights within their interconnections in the so called clusters	els and	their w	veigh	ts with	in their	. interco	onnectio	ins in	n the so called o	cluster.	S					
id	×	>	cluster	weight <links></links>	weight <total link<br="">strength></total>	weight <occurren ces></occurren 	score <avg. pub.<br="">year></avg.>	p	label	×	>	cluster	weight <links></links>	weight <total link<br="">strength></total>	weight <0ccurren ces>	score <avg. pub.<br="">year></avg.>
1 active	-0.8894	0.5398	3	27	72	14 2	2017.5714	37 1	37 limitation	0.3814	0.444	4	31	43	14	2018.8571
2 age	-0.525	-0.1826	2	29	48	19	2016.0526	38	38 local community	-0.7816	0.0035	2	18	19	10	10 2017.5
3 assessment	0.1789	0.2114	3	51	150	99	2017.8636	39	39 local enterprise partnershi	-0.4273	-0.0978	2	12	13	10	10 2015.4
4 biotechnology	0.0038	-0.5278	2	10	10	12	2012.25	40	40 location	0.4916	0.4356	1	30	51	24	24 2016.2083
5 care	-0.7226	0.3956	3	33	83	43	43 2016.3023	41 i	41 main objective	-0.7463	-0.3778	2	21	27	12	12 2015.4167
6 citizen	-0.8279	0.0347	2	33	54	17	2016.4706	42 1	42 medium enterprise	-0.6501	-0.4413	2	14	17	11	11 2015.4545
7 civil society	-0.6245	0.5046	3	15	19	14	2016.2143	43 1	43 mission	-0.774	-0.1871	2	23	30	20	20 2015.8
8 climate	443771	443771 -0.0008	1	38	137	29 2	2017.2414	44 I	44 month	0.6832	0.6726	4	24	36	14	14 2018.2143
9 climate change	0.878	0.1435	1	40	131	39 2	2017.6154	45 0	45 observation	0.722	0.0693	1	44	130	38	38 2017.7895
10 commercialization	-0.7177	-0.466	2	15	20	14	2013.7857	46 (46 open innovation	-0.9293	-0.0746	2	13	15	12	12 2016.0833
11 commitment	-0.4341	0.2577	3	31	40	22	2017.5	47 (47 output	0.3204	0.238	4	36	55	18	18 2016.8333
12 comparison	0.1983	-0.5043	2	39	87	31 2	2016.8065	48	48 parameter	-0.2212	-0.0653	2	21	32	15	2017.7333
13 contrast	1.0329	-0.2312	1	31	72		24 2018.25	49	49 pattern	0.716	-0.2412	1	42	122	45	45 2016.9111
14 decline	-0.048	0.0157	1	25	37	14	2014.7857	50 1		0.5858	0.3712	1	36	64	27	27 2017.037
15 decrease	1.222	-0.2171	1	31	62	12	2019	51	51 population	-0.4289	0.4661	3	47	105	45	45 2017.8222
16 difference	0.4699	-0.2617	1	49	168	59	2017.0169	52	52 precipitation	488332	0.2081	1	34	109	20	20 2017.85
17 direction	-0.4988	-0.5717	2	21	40		30 2016.4667	53	53 prevention	-0.3084	0.5606	з	31	73	26	26 2016.7692
18 distribution	-0.1235	-0.3604	2	43	78		2017.2	54 6	ii ni stra ti on	-0.68	-0.7638	2	7	12	10	10 2016.7
19 effect	0.4052	-0.2601	1	57	275		106 2016.934	55 (55 qualitative data	-0.7287	0.5747	3	12	14	10	10 2017.7
20 emission	334930	334930 -0.1592	1	30		31	2017.2258	56 1		0.4915	-0.0257	4	41	116	41	41 2016.2195
21 employment	-0.5898	-0.443	2	10	12	16 2	2014.625	57 1	57 reduction	0.3073	-0.0248	1	42	78	26	26 2016.8077
22 european commission	-0.8439	0.4522	3	17		11	2016.4545	58 1	conomic develop	-0.8278	-0.4684	2	10	16	13	13 2013.6154
23 european innovation partners -0.9091	s -0.9091	0.5018	3	28		16	2017	59 1	59 regional network	-0.4087	0.6356	3	23	30	12	12 2017
24 event	0.2568	-0.0963	4	41	91	36	2017.9722	60 1	60 regional scale	0.8293	-0.3881	1	20	36	12	12 2015.8333
25 experiment	1013550 0.0019	0.0019	1	32	106	27	2016.4444	61	61 respect	0.4884	0.1852	1	30	47	20	20 2015.65
26 financing	-0.3871	-0.5576	2	16	22	13	2016.1538	62 1	62 rise	0.5959	0.2201	1	25	35	14	14 2014.8571
27 good practice	-0.8631	0.2759	m	25	42	13	2017.4615	63 5	63 school	-0.6119	-0.104	2	23	34	32	32 2015.25
28 healthy ageing	-0.9015	0.4542	ŝ	25	60	11	2016.3636	64 5	64 smart city	-0.909	0.0409	2	14	16	10	10 2016.6
29 higher education institution	-0.8961	-0.3457	2	16	20		16 2017.9375	65 5	65 species	0.6542	-0.0786	1	27	45	14	14 2017.2857
30 increase	0.5312	-0.3741	1	50	191	58	2017.7931	99	able development g	-0.5215	0.2701	m	17	19	11	11 2019.3636
31 influence	0.3253	-0.1714	1	49	163	61 2	2015.9508	67 1	67 treatment	-0.149	0.371	m	38	74	24	24 2017.625
32 innovative development	-0.582	-0.7794	2	11	17	13	2016.7692	68 (0.8987	0.0716	1	38	116	33	33 2017
33 innovative solution	-0.5529	0.3085	S	16	21	6	2017.5556	69	69 urbanization	0.1202	-0.3505	1	22	38	12	12 2018.5
34 input	0.2537	0.5274	4	33		19	2016.4211	701	tion	0.768	0.1266	4	35	87	26	26 2017.6538
35 intensity		-0.1077	1	29		17	2017.1765	71		0.8057	0.3102	4	35	65	22	22 2016.8182
36 knowledge transfer	-0.8376	-0.3082	2	15	22		11 2016	72	72 wide range	0.9585	-0.2844	1	21	29	10	10 2017.7
Connect and attraction because	50	dote domined f	A Louis	Wom W/O	oc dotob		mantoti o									

3. Results

The completed literature review based on the selected publications made it possible to identify several key issues connected with searching for a gap in the network relations for smart specialization strategies.

Firstly, the WoS database, which makes it possible to browse bibliography records of major periodicals, summaries of conference proceedings (as well as to analyze citations of publications or authors), contains few publications that combine the topic of partnership for innovation with the topic of smart specialization strategies. There are many studies regarding partnerships and innovations, which focus either on the kinds of entities involved in the partnerships or on the kinds of activities the partnerships engage in. On the other hand, there is a considerable, though incomparably smaller number of publications regarding smart specialization strategies (cf. Fig. 1). In a synergistic combination of the two labels there is a limited (not exceeding 30 items) set of publications that address the topic not only on the European (Kempton, 2015; Virkkala, Mäenpää, Mariussen, 2017; Meyer, Gerlitz, Klein, 2022), but also global scale (e.g. (Monardo, 2019; Parisi, Biancuzzo, 2021; Ivashchenko, Kornyliuk, Polishchuk, 2021; Ward et al., 2021).

A detailed analysis of the content of the selected set of publications, as per the three major clusters generated with the use of VOSviewer, demonstrated unambiguously that the approach to building network relations within the framework of partnerships for implementing smart specialization strategies is changing. Currently, network relations and partnerships are deeply rooted in the EU policies, such as those related to sustainable development, support for European Green Deal implementation, the EU industrial policy strategy, Horizon Europe programme, the Cohesion Policy. Building network relations for smart specialization refers to fragmentation of the EU initiatives and funds, eventually combining them under the umbrella of integrated partnerships.

Moreover, what is becoming more and more prominent is the need to focus on the development trends that lead to additional benefits for the economy, society and environment and, importantly, preference for partnerships that bring additional benefits in all the three dimensions at the same time. It is also emphasized that there is a need for running in-depth analyses which would pertain to extensive deliberations on how to stimulate stakeholders in partnerships based on current challenges and capabilities of regional transformation.

The completed analyses make it possible to state that currently the network relations require the use of a wider range of political tools in order to have an impact within a specified time frame. There is also a need to specify and introduce solutions for which time is critical – i.a. counteracting the climate changes, preserving specified levels of employment or securing the position of European regions in the emerging value chains, which means putting more emphasis on investments in innovations that are merely risky (e.g. adaptation of proven technologies) rather than explicitly uncertain. Meeting the challenges that are critical in terms of time also requires coordination with policy areas in addition to research and innovation, which support dissemination of key innovations, and also introducing new ways of working among stakeholders, which ensures better synergy stimulation and harmonization of efforts made by each of the parties. However, a question arises: to what extent the enhanced and extended participative management makes it possible to identify and justify the ambitious goals of network relations and whether or not this is sufficient for the purposes of co-developing the paths for regional transformations based on innovations.

4. Conclusion

Network relations created within the framework of regional partnerships currently fit into the strategic frameworks featuring strong ambitions in the area of systemic transformation of regions. In connection with smart specialization strategies, they more and more often refer to European Green Deal and the possibilities and challenges connected with policies pursued in specific places. In the context of the EU policy, the partnerships also rely on positive experiences ensuing from implementation of smart specialization strategies (RIS3) and strive to promote transformative innovations, putting strong emphasis on Sustainable Development. This new, innovative approach shows considerable potential to meet the challenges of sustainable development, bringing additional benefits for the economy, society, and environment. The analyses completed as part of the study have unambiguously confirmed this direction of pro-innovative activity, and at the same time have shown that this is a niche issue and it is entering the stage of intensive development. The identified research gaps indicate that these issues are still emerging and for both practitioners and theoreticians they constitute considerable cognitive potential.

References

- D, P. et al. (2022). Partnerships for Regional Innovation Playbook. Luxembourg (Luxembourg): Publications Office of the European Union. doi: 10.2760/775610 (online),10.2760/292307 (print),10.2760/513200 (print exec summ).
- 2. Foray, D. (2015). *Smart specialisation : opportunities and challenges for regional innovation policy*. Routledge Taylor&Francis Group.

- Foray, D. (2018). Smart specialization strategies as a case of mission-oriented policy-a case study on the emergence of new policy practices. *Industrial and Corporate Change*, 27(5), pp. 817-832. doi: 10.1093/icc/dty030.
- Foray, D., David, P.A., Hall, B.H. (2011). Smart specialisation From academic idea to political instrument, the surprising career of a concept and the difficulties involved in its implementation. *Mtei-Working_Paper*, 2011-001, pp. 1-16. Available at: https://infoscience.epfl.ch/record/170252.
- Foray, D., Mowery, D.C., Nelson, R.R. (2012). Public R&D and social challenges: What lessons from mission R&D programs? *Research Policy*, 41(10), pp. 1697-1702. doi: 10.1016/j.respol.2012.07.011.
- 6. Foray, D., Rainoldi, A. (2013). Smart specialisation programmes and implementation. *European Commission*, 2. doi: 10.2791/19106.
- 7. Ghinoi, S. et al. (2021). Smart Specialisation strategies on the periphery: a datatriangulation approach to governance issues and practices. *Regional Studies*, *55(3)*, pp. 402-413. doi: 10.1080/00343404.2020.1791321.
- 8. Gianelle, C. et al. (2020). Smart Specialisation on the move: reflections on six years of implementation and prospects for the future. doi: 10.1080/00343404.2020.1817364.
- Gianelle, C., Guzzo, F., Mieszkowski, K. (2020). Smart Specialisation: what gets lost in translation from concept to practice? *Regional Studies*, 54(10), pp. 1377-1388. doi: 10.1080/00343404.2019.1607970.
- Grillitsch, M., Asheim, B. (2018). European Planning Studies Place-based innovation policy for industrial diversification in regions Place-based innovation policy for industrial diversification in regions. doi: 10.1080/09654313.2018.1484892.
- Ivashchenko, A., Kornyliuk, A., Polishchuk, Y. (2021). Innovation vouchers as a modern financial tool for the development of SMES. *Baltic Journal of Economic Studies*, 7(5), pp. 78-87. doi: 10.30525/2256-0742/2021-7-5-78-87.
- Kempton, L. (2015). Delivering smart specialization in peripheral regions: the role of Universities. *Regional Studies, Regional Science*, 2(1), pp. 489-496. doi: 10.1080/21681376.2015.1085329.
- 13. Klimas, P., Stanczyk, S., Sachpazidu-Wojcicka, K. (2020). *Metodyka systematycznego przeglądu literatury wyzwania selekcji a posteriori podczas tworzenia bazy literatury*, pp. 39-52.
- Klincewicz, K., Żemigała, M., Mijal, M. (2012). Bibliometria w zarządzaniu technologiami i badaniami naukowymi. Available at: https://kpbc.umk.pl/dlibra/publication/75365/ edition/81392/content?ref=aHR0cHM6Ly9rcGJjLnVtay5wbC9kbGlicmEvcHViaW5kZX gxMDM, 22.05.2022.
- 15. Makieła, Z.J. (2018). Znaczenie innowacyjności w gospodarce regionów. *Przedsiębiorczość - Edukacja*, 14(0), pp. 40-48. doi: 10.24917/20833296.14.3.

- 16. Martins, J.T. (2016). Relational capabilities to leverage new knowledge. *The Learning Organization*, 23(6), pp. 398-414. doi: 10.1108/TLO-03-2016-0022.
- 17. Mazzucato, M. (2012). The entrepreneurial state. *Soundings*, 49(49), pp. 131-142. doi: 10.3898/136266211798411183.
- McCann, P., Ortega-Argilés, R. (2015). Smart Specialization, Regional Growth and Applications to European Union Cohesion Policy. *Regional Studies*, 49(8), pp. 1291-1302. doi: 10.1080/00343404.2013.799769.
- 19. Meyer, C., Gerlitz, L., Klein, M. (2022). Creativity as a Key Constituent for Smart Specialization Strategies (S3), What Is in It for Peripheral Regions? Co-creating Sustainable and Resilient Tourism with Cultural and Creative Industries. *Sustainability*, *14*(6), p. 3469. doi: 10.3390/su14063469.
- 20. Monardo, B. (2019). Innovation Districts as Turbines of Smart Strategy Policies in US and EU. Boston and Barcelona Experience. In: F. Calabro, L. DellaSpina, C. Bevilacqua (eds.), *New metropolitan perspectives: local knowledge and innovation dynamics towards territory attractiveness through the implementation of horizon/e2020/agenda2030 vol. 1*, pp. 322-335. doi: 10.1007/978-3-319-92099-3_38.
- Nguyen, H.T., Marques, P. (2022). The promise of living labs to the Quadruple Helix stakeholders: exploring the sources of (dis)satisfaction. *European Planning Studies*, 30(6), pp. 1124-1143. doi: 10.1080/09654313.2021.1968798.
- Nieth, L. (2019). Understanding the strategic "black hole" in regional innovation coalitions: reflections from the Twente region, eastern Netherlands. *Regional Studies, Regional Science*, 6(1), pp. 203-216. doi: 10.1080/21681376.2019.1578259.
- Parisi, L., Biancuzzo, L. (2021). A new model of urban regeneration and economic revitalisation: the I.D.E.A. district, San Diego. *Journal of architecture and urbanism*, 45(2), pp. 155-163. doi: 10.3846/jau.2021.14422.
- 24. Porter, A.L. et al. (2004). Technology futures analysis: Toward integration of the field and new methods. *Technological Forecasting and Social Change*, *71(3)*, pp. 287-303. doi: 10.1016/J.TECHFORE.2003.11.004.
- 25. Sorama, K. (2020). *The role of university in the regional innovation ecosystem*. 14th international technology, education and development conference (inted2020). L.G. Chova, A.L. Martinez, I.C. Torres (eds.), pp. 1629-1634.
- 26. Trippl, M., Zukauskaite, E., Healy, A. (2020). Shaping smart specialization: the role of place-specific factors in advanced, intermediate and less-developed European regions. *Regional Studies*, 54(10), pp. 1328-1340. doi: 10.1080/00343404.2019.1582763.
- 27. Tumbas, P. et al. (2013). *Impact of clusters on university-industry interaction*.
 6th international conference of education, research and innovation (Iceri 2013). L.G. Chova, A.L. Martinez, I.C. Torres (eds.), pp. 3997-4005.

- Uyarra, E., Marzocchi, C., Sorvik, J. (2018). How outward looking is smart specialisation? Rationales, drivers and barriers. *European Planning Studies*, 26(12), pp. 2344-2363. doi: 10.1080/09654313.2018.1529146.
- 29. Virkkala, S., Mäenpää, A., Mariussen, Å. (2017). A connectivity model as a potential tool for smart specialization strategies. *European Planning Studies*, *25(4)*, pp. 661-679. doi: 10.1080/09654313.2017.1283391.
- 30. Ward, C. et al. (2021). Regional policy in Australia: can smart specialisation deliver vibrant and prosperous regional Australian communities? *Australasian journal of regional studies*, 27(3), pp. 306-330.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

DECRUITMENT IN PROJECT TEAMS – DETERMINANTS AND WAYS OF IMPLEMENTATION

Anna KRASNOVA

University of Lodz, Department of Human Resources Management, Faculty of Management; anna.krasnova@uni.lodz.pl, ORCID: 0000-0003-2832-2100

Purpose: Decruitment, understood as a multidimensional process of employees downsizing, is little discussed in the literature on project team management. The purpose of this article is to present decruitment as a personnel subfunction in relation to project employees.

Design/methodology/approach: The empirical part presents the results of a qualitative research conducted using the asynchronous interview method with a sample of 133 respondents. **Findings:** The results of the research show that decruitment in project teams is understood narrowly and boils down to parting with an employee at the end of a project. Respondents have a comprehensive approach to the way this process is conducted, emphasizing the need to keep a good atmosphere during the parting and to form further relationships.

Research limitations/implications: Most respondents referred in their statements only to decruitment because of project end or project work for which the employee was recruited. Therefore, the research results do not refer to employees leaving during the project, e.g., because of voluntary departures or dismissals. The issue of decruitment in project teams should therefore constitute a further research area.

Practical implications: The results of the research can form the basis for the development of decruitment procedures in project management organizations in relation to the separation of employees after the end of the project.

Originality/value: The article presents the opinions of potential project employees to the process of leaving the employer, which not described so far in the literature on project team management.

Keywords: decruitment, layoffs, quitting the job, project management, project team.

Category of the paper: Research paper.

Introduction

The functioning of project teams and project management are not new concepts in the field of management science. Projects play a key role in today's enterprises (Al-Nabae, Sammani, 2019, p. 1), and working in project teams has been gaining popularity over the years (Kolodziejczyk-Olczak, 2013, p. 65; Wachowiak, Gregorczyk, 2018, p. 76), evaluating and causing changes in the existing methods of personnel management. The result of these changes includes publications devoted to the general topic of human resource management in project teams (e.g., Szymanska, 2012; Singh, 2014; Kaczmarska-Krawczak, 2013; Frączkowski et al., 2016) and those that extensively discuss such issues as:

- Creation of project teams, thus, among other things, recruitment and selection and selection of project employees (e.g., Kolodziejczyk-Olczak, 2013; Ahsan, Ho, Khan, 2013; Krajewska-Nieckarz, Bialas, 2021).
- Competencies of project employees (e.g., Stor 2013; Wachowiak, Gregorczyk, 2018; Cabala et al., 2020).
- Motivating project team members (e.g., Schmid, 2007; Sroka, 2017).
- Evaluating (e.g., Buklaha, 2010; Yaroslavska, 2010).
- Managing the project team (e.g., Karbownik, 2006; Listwan, 2011).
- The role of the manager in team management (e.g., Klimiuk, 2009; Kisielnicki, 2016; Chmielewiec, 2018).

However, the indicated variety of studies devoted to personnel management in project teams does not refer to one of the personnel sub-functions, which is decruitment. By the term decruitment, the author understands the opposite actions taken in getting employees, the effect of which is a negative change in the quantitative and/or qualitative state of human resources of an organizational unit, in this case a project team.

The revealed cognitive gap shaped the author's interests around the topic of decruitment in project teams with a particular focus on parting with project employees. The purpose of this article is to present decruitment as a personnel sub-function in relation to project teams. Wherever in this publication the author uses the term decruitment, it refers to the situation when a project employee leaves the team during or after the project (through the dissolution of the project team).

Decruitment in project teams – a review of the literature on the subject

The role of the project team and its proper management in the context of successful implementation of project goals has been emphasized more than once in the literature (Szymanska, 2012 p. 148; Kolodziejczyk-Olczak, 2013, p. 73). Problems caused by the destabilization of the project crew can delay the implementation of the project or prevent its completion, and decruitment processes can underlie such problems.

Referring to the Project Management Institute's definition, in which a project is called an activity "undertaken for the purpose of creating a unique product or service" (Klimiuk, 2009, p. 36) and the related definition's characterization of a project team, which indicates that it is

an organizational unit of a temporary nature (Kaczmarska-Krawczak, 2013, p. 51; Krajewska-Nieckarz, Białas, 2021, p. 90), it may seem that decruitment in a project team is a natural phenomenon. Meanwhile, although the dissolution of a project team at the end of a project is a process for which team members should be prepared, the manner in which it takes place is important, among other things, in the context of employer branding of the project organization and from the point of view of recruiting employees for subsequent ongoing projects (Kolodziejczyk-Olczak, 2013, p. 73).

In addition, although the project is a temporary structure, the team may also become destabilized during the project implementation, caused by voluntary departures of employees, dismissals at the initiative of the employer (e.g. in the case of violations or abuses), necessary vertical or horizontal shifts within the project structures, e.g. the employees will lose their rights or they will be dismissed for natural reasons (e.g. when the employee loses the ability to work).

The specificity of project teams assumes that a part of the project team is usually made up of permanent employees, employed for the entire duration of the project (e.g., project manager, project experts), and another part - employees employed for the duration of specific project works or for specific stages of the project. In the conditions of the need to constantly adapt to the constantly changing composition of the workforce of the project, it is difficult for the team to achieve the highest efficiency. When another problem, i.e., unplanned staff turnover (related to unplanned recruitment) becomes noticeable, further problems may arise, e.g., in terms of keeping team spirit, cooperation or knowledge flow (Bushe, 2010). Among the most common problems caused by frequent changes of project team members, the following can be distinguished (Bushe, 2010): loss of knowledge; destabilization of ways of working; decreased involvement; disappearance of the sense of identification with the project team, project, or organization.

A study conducted in the United States, Canada, and Australia on a total sample of 134 project managers revealed that the highest level of rotation of project workers is noticeable during the project implementation phase, and the main reasons for departures include individual reasons for employees related to career building and personal development (Parker, Skitmore, 2005, p. 205). The authors of this study, referring to earlier publications, show that the reasons for leaving the project during its implementation include "difficulty in work", lack of loyalty to the organization, lack of promotion opportunities or lack of a sense of job security (Parker, Skitmore, 2005, p. 205, p. 2014).

A survey conducted in Poland among 5 managers with experience in managing project teams revealed that the so-called "Continuity of human resources" during the project (Kołodziejczyk-Olczak, 2013, p. 73), and the emerging staffing gaps, even if they do not last long, may cause many problems, e.g., in the context of work organization or the atmosphere in the team.

An analysis of the literature on project management allows the conclusion that the responsibility for recruitment in the project team should rest on the shoulders of the project manager, as he is responsible, inter alia, for recruiting employees (Szymańska, 2012 p. 148; Kaczmarska-Krawczak, 2013 p. 57; Wachowiak, Gregorczyk, 2018, pp. 79), planning, organizing and coordinating the work of team members (Klimiuk, 2009, p. 36, Kaczmarska-Krawczak, 2013 p. 57; Wachowiak, Gregorczyk, 2018, pp. 78-79), appropriate assessment, motivating and rewarding (Wachowiak, Gregorczyk, 2018, pp. 78-79) and generally understood human resource management in relation to project employees (Klimiuk, 2009, p. 41; Szymańska, 2012, p. 148).

However, there is no list of procedures or framework activities that a project manager should undertake in recruitment procedures. The author of the article is of the opinion that the exploration of the phenomenon of recruitment in relation to project teams will not only fill the cognitive gap, but also enable project managers to be able to manage a project team efficiently and effectively in human resources, based on specific recommendations.

Methodology of own research

A qualitative survey was conducted in 2019 and 2021 on a sample of undergraduate students and postgraduate students of faculties and specialties related to personnel management. The author used the method of an asynchronous interview (Walentynowicz-Moryl, 2017, p. 58), which was partially structured in writing. The interview questionnaire, which was made available to the respondents, covered 6 issues related to the universally understood subject of recruitment. One of the issues related to recruitment in project teams. Due to the subject matter of this article, the results are presented of research relating exclusively to this issue in it.

Questions relating to recruitment in project teams referred to two areas - the course of parting with an employee as part of a project team and shaping relations with former project employees.

The interview questionnaire was sent to 146 people. As a result of the analysis of the obtained feedback answers, 133 of them were qualified to the research sample. These were questionnaires, the authors of which answered questions about the area of recruitment in the project team. Due to the exploratory purpose of the presented research, no analysis of the relationship between the personal characteristics of the respondents and the opinions presented by them was conducted. The presentation of the research results is a qualitative analysis of the collected research material consisting of 32 pages of typescript. The presentation of the research results was enriched with quotes from the respondents.

Parting with project employees – the results of own research

When analyzing the results of the research, it is worth pointing out that most respondents referred in their statements only to recruitment because of the completion of the project or stage of the project (project work) for which the employee was recruited. Although the interview questionnaire had instructions about the departure of project employees during its implementation, only a few respondents referred to it in their statements.

One of the respondents noted that "the company (implementing the project - note A.) should give the employee a sufficient amount of time to familiarize the employee with the information about the dismissal, ... it should not take place overnight, unless the dismissal is concerned disciplinary "(50), and the second that" maintaining a positive relationship with a former employee is not always possible. The employee must then be openly notified of the reason for his dismissal, and the information that he may have performed his job poorly cannot be concealed"(71). The quoted statements refer only to the situation of dismissal of an employee at the initiative of the employer, e.g., when the employee does not fulfill the assigned tasks. However, none of the respondents referred to the voluntary departure of project employees. This may show that the feeling of the "timeliness" of work in the project by the respondents finds their approach to the possibility of making decisions about leaving by the employees themselves. After all, "people employed only as part of a project are aware that their cooperation is based on the performance of the employment relationship at the end of the project" (57) the voluntary departure of an employee's project during its implementation is rather extremely rare.

Many of the statements of the respondents referred to the fact that parting with a project employee should be natural, and therefore easy and pleasant. This is showed by a statement of one of the respondents: "I think that parting with an employee who was employed only for a given project should not be as difficult as dismissing an employee we employed on a permanent basis" (61). On the other hand, another respondent emphasizes that "ending cooperation with an employee after the end of the project should proceed in a neutral manner, without emotions and with full culture on both sides" (59). Such an approach of the respondents may be found by the lack of the need to decide to end the cooperation directly by the project manager (less often by the employer), and thus by the lack of a sense of guilt towards the employee. Because in a situation where the breakup is due to the end of the project period, the de-recruitment process may seem only a formality. Meanwhile, this is not always the case. At this point, it is worth recalling the statement of another respondent, who referred to the experiences of his colleague and emphasized that parting with employees in "... the issue of projects and people hired to carry them out is multidimensional. My friend was contracted as an IT specialist to install new software for printers and install them in the Fast-food network Of course, he was subcontracted (project implementer – A. note) for a period of 4 months.

The job was particularly good, both in terms of the number of tasks, requirements, and atmosphere among colleagues, as well as earnings ... After 4 months, the company did not sign a new contract with him. At the end of the project, any contact from the company ended. He did not get a thank you. No one had any follow-up or recruitment interviews with him because, according to the company, he was only a project worker. This is an example of how not to deal with employees ... My friend, hoping to sign a new contract ... was left to himself during a raging pandemic and could not find himself in the labor market for the next few months"(107). It is impossible to disagree with the cited respondent. It turns out that even if it may seem that every employee should be aware of the timeliness of their employment when undertaking work in the project, they often count on the possibility of continuing cooperation. Then, leaving this employee without support and adequate communication of the upcoming termination of cooperation may result in a deterioration of the employer's image, and even a negative opinion about the project contractor or manager on the labor market. One of the respondents noticed the exceptional value of communication in terms of the period of termination of cooperation with employees, noting that "informing the employee about leaving the company after the end of the project should take place at least 2 or 3 months earlier" (22). In such a situation, the employed person can plan a further career path, and the employer limits the possibility of speculation among the staff about an extension of contracts or proposing other jobs.

Referring to how the parting with project employees should go ahead after the end of the project, it is worth noting that the respondents agreed that it is best for the project manager to conduct a summary meeting, during which he could conduct an overall evaluation of the project and assessment of cooperation with individual employees. Depending on the size of the team, respondents suggest a joint meeting for the entire project team or smaller teams, but necessarily with the project manager. The role of the project manager, at the stage of parting with employees, is to thank for the cooperation, appreciate the contribution they made in the implementation of the project, and encourage them to keep relationships and show the possibility of probable future cooperation. "In my opinion, it would be a clever idea to formally express thanks and appreciation to the entire department or team with which he worked" (51), remarks one interviewee.

In turn, line managers, as part of their project subgroups, should conduct individual meetings with their direct subordinates during which they will thoroughly discuss their work, successes, and failures, indicate strengths and weaknesses, learn about further career plans, as well as the employee's opinions about working in the project. According to the respondents, an individual recruitment interview is extremely important, as it creates the possibility of unraveling "all misunderstandings" (64). "If there are any ambiguities between the legislator and the employee during the project, it is worth clarifying them at the end of the cooperation" (119), emphasizes another respondent. During such a meeting, "the employer should honestly say what was successful in the project and what was worse, and what difficulties were there,

and then ask the former employee what it was like on his part" (32) - emphasizes another respondent. Moreover, "when we part with an employee after completing a project, it should be assumed that he or she has a lot of knowledge about the functioning of the company and the projects that are implemented in it. It should be ensured that this potential is not wasted"(40) - points out another respondent. "It is worth asking for the employee's opinion on the functioning of the company, working conditions or organization. One should also ask how he assesses the atmosphere and relations with co-workers during the project implementation"(76).

Particularly noteworthy is the fact that most respondents believe that the employer should take specific actions aimed at supporting project employees in finding alternative employment. "The employer should try to make parting with the employee a fresh start for him (the employee - note A.)" (88) - emphasizes one of the respondents, while another indicates that "to maintain positive relations with the former employee after the end of the project, the employer should obligatorily offer the dismissed person an alternative occupation. He should think about the employee's fate in advance and, if possible, propose another job or help in finding one"(78). These activities, as indicated by the respondents, can take the form of programs (e.g., in the form of offboarding or outplacement), but also be conducted separately, depending on the needs of the employees themselves (e.g., "issuing references" (78) or "opinions about cooperation on Linkedin "(80) or" letter of recommendation "(35). Moreover, it is worth" finding out after some time whether he (the employee - note A.) was able to find another job and / or offer help in this regard "(78).

All respondents emphasized the value of shaping further relationships with former project employees. "It is important to keep good relations with him (the employee - note A.), especially if we work in an industry with a high demand for specific specialists (e.g., IT). In this way, we do not close the chance to resume cooperation with a given person in the future, in addition, the departing employee may also recommend other specialists in each field to us"(63) - emphasizes one of the respondents in his opinion. "After a well-conducted project, not only the effects that were the goal of its creation are important, but also the knowledge we get during the project. In order not to lose the newly created relationship, after the end of the project, you must act already during it ... then we can expect a positive image of the employer and a field of cooperation or help for both parties"(15).

Summary

The quotes cited in the above part of the article show a comprehensive approach to the process of leaving employees presented by the respondents. They show both aspects related to the summary of the period of cooperation, mutual evaluation, as well as planning further

relationships and help in finding a new job provided by the employer (entity implementing the project).

Almost all respondents emphasized in their statements that regardless of the assessment of the quality of work carried out as part of the project, each parting with an employee should take place in a good, friendly atmosphere, and "the project manager can prepare a small gift or a congratulatory diploma for the employee, which will be positive it was associated with the duration of the project "(93).

According to the author, the presented research results can be summed up with a quote from one of the respondents, who shows that "the employee's parting from the employer after the project is completed should end with a friendly conversation, where the following aspects will be discussed:

- Summary of the project results.
- Mutual expression of opinion on cooperation.
- Mutual thanks for the time worked together.
- Possibility of cooperation in the future"(72).

The research results presented in the article may constitute the basis for the development of recruitment procedures in project management organizations in relation to the separation of employees after the completion of the project. However, they cannot be the basis for any conclusions about the parting of employees who leave the project during its duration, e.g., because of voluntary departures or dismissals at the initiative of the employer. The issue of recruitment in project teams should therefore be a further research area. According to the author, an interesting research area may be the views of employees who left the project teams during its implementation. The implementation of quantitative research in this area would make it possible to verify the reasons for the voluntary departures during the project, the reasons and course of the layoffs, as well as the prospects for shaping further relations between the project manager/employer and former employees.

References

- Ahsan, K., Ho, M., Khan, S. (2013). Recruiting Project Managers: A Comparative Analysis of Competencies and Recruitment Signals From Job Advertisements. *Project Management Journal*, Vol. 44, No. 5, pp. 36-54.
- Al-Nabae, M.G., Sammani, D. (2019). Training methods for developing project team members, *International Journal of Innovation and Industrial Revolution*, Vol. 1 Iss. 1, eISSN: 2637-0972, pp. 1-12.

- 3. Bukłaha, E. (2010). System ocen pracowniczych z uwzględnieniem zespołów projektowych. In: R. Bartkowiak, J. Ostaszewski, *Nauki ekonomiczne w świetle nowych wyzwań gospodarczych* (pp. 451-465). Warszawa: Oficyna Wydawnicza SGH.
- Bushe, G.R. (2010). When People Come and Go. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/SB10001424052748704100604575145950278914776, 28.03.2022.
- Cabała, P., Jarosz, Sz., Sołtysik, M., Zakrzewska, M. (2020). Kompetencje kierownika projektu w świetle wytycznych Individual Competence Baseline v.4.0. In: J. Walas-Trębacz, T. Małkus (eds.), *Zarządzanie organizacjami w społeczeństwie informacyjnym. Projekty – Procesy – Struktury* (pp. 37-48). Toruń: Towarzystwo Naukowe Organizacji i Kierownictwa, Stowarzyszenie Wyższej Użyteczności "Dom Organizatora".
- 6. Chmielewiec, B. (2018). Rola kierownika zespołu projektowego w polskich realiach. *Edukacja ekonomistów i menedżerów*, 1(47), pp. 59-76.
- 7. Frączkowski, K., Janiak, A.M., Kosakowski, J., Kruk, M., Mastalerz, M., Stankowska, A. (2016). *Zarządzanie zespołami projektowymi*. Warszawa: Texter.
- 8. Jarosławska, A. (2010). System oceny projektowej. *Personel i Zarządzanie, nr 6,* pp. 82-85.
- 9. Kaczmarska-Krawczak, J. (2013). Uwarunkowania kształtowania zespołu projektowego w organizacji. In: T. Listwan (ed.), *Przedsiębiorczość i Zarządzanie, Społeczne problemy zarządzania projektami, t. 14, z. 11, cz. 1,* pp. 51-64.
- 10. Karbownik, A. (2006). Kierowanie zespołem projektowym w procesie zarządzania projektem w górnictwie. *Górnictwo i Geologia, T. 1, z. 3,* pp. 5-17.
- 11. Kisielnicki, J. (2016). Kierownik projektu informatycznego i jego rola w zespole realizującym projekt. *Studia Informatica Pomerania, Metody komputerowe w procesie podejmowania decyzji, nr 4(42), pp. 109-122.*
- Klimiuk, J. (2009). Rola kierownika projektu oraz zespołu projektowego w zarządzaniu projektami, *Bezpieczeństwo i Technika Pożarnicza*, Nr 3. Centrum Naukowo-Badawcze Ochrony Przeciwpożarowej im. Józefa Tuliszkowskiego - Państwowy Instytut Badawczy, pp. 35-45.
- Kołodziejczyk-Olczak, I. (2013). Tworzenie i kompetencje zespołu projektowego. Przedsiębiorczość i Zarządzanie, t. XIV, z. 11, cz. I. Wydawnictwo SAN, ISSN 1733-2486, pp. 65-76.
- Krajewska-Nieckarz, M., Białas, K.B. (2021). Proces doboru personelu do wirtualnego zespołu projektowego, *Przedsiębiorczość i Zarządzanie, t. XIV, z. 11, cz. I.* Wydawnictwo SAN, ISSN 1733-2486, pp. 89-103.
- 15. Listwan, T. (2011). Determinanty skuteczności kierowania zespołem projektowym. *Przedsiębiorczość i Zarządzanie. Koncepcje i metody współczesnego zarządzania, t. 12, z. 14,* pp. 119-131.

- 16. Parker, S.K., Skitmore, R.M. (2005). Project management turnover: causes and effects on project performance. *International Journal of Project Management*, 23(3), pp. 205-214.
- Schmid, B. (2007). Motivation in Project Management: The Project Manager's Perspective. Florida State University Libraries. *Electronic Theses, Treatises and Dissertations*. The Graduate School.
- 18. Singh, H. (2014). *Mastering Project Human Resource Management: Effectively Organize and Communicate with All Project Stakeholders.* Pearson FT Press.
- 19. Sroka, M. (2017). Współczesne metody motywowania do pracy w zespole projektowym. Journal of Modern Management Proces. Instrumenty budowy zaangażowania w marketingu i projektach, nr 2, pp. 36-44.
- 20. Stor, M. (2013). Kwalifikacje i kompetencje członków międzynarodowych zespołów projektowych w obszarze ZZL. *Przedsiębiorczość i Zarządzanie, t. XIV, z. 11, cz. I,* pp. 207-229.
- 21. Szymańska, K. (2012). Przegląd współczesnych poglądów na zarządzanie zasobami ludzkimi w projektach. *Rocznik Naukowy Wydziału Zarządzania w Ciechanowie. Wydanie 1-4*, pp. 129-149.
- 22. Wachowiak, P., Gregorczyk, S. (2018). Kompetencje kierowników zespołu projektowego. *Studia i Prace Kolegium Zarządzania i Finansów, z. 159.* Szkoła Główna Handlowa, pp.75-93.
- 23. Walentynowicz-Moryl, K. (2017). Indywidualny wywiad online technika asynchroniczna. *Relacje. Studia z nauk społecznych, nr 3,* pp. 55-65.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

A PROACTIVE STRATEGY OF THE ORGANIZATION, AND ACTION-TAKING EFFICIENCY HAVING AN IMPACT ON WORK SAFETY

Sebastian KUBASIŃSKI

Poznan University of Technology, Faculty of Engineering Management, Institute of Safety and Quality Engineering; sebastian.kubasinski@put.poznan.pl, ORCID: 0000-0001-6417-6150

Purpose: The aim of this article is to depict a scientific attitude to systemic implementation of employee-related proactive attitude mechanisms in the context of work safety.

Design/methodology/approach: In this article, the author depicts a systemic attitude method to designing proactive safety strategy in the organization.

Findings: A proactive safety strategy in the organization involves workers' commitment through all entity levels of its management in an operating cooperation with on-the-job employees. Method to designing proactive safety strategy in the organization it is based on the integration of all levels such as: strategic, tactic and operational in terms of stimulating proactive behaviours. It requires implementing specific reaction-related procedures concerning anticipated hazardous situations. A systemic conceptualization that implements a proactive safety strategy is possible when using specific proactive factors. Their attributes result in and are strictly linked to employee's attitude towards established targets.

Originality/value: The author of this publication analyses the research literature and personal current research in the scope of systemic work safety enhancement, being concentrated on key areas of research subject, which consists of OHS action-taken efficiency, proactive attitude encouragement and, moreover, work safety standards and indicators (Key Performance Indicators - KPI).

Keywords: safety management systems, OHS proactive strategy, risk factors, management strategies, proactivity indicators.

1. Introduction

Safety management is a prevention, reaction and restoration process of appropriate functioning work safety. Depending on policy-taken work safety, aims and actions should be mainly targeted at proactive aspects. The consequence of the above mentioned fact is specific reaction procedures. It leads to superior stimulating incentive systems of proactive attitude in contrast with analysing the reporting of statistical data.

Regulating enterprise relations with surroundings emerges in three stages, on which particular problems are solved and various assessment criteria of action-taken efficiency are implied. Due to an accepted structure of aims, these ones are implemented on the operational, coordinative and strategic levels. In terms of it, for purposes of action-taken assessment in the organization, the author declared to take the analogical structure as the above mentioned levels. Practically, those three levels need to be firmly connected and coherent each other in order to achieve established aims in the organization (Walczak, 2012).

Contemporarily, the attitude to management plays an increasing role in entrepreneurs' activity. OHS management system is a part of the general management system in the company. Its task is to help the organization control and mitigate threats for employees' health, and others as well. A proceedings scheme depicted in fig. 1 constitutes a systemic attitude method to design a proactive safety strategy in the organization. As part of taken actions on particular management levels, it becomes an implementation tool for mechanisms of a proactive attitude among employees.

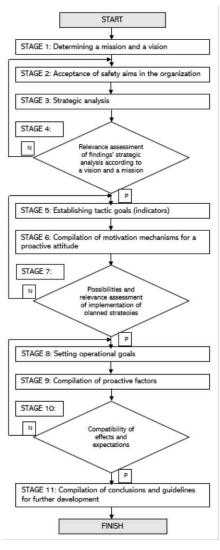


Figure 1. A method to design a proactive safety strategy in the organization. Source: own study.

Improving work safety is not possible without taking actions in an accurate manner. According to Zieja and Gołda (2014), improving actions are proactive ones based on an active strategy of performance. To make taken actions in all areas, included OHS one, give the expected result, the first action in the organization should be determining a vision and a mission (1st stage). A properly established mission allows to set the goal of further company activity, to be popularised and understood by everybody, and the way of its realization should be reliable and feasible. In turn, a vision should contain a detailed description of the aim of its activity perceived by all departments. The following step (2nd stage), which the organization should take is to accept the safety goals. It is important to accept goals that are feasible - it means that all interior and exterior circumstances are respected. Moreover, safety goals should be comprehensive, motivational and acceptable for every member of the organization. On a strategic level, the strategic analysis is essential (3rd stage), and the following assessment relevance of its findings towards a mission and a vision (4th stage). The main aim of a strategic analysis is to establish factors that will influence over the organization in the future and determine further strategies. Currently, companies in their basic activity use a range of methods described in the literature, which is, for instance, SWOT/TOWS analysis applied for key interior factors identification (strengths and weaknesses) and exterior ones (opportunities and threats) in the organization (Sadłowska-Wrzesińska, Marczewska-Kuźma, Jakubowicz, 2020).

Before operational tasks are taken, the organization should concentrate on a way of a preparation of actions that are necessary to achieve strategic goals. For this reason, firstly, tactical aims are established (5th stage) and motivation mechanisms for proactive attitude are prepared (6th stage). And, in the next stage, after carrying out relevance assessment and a possible implementation of planned strategies (7th stage), operational goals are established (8th stage). At this point, it is worth emphasizing the role of a human being that is a common element of all coexisting management subsystems in the organization. (Kubasiński, 2020). Employee involvement and motivation on different levels of an existing company, supported by top management, are one of key elements of all development process.

Setting the operational goals enables to solve current short-term problems, which are linked to tactical problems and it allows to begin the next stage, which is proactive indicators compilation (9th stage). Briefly described and explained importance of proactive indicators with their examples are presented in the third point (Controlling under the specific reaction proceeding). Compiling findings and guidelines to further development, the organization should do is the compatibility assessment of effects and accepted expectations (10th stage). It should be underlined that at this stage the verification system of effect compatibility proceeds on the basis of various forms, tools and it is individual in every organization.

In their publications (Peñaflor, Juevesa, 2021), authors demonstrate that taking actions that are characterized as proactive attitude are not concentrated only on a field of reporting incompatibility, but concern individual employee's actions. We can assume that proactive attitude in the organization should be understood as anticipating upcoming difficulties and

taking solutions in advance to probable emerging undesireable situations such as malfunctions or accidents.

The aim of this article is to depict a scientific attitude to systemic implementation of employee-related proactive attitude mechanisms in the context of work safety. The author of this elaboration, analyzing the subject literature and own research findings in terms of systemic development of work safety, concentrate on key fields of a relevant topic, which consists of action-taking effectiveness in terms of OHS, motivating for proactive attitude, and measures and indicators of Key Performance Indicators (KPI).

2. The importance of proactive strategy for work safety management

Presently, to be provided with the efficient safety area management and employee health in the organization, the key role is played by enhancing actions (Zieja, 2014). The Internet management encyclopaedia defines the term of enhancing actions as every kind of actions that are taken in order to make the organization efficient (Int, 2022). However, the author's publication together with others asserts that any actions taken by the enterprise, which are aimed at creating a safe work place, should be marked by mostly enhancing actions (Kubasiński, Piechocki, Sławińska, 2019). In a process of improving the company functioning and its areas there are numerous difficulties. The reason why it happens may be found in an individual company analysis. Generally, they result, among others, from the company idiosyncrasy, a deficiency of consequence and discipline of implementing modifications and perception of implemented changes and standards as a trial of new policy imposition and killing creativity (Kubasiński, Sławińska, 2019).

In one of their publications M. Sławińska i S. Kubasiński (2021) claimed that *To improve work safety of every employee, there must be a condition allowing to stimulate a proactive attitude*. Such formulated assumption becomes more crucial in case in the organization unwelcomed occurrences are registered and the employee behaviour observation are conducted and the way how they work in accordance with work safety policy (Ewertowski, Kubasiński, 2021).Thus, it is unnecessary to register current data linked to targeted tasks proceedings, preferably in real time. Actions that the organization can take to provide safe work place in view of the ISO 45001 directives, should be oriented to stimulating a proactive attitude in all organization areas.

In research literature, safety strategy is defined as a set of principles concerning actions linked to different in nature resources. A. Szymanek (2015), in one of his elaborations, distinguishes three safety management strategies: reactive strategy, proactive strategy and predictive strategy. In a modern organization, using a proactive strategy plays a key role in safety provision. Presently, such a strategy is the alternative to a common reactive strategy as

part of which defined corrective actions are taken only after malfunction or unwelcomed incidents. However, a predictive strategy is about foreseeing upcoming dangers, emerging new types of risk and incidents. The elementary rule is to anticipate unwelcomed incidents in a system and to notify before they emerge.

Taking the actions across proactive attitude is impossible unless all company units are engaged. Such an assumption becomes more important when areas connected with providing safety at work require facilitation. In such an example, the key role is an employee. According to Crant and Bateman (2000), this, which is distinctive for proactivity-related individuals, is the ability to perceive and exploit available possibilities and, in addition, pursue initiatives and strive for changes in the environment, in which those individuals are. Proactive-oriented individuals are valuable resource for the organization. They initiate changes in the company, predict certain events in the environment, in which they exist and, furthermore, are willing to propose solutions.

A proactive stance/attitude is expressed through motivation of gaining new achievements and pursuing tasks and challenges in non-standard situations. Taking the utterance for granted that appropriate involvement and employees' motivation on various company levels are one of key elements having an impact over efficient company performance in every field of its activity. It will happen if theretofore properly motivated individuals are satisfied and eager to perform. In Agyemang's and Ofie's (2013) opinion, employee involvement is a factor that brings or intends to bring benefits for the whole organization. On the other hand, in Sadłowska-Wrzesińska's and Nejman's research (2016), encouraging profoundly influences attitudes and behaviours among employees through applying particular stimuli. Similarly, Ruth Mayhew (2012) perceives the motivation. In his opinion, the most effective and efficient form of encouraging employees might be financial and intangible assets, acknowledgement and, simultaneously, sufficient source of information, and finally, unnecessary tools and equipment. There is no doubt that motivating employees is the essential element of forming a proactive attitude in the organization. Hereby it should be emphasized that because of diversified needs and employee expectations, top management (high-ranked company representatives) should apply numerous incentives towards subordinates.

On the basis of ISO 45001, companies are obliged to comprehend needs and expectations notified by parties' interest and to take into consideration all internal and external problems that affect the company capability of achieving OHS (Occupation Health and Safety) targets. ISO 45001 norms require awareness of the company context to make it react to changes actively. The term of content implies the company to accommodate working conditions, which are out of its direct control. The context of the organization is understood as internal and external factors, which have an impact over organization activity and target-related action performance. The Internet Polish Language Dictionary published by PWN (Polish Scientific Publishers) indicates few meanings of a word "context". It is, among others, "a set of coexisting factors linked to something". However, Daft (2000) paved the way of understanding the context

of organization as a size of the organization, accepted strategy, technology, culture and company environment. In accordance with regulations in ISO 45001:2018, comprehending the context of the organization is "used for establishing, implementing, sustaining and constant improving OHS management system". On this ground, according to Pawłowska's and Skład's research (2017), it is thought that comprehending the organization and its context, in compliance with ISO 45001, is possible to achieve if concerned parties are identified and interested in functioning the company in the OHS field. As far as it happens, the next consequence of actions is to identify factors in the external and internal area of the company (Fig. 2).

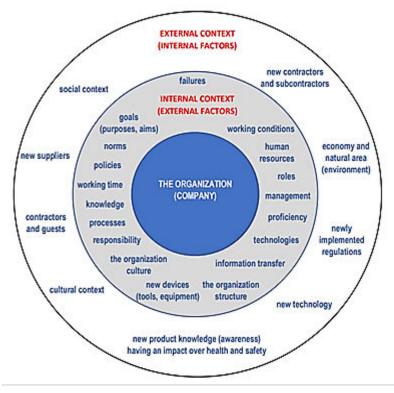


Figure 2. The context of the organization – internal and external factors. Source: own study.

The environment influences the organization conditions and its functioning. It specifies rules and possibilities of development creating opportunities and barriers, threats as well. The environmental impact may be expressed as uncertainty, competitors' forces and disturbances (for instance, an unexpected crisis). External environment consists of everything which is beyond the organization and which can affect it. Moreover, the external environment contains itself purposeful and general surroundings. By contrast, the internal environment is described as conditions and forces emerging in the organization. It is comprised of organization owners, executive board, employees, physical ambience and culture.

3. Monitoring - the element of resistance engineering

In order fully to achieve intended results and accepted aims of OHS management system, according to ISO 45001, it is recommended to monitor, measure and analyse all occurred processes in the organization. Proper accomplishment of monitoring proces enables establishing accurate dispositions and procedures. A very significant element is to arrange the periodicity (terms) of monitoring various OHS areas and individuals participating in this process. In the explanation part of ISO 45001, there are hints concerning what and how might be monitored in the area of the company. Norm regulations indicate examples, in different areas, which include:

- complaints about health, employee health (through medical surveillance) and working environment,
- work-related incidents, injuries and health ailments, complaints, trends included,
- supervision effectiveness over operational actions and emergency trainings or modification need or implementing new surveillance instruments,
- proficiency,

as well, in the scope of juridical requirements and other requirements, are:

- identified juridical requirements (e.g. if all juridical requirements have been specified and if documented company (entity) information about them are updated),
- corporate systems (when they are lawfully mandatory),
- the status of identified deficiencies in terms of discrepancy,
- regulations and codes,
- corporation policies and other policies, rules and regulations.

When it comes to benchmarks in terms of criteria that organization can apply in order to compare its outcomes, according to ISO 45001, are listed as:

- other organizations
- regulations and codes.
- own codes and organization targets.
- statistics in terms of OHS.

Monitoring and assessment of outcomes emerging in the area of OHS are key elements of efficient organization management. The basic aim of monitoring OHS is a current inspection of correctness (conformance) of all systemic actions and their outcomes with earlier accepted requirements. Scoping the occurring processes in the organization out, every enterprise should set own goals. Only properly defined goals are essential to function accurately in every field and strictly linked to gauges and indicators used for assessing actions in OHS area. A selection of particular KPI indicators is defined in order possibly to measure and assess. As authors' research literature pay attention, a selection and measurement of described KPI indicators are

meaningful only if they are legitimate in a business way and have a reflection of tangible condition of a measured field (Torbacki, Torbacka, 2015).

Carrying out the analysis and the assessment in the field of OHS, there are particular factors of widely interpreted working environment, which consists of occurring discrepancies in the company and incidents, taken actions in terms of banking security system and their outcomes. Indicators that are used for working environment measurements and accomplished actions are dubbed as leading indicators, whereas, indicators used for obtained outcome measurements are - output ones. According to Pawłowska and Ordysiński (2013), mentioned indicators (fig. 3) do not refer to individual workplace assessment. The substantial factor is the organization action (performance), which is oriented at defining indicators in the fields of activity, which refer to unit workplace, and are especially about: internal customers, internal processes and development processes.

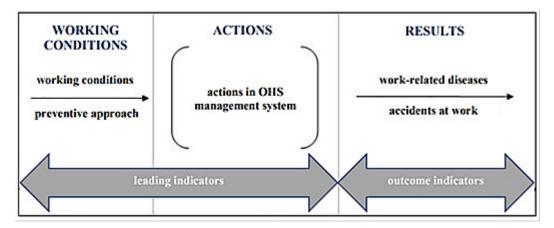


Figure 3. The measurement of functioning in the OHS area.

Source: own study.

Fields, in which the organization accepts the goals, constitute the cornerstone of properly defined and adjusted indicators. A type of a goal may, thus, condition gauges both in the internal process area and external area. Examples of such an attitude are illustrated in a table 1.

Table 1.

Exemplary goals and indicators used for improving the functioning in terms of OHS monitoring

Goals	Leading indicators		
Implementation of register and potentially hazardous	Number of registered potentially accidental events		
incidents analysis system			
Implementation of reporting applications and	Number of registered employee-related applications		
complaints concerning working conditions system	and complaints concerning working conditions		
Monitoring of schedule execution in terms of OHS	The percentage of monitor-related schedules		
Implementation of monitoring and registering	Number of dropped-out discrepancies concerning		
discrepancy concerning technical condition of	technical condition of machines and equipment		
machines and equipment system	detected in the monitoring process		
Source: Own study			

Source: Own study.

It is emphasized that a selection of indicators is as important as their interpretation. In this case, it is recommended to apply a selection based on multi-criteria assessment. Multi-criteria assessment of safety level is extensively used for recognition of real danger-related causes.

4. Controlling in the context of distinctive reaction procedures

As it was mentioned in the second chapter, controlling consists in the goal assessment for accepted proactive strategy. To portray the accepted proactive attitude in work safety, in tab. 2 there are examples of proactive indicators. To be honest, for instance, indicators referring to knowledge result from willingness of sharing one's knowledge, and in the record, they are presented as a comment.

Table 2.

Proactive indicators	Description
Knowledge awareness (level)	Visible comment quality
Feedback on a problem report from a subordinate	The record of registered recieved calls from a subordinate
Anticipation of mechanical threats	Response register to reported exploitation circumstances
Responsibility awareness (level)	Documentation of taken complete amended actions

Specification of proactive indicators

Source: Own study.

Proactive indicators have to be achieved on a working position and directly consulted with employees. An extensive level of work safety culture and adequate motivation system has a huge impact over efficiency of those undertakings. In Romanowska's and Trocki (2004) research, to make the company well manage and efficiently function, it is vital to carry out a regular analysis, assessment and facilitation based on the previous assessment. For this purpose, many problem solution methods are used.

Methods that might be mentioned are failure models or better known as accident-related models, which refer to a particular problem: failure, unwelcomed event, or a post-accident (Clifton, 2005; Helander, 2006; Kjellen, 2000; Krzyśków, 2015). Applying each model, by appointed teams, for example, in the case of accident causes, contributes to identifying these places on particular positions where enhancing actions needed.

5. ISO 45001 norm - The PDCA cycle

ISO 45001 norm can be demonstrated as a new standard in the scope of OHS management system in the company, whose compliance with requirements, forms a fundamental condition of efficient company performance. It contains instructions concerning its implementation, which generates arrangement conditions for improving outcomes in the OHS field. A standard

is suppossed to let companies (entities) provide a safe and healthy workplace connected with the enterprise and its area. ISO 45001 norm may be applied in every organization independently of its size, type and characteristics. It has an analogical framework in comparison with earlier published norms concerning, among others, quality management system, according to ISO 9001 and environment management system - ISO 14001. It facilitates the integration of OHS management system and organization management system. The cornerstone of functioning ISO 45001 is the PDCA cycle: Plan-Do-Check-Act. In the scope of such an accepted conception of a constant improvement in the management system, the organization can apply the model as the entity and as in its particular elements.

A significant aspect of a new norm is that it takes into consideration the interaction between the organization and its business area. It is characteristic that detailed OHS efficiency criteria are not defined, and as well, its structure is not prescriptive in terms of OHS project management system. As a consequence, it forces the organization to analyse own situational context. Simultaneously, it creates conditions to adjust the OHS management system to one's needs in terms of emerging incidents prevention and discrepancies. ISO 45001 regulations emphasise employee co-participation in the field of achieving work safety provision in the company. As Pawłowska and Skład (2017) rightfully pay attention in their research, the norm lists processes and indicates actions, whose co-participation and consultations should concern. Involvement and a role of not possessing executive positions individuals is considered to be an elementary condition of efficient functioning OHS management system. Despite the fact that the norm requirements in terms of employee co-participation fundamentally stick to the requirements, within this scope, PN-N-18000 Polish norms, in a new standard, a need for involvement and consultation among ordinary employees is clearly emphasised.

Essential changes, which are noticeable in terms of earlier standards concerning OHS, are listed below:

- the organization context in OHS management inclusion,
- risk and chances concerning both employees and other parties, and the organization itself (e.g. reputation infringement, influence over activity continuity) planning OHS management system inclusion,
- leadership role growth and OHS management importance through integration with business processes (e.g. design and development, supplies, human resources, sales and marketing),
- extension in communication requirements,
- emphasis on planning changes, among others, through consequence review,
- employee participation in terms of consultation and participation mechanisms; risk identification and risk assessment; actions aimed at risk and threat control; identification authority requirements, training needs and their evaluation,
- employee inclusion onto consultations concerning: needs and expectations formulating by interested parties; establishing OHS policy; attributing the organization roles, duties.

6. Conclusion

Constructing the safety system, which results from the integration of strategic, tactic and operational levels, makes a correlation between employee-related involvement efficiency and approved proactive strategies. The example of such relations having an impact on work safety might be observed as indicators in tab. 2, for instance, anticipating mechanical threats and the evidence of received response to reported exploitation circumstances.

Through a presented method of implementing mechanisms of a proactive employee's attitude in terms of work safety, every organization is able to set own goals on the ground of work safety improvement. The basic goal of OHS monitoring is a regular checking compatibility of conducted actions in the system and their outcomes with earlier established requirements, on particular management levels shown in a scheme (fig. 1). It is emphasised that effective monitoring in OHS management system should be both active and reactive.

In a proactive strategy, the added value is a contextualized view of enhancing actions, and not like in a reactive one, a statistical review. Thus, the efficiency of motivation system results from employee creativity and their diverse actions and not from the number of performed records related with it. Obliging the employer to provide employee co-participation in consultations, and as well, taking interested parties into considerations, condition the efficient achievement of intended goals. Foreseeing future events, which mean, anticipation that are fundamentally meaningful to a proactive attitude to OHS management, constitutes the most challenging element to achieve. Therefore, it requires the whole staff (crew) responsibly to involve in favour of all the levels of the organization supporting a proactive attitude conditioning.

References

- Agyemang, C.B., Ofie, S.B. (2013). Employee Work Engagement and Organizational Commitment: A Comparative Study of Private and Public Sector Organizations in Ghana. *European Journal of Business and Innovation Research*, No. 1, pp. 20-33.
- Artykuły i informacje. ISO 45001:2018 nowa norma dotycząca zarządzania BHP (2019-01-25). Retrieved from https://www.iso.org.pl/artykuly-i-informacje-dotyczace-systemowzarzadzania/artykul-iso-450012018-nowa-norma-dotyczaca-zarzadzania-bhp-2019-01-25/, 23.04.2022.
- 3. Chomątowska, B. (2011). Zarządzanie bezpieczeństwem i higieną pracy. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu. Nauki o Zarządzaniu, No. 8*, pp. 160-163.

- 4. Clifton, A.E. (2005). *Hazard Analysis Techniques for System Safety*. John Wiley &Sons, Inc., Hoboken, New Jersey, Canada.
- 5. Crant, M., Bateman, S. (2000). Charismatic leadership viewed from above: the impact of proactive personality. *Journal of Organizational Behavior*, *Vol. 21, Iss. 1*, pp. 63-75.
- 6. Daft, R.L. (2000). Organization Theory and Design. Ohio: South-Western Publishing.
- Ewertowski, T., Kubasiński, S. (2021). Multi-Criteria Comparative Analysis of Proactive Safety Strategy of An Organization Exemplified by Polish Companies. Proceedings of the 37th International Business Information Management Association Conference (IBIMA), 30-31 May 2021, Cordoba, Spain. Innovation Management and information Technology impact on Global Economy in the Era of Pandemic. Soliman Khalid (ed.). IBIMA Publishing, pp. 10638-10646.
- 8. Helander, M. (2006). *A Guide to Human Factors and Ergonomics*. New York: Taylor&Francis.
- 9. Internetowa Encyklopedia Zarządzania. *Działania doskonalące*. Retrieved from https://mfiles.pl/pl/index.php/Dzia%C5%82ania_doskonal%C4%85ce, 24.04.2022.
- 10. ISO 45001:2018: Occupational health and safety management systems Requirements with guidance for use, ISO (2018).
- 11. Kjellen, U. (2000). *Prevention of accidents through experience feedback*. London: Taylor&Francis.
- 12. Krzyśków, B. (2015). Badanie wypadków przy pracy: materiał źródłowy dla uczestników szkolenia. Warszawa: CIOP-PIB.
- Kubasiński, S. (2020). Znaczenie podejścia proaktywnego w systemowym doskonaleniu bezpieczeństwa pracy. In: Ł.B. Pilarz (ed.), *Prawo w służbie Państwu i obywatelom - nowe modele zmian w polskich systemach prawnych* (pp. 194-203). Lublin: Wydawnictwo Naukowe TYGIEL sp. z o.o.
- Kubasiński, S., Piechocki, J., Sławińska, M. (2019). Identification of key relations for work safety - a case study. In: L. Pacholski et al. (eds.), *Human Factors in Contemporary Organizations (XXXI International Seminar of Ergonomics)* (pp. 86-94). USA: DEStech Publications Inc.
- 15. Kubasiński, S., Sławińska, M. (2019). Doskonalenie bezpieczeństwa pracy w świetle wymagań ISO 45001. In: D. Zwolińska (ed.), *Nauka i praktyka w bezpieczeństwie pracy, środowisku i zarządzaniu* (pp. 131-142). Katowice: Wyższa Szkoła Zarządzania Ochroną Pracy.
- Mayhew, R. (2012). What Are Some Ways That a Company Can Value Its Employees? Retrieved from https://smallbusiness.chron.com/ways-company-can-value-its-employees-44257.html, 23.04.2022.
- Pawłowska, Z., Ordysiński, S. (2013). Zastosowanie wskaźników wynikowych i wiodących do oceny skuteczności zarządzania bhp w przedsiębiorstwach. *Bezpieczeństwo Pracy: Nauka i Praktyka, No. 12.* CIOP-PIB.

- Pawłowska, Z., Skład, A. (2017). Dostosowanie Systemów Zarządzania BHP do wytycznych wynikających z normy ISO/DIS 45001.2. *Zarządzanie i Ekonomia, No. 11*. CIOP-PIB.
- Peñaflor, M., Juevesa, R. (2021). Management Practices and Employee Engagement in the Workplace: A Qualitative-Phenomenological Study. *Open Journal of Business and Management, Vol. 9*, pp. 288-308.
- 20. Romanowska, M., Trocki, M. (2004). *Podejście procesowe w zarządzaniu*. Warszawa: Szkoła Główna Handlowa.
- 21. Sadłowska-Wrzesińska, J., Marczewska-Kuźma, R., Jakubowicz, A. (2020). Możliwość zastosowania analizy SWOT/TOWS w procesie projektowania koncepcji bezpieczeństwa behawioralnego. *Zeszyty Naukowe Politechniki Poznańskiej, Organizacja i Zarządzanie, Vol. 81*, pp. 181-200.
- 22. Sadłowska-Wrzesińska, J., Nejman, Ż. (2016). Organizacja bezpiecznej pracy jako pozapłacowy czynnik motywacji pracowniczej. *Przedsiębiorczość i Zarządzanie, tom* 17(6), cz. 2, pp. 399-414.
- 23. Szymanek, A. (2015). O niektórych metodologicznych aspektach zarządzania ryzykiem w transporcie drogowym. *Logistyka, No. 4*, pp. 8386-8394.
- 24. Torbacki, W., Torbacka, M. (2015). KPI w systemach informatycznych dla branży logistycznej. *TTS Technika Transportu Szynowego, Nr 12*, pp. 1570-1574.
- 25. Walczak, W. (2012). Cele i funkcje zarządzania w teoriach naukowych a praktyka próba diagnozy źródeł występujących rozbieżności. *E-mentor, No. 2(44)*, pp. 19-29.
- 26. Zieja, M., Gołda, P. (2014). Wybrane aspekty systemu zarządzania bezpieczeństwem. *Logistyka, No. 4*, pp. 2601-2604.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

MOTIVES FOR EMPLOYEE SILENCE IN AN ORGANIZATION – A CORRELATION ANALYSIS OF A POLISH SAMPLE

Marek KUNASZ

University of Szczecin; marek.kunasz@usz.edu.pl, ORCID: 0000-0002-1577-0425

Purpose: The aim of this paper is to analyse the differentiated spectrum of types of employee silence that reflect selected motives (including an analysis of interdependence between selected forms of employee silence).

Design/methodology/approach: The empirical material was obtained through a survey - a questionnaire with 47 questions was used (including questions about discriminatory behaviour, forms of organizational silence and respondents' personality traits). The survey was conducted in 2021 in the West Pomeranian province, Poland. 426 questionnaires were analysed. **Findings:** Employees often keep silent in an organization for social reasons, while fear is the least important factor here. This research shows marked specific characteristics of prosocial silence which was introduced to research programmes by Knoll and van Dick (2013) (relatively high intensity, weak correlation with other forms). It also points out that a further analysis must take into consideration the widest possible spectrum of motives underlying employee silent attitudes.

Research limitations/implications: The analysis is based on respondents' subjective declarations.

Practical implications: Organizations' management staff should be aware of the diverse spectrum of motives for employee silence and thus measures to counteract negative effects of this phenomenon. This paper provides useful knowledge on this issue.

Originality/value: An analysis of a broad spectrum of motives for employee silence investigated in a Polish sample, along with a multidimensional analysis of the correlation between individual forms of employee silence.

Keywords: organizational silence.

Category of the paper: research paper.

1. Introduction

This paper focuses on the subject matter of motives that determine silence of employees in the organization. The literature points to two opposing interpretation routes of the analysis of the discussed category which is treated as a homogeneous construct in consideration of the context of factors that make up the climate of organizational silence, or as a category that must be viewed in consideration of many non-homogeneous motives of employee silence. This paper follows the second interpretation path. Commonly accepted measurement instruments have been designed in the second category. The questionnaire refers to four basic forms of employee silence, but it also provides possibilities of a more extensive analysis of motives of employee silence - this part of the questionnaire is often treated as secondary. This paper tries to fill this gap by a comprehensive approach to the analysis of data obtained using this instrument in the Polish sample and also by investigating areas of secondary employee silence. The survey was carried out in 2021 on a sample of 426 respondents who filled out the forms. The aim of this paper is to analyse the differentiated spectrum of types of employee silence that reflect selected motives (including an analysis of interdependence between selected forms of employee silence).

2. Literature review

The subject matter of employee voice/silence was introduced to organisational science by Hirschman (1970). His model offers four alternatives of responses for discontent organizations' employees and clients in the face of a crisis: exit (quitting the organization), voice (adopting an active attitude to initiate changes, voice may also be communicated outwards - whistleblowing), neglect (inactivity, passive observance) and loyalty (support even in a difficult situation). The last two alternatives may be examined in the context of silence (as an act of loyalty or resignation).

Hirschman's model and the concept of the spiral of silence (Noele-Neuman, 1974) that emerged more or less in the same time are examined outside the organizational context, also in the political science perspective. The subject matter of voice/silence has been functioning at the interface of disciplines. It is represented in the psychological, sociological and anthropological literature. It is addressed in discussions on bottom-up communication in an organization (Roberts, O'Reilly, 1974), the MUM effect (Rosen, Tesser, 1970), whistleblowing (Miceli, Near, 1992), procedural justice (Thibaut, Walker, 1975), selfcensorship, social organizational behaviours (Brief, Motowidlo, 1986), issue selling (Dutton, Ashford, 1993), social ostracism (Williams, Sommer, 1997) or deaf-ear syndrome (Peirce, Smolinski, Rosen, 1998).

The subject matter of employee voice has much more pronounced achievements than the subject matter of silence because it has been functioning in literature since the 1970s. Management literature includes two main conceptualizations of voice. In the first approach the term "voice" is used to describe behaviours associated with employees speaking up (employees promote changes pro-actively) (Farrell, Rusbult, 1992; Le Pine, van Dyne, 1998; Withey, Cooper, 1989). In the second meaning the literature uses the terms "voice" to describe the presence of procedures which facilitate employees' participation in decision-making (Folger, 1977; Bies, Shapiro, 1988; van Dyne, Ang, Botero, 2003).

The issue of voice was introduced to organisational science only at the turn of the centuries (Milliken, Morrison, 2000). Contrary to the discussion on employees' speaking up held so far, they treat organizational silence as a collective phenomenon driven by managers' fear of feedback and their covert beliefs. This is how a climate of silence may be built. This is why it is silence, not voice, that prevails in an organization.

In contrast to this approach, there are works that focus on the individual character of decisions about not speaking up. In this angle, silence should be treated as a uniform construct because decisions of individual employees may be based on various premises. The term organizational silence should be replaced by the category of employee silence. Van Dyne, Ang, Botero (2003) identify three basic motives for voice and silence: resignation, fear or orientation on others, and identify the following types of silence: acquiescent silence, defensive and prosocial silence, and thus acquiescent, defensive and prosocial voice, respectively. Therefore, these authors did not oppose earlier approaches to employee voice in their discussion, but successfully attempted at an integration of these approaches. This concept of categorisation of employee silence has become a standard in literature that many writers adhere to.

Knoll and van Dick (2013), sharing this typology of employee silence, introduce an additional category - opportunistic silence. This type of silence is motivated by fear that speaking up may be disadvantageous to an individual, thus they calculate whether it is worth speaking up in such a situation. Authors of the publication cited above also propose measurement instruments for said four categories of employee silence, which are now widely used in empirical applications.

So far it has not been decided whether voice or silence must be seen as opposite ends of a continuum (voice or silence) (Milliken, Lam, 2009) or as separate constructs (Kish-Gephart, 2009). In the second approach, it is argued that voice is a conscious choice of an individual, whereas silence may be an automatic withdrawing response. Additionally, an employee, with a high voice engagement, may at the same time conceal certain information. Scholars put forward postulates of integration of literature on voice and silence in an organization (Morrison, 2011).

3. Methodological aspects of the research

The analysed empirical material comes from investigations of silence in an organization. Analyses that take into consideration the employee silence typology commonly use instruments proposed by Knoll and van Dick (2013). These authors, in turn, root their analytical concept in the works of Milliken, Morrison, Hewlin (2003); van Dyne, Ang, Botero (2003); and Brinsfield (2009). These instruments were used, for example, by Adamska (2015) and Knoll, Neves, Schyns, and Meyer (2021). Adaptation of this measurement instrument in the national literature was done by Adamska and Jurek (2017) who also used it in other studies.

The questionnaire comprises the total of 20 statements that start with the same phrase "I remain silent at work....". On the basis of the confirmatory factor analysis the author of the concept identified questions that may be used in the context of the research for the four individual types of employee silence. 3 statements were provided for each such area. This is why the analysis usually uses 12 questions, while we may assume that the remaining 8 are control questions, though they refer to many other motives of silence in an organization (e.g. aspects of building relations, dislike of conflicts or previous negative experience associated with criticism) not taken into account in the four-element set-up. These questions are usually avoided in investigations or even not taken into account in measurement questionnaires. This study fills this research lacuna. This analysis takes into account the total of information communicated.

This investigation also employees a previously described measurement tool translated into Polish. Statements given to respondents had a common core. The participants could choose their answers on a five-point Likert scale, where 1 meant disagreeing with a statement completely and 5 - agreeing with the statement completely. In individual areas the synthetic value of responses taken into account in further analyses was the total of partial responses recorded on the Likert scale. Apart from questions about employee silence and the bio section, the questionnaire also featured questions on the basis of which it was possible to build other potentially related constructs (e.g. job satisfaction, engagement, turnover intentions). The questionnaire had 47 questions in 3 blocks in total.

The empirical material was gathered in September - October 2021 (research period) from respondents from the West Pomeranian province (spatial scope). 426 respondents filled out the questionnaire to provide the data for the investigation.

An average value of responses weighted with percentage of choosing individual options was calculated to present the degree to which a respondent agreed with a given statement in a synthetic and comparable formula. Such a measure allows us to compare, relatively quickly, a lot of data in the ranking set-up as it is easy to interpret - the higher the value of the mean measure, the more the statement is agreed with. Naturally, we need to take into account the varied distribution of the variable (despite comparable values of weighted means),

thus questions of the emerging asymmetry (right- or left-biased) arise. These questions were controlled by means of the coefficient of skewness presented in selected tables.

The magnitude of interrelations between variables created on the basis of responses was investigated by means of the Pearson's linear correlation coefficient. The statistical significance of this coefficient was also established at p = 0.05.

4. Research results

Table 1 presents the structure of respondents' declarations with regard to 20 statements included in the survey that concerned employee silence. Statements that discriminate four basic kinds of silence in an organisation were marked with an adequate category (column 1). The table also presents an average weighted degree to which a given statement is agreed with. The data for the ranking was sorted according to the degree of this average measure (from the highest to the lowest value). The coefficient of skewness was also calculated for each of the statements.

Table 1.

Type of	I keep silent at work	% of responses					weighted	skewness
silence		1	2	3	4	5	mean	
prosocial	because I don't want others to get into		20.9	20.5	18.7	16.8	2.85	-0.12
	trouble because of me							
	to avoid conflicts	22.0	23.1	22.0	19.4	13.4	2.79	-1.64
	because I don't want to damage	23.1	19.4	28.4	16.0	13.1	2.76	0.42
	relationships to colleagues or superiors							
	because I don't want to be viewed as a	31.3	20.1	24.3	11.6	12.7	2.54	0.41
	troublemaker							
prosocial	because I do not want to hurt the feelings	34.0	23.1	19.4	11.6	11.9	2.44	0.86
	of my colleagues or superiors							
acquiescent	because my superiors are not open to	36.9	21.6	19.4	11.9	10.1	2.37	1.16
	proposals or solutions							
	because others say nothing, too		18.3	16.4	12.3	11.6	2.34	1.95
acquiescent	because nothing will change anyway		18.3	20.5	10.8	9.7	2.31	1.50
opportunistic	because of concerns that others could take		21.3	22.8	9.3	7.5	2.25	0.79
	an advantage of my ideas							
defensive	for fear of negative consequences		22.6	23.3	9.0	6.8	2.23	0.52
opportunistic	not to give away knowledge advantage		22.0	19.4	11.9	6.3	2.22	1.02
acquiescent	because my opinions will not fall on		22.8	25.7	6.0	7.5	2.22	0.24
	fertile ground anyway							
prosocial	because I don't want to embarrass others	39.9	23.9	18.7	9.7	7.8	2.22	0.98
	because I want others to experience the	43.3	22.8	15.3	11.2	7.5	2.17	1.44
	effects from their mistakes							

The structure of respondents' declarations about statements concerning organizational silence (together with coefficient of skewness)

to not make me vulnerable in the face of	39.6	26.1	17.2	12.7	4.5	2.16	0.61
colleagues or superiors							
because it would mean having to do	43.3	23.5	17.9	7.8	7.5	2.13	1.17
avoidable additional work							
because I fear disadvantages from	43.8	24.7	18.4	7.5	5.6	2.06	0.98
speaking up							
because of bad experiences I've had with	50.9	16.1	16.5	9.7	6.7	2.05	1.93
speaking up on critical issues in the past							
because it is not expected from me to get	47.8	23.9	17.2	6.0	5.2	1.97	1.22
involved							
because my superiors do not deserve my		19.4	13.1	7.5	4.1	1.84	1.83
involvement							
	colleagues or superiors because it would mean having to do avoidable additional work because I fear disadvantages from speaking up because of bad experiences I've had with speaking up on critical issues in the past because it is not expected from me to get involved because my superiors do not deserve my	colleagues or superiors43.3avoidable additional work43.3because it would mean having to do avoidable additional work43.3because I fear disadvantages from speaking up43.8because of bad experiences I've had with speaking up on critical issues in the past50.9because it is not expected from me to get involved47.8because my superiors do not deserve my56.0	colleagues or superiors43.3because it would mean having to do avoidable additional work43.3because I fear disadvantages from speaking up43.8because of bad experiences I've had with speaking up on critical issues in the past50.9because it is not expected from me to get involved47.823.9because my superiors do not deserve my56.0	colleagues or superiors43.323.517.9avoidable additional work43.323.517.9avoidable additional work43.824.718.4because I fear disadvantages from speaking up43.824.718.4because of bad experiences I've had with speaking up on critical issues in the past50.916.116.5because it is not expected from me to get involved47.823.917.2because my superiors do not deserve my56.019.413.1	colleagues or superiors43.323.517.97.8avoidable additional work43.323.517.97.8because I fear disadvantages from speaking up43.824.718.47.5because of bad experiences I've had with speaking up on critical issues in the past50.916.116.59.7because it is not expected from me to get involved47.823.917.26.0because my superiors do not deserve my56.019.413.17.5	colleagues or superiors43.323.517.97.87.5avoidable additional work43.323.517.97.87.5because I fear disadvantages from speaking up43.824.718.47.55.6because of bad experiences I've had with speaking up on critical issues in the past50.916.116.59.76.7because it is not expected from me to get involved47.823.917.26.05.2because my superiors do not deserve my56.019.413.17.54.1	colleagues or superiors43.323.517.97.87.52.13avoidable additional work43.323.517.97.87.52.13because I fear disadvantages from speaking up43.824.718.47.55.62.06because of bad experiences I've had with speaking up on critical issues in the past50.916.116.59.76.72.05because it is not expected from me to get involved47.823.917.26.05.21.97because my superiors do not deserve my56.019.413.17.54.11.84

Cont. table 1

Source: author's own compilation on the basis of author's own research.

The weighted degree of agreement for the 20 presented statements that refer to motives for silence in an organization was between 1.84 and 2.85. In the group of statements that discriminated four basic types/motives of employee silence, respondents most often agreed with statements that discriminated prosocial silence (point 1, 5 and 13 in the ranking). Defensive silence may be placed on the opposite pole (points 17, 15 and 10, respectively). Statements that discriminated acquiescent and opportunistic silence sat mid-way in the ranking. The said trends reflect information included in Table 2 that presents an average level (arithmetic mean) of measures that demonstrate agreement with statements presented in the questionnaire.

Table 2.

The average degree of agreement and the average value of coefficient of skewness for individual types of employee silence

Type of silence	Mean	skewness
prosocial	2.50	0.57
acquiescent	2.30	0.97
opportunistic	2.20	0.99
defensive	2.15	0.70

Source: author's own compilation on the basis of author's own research.

The mean values analysed sit between 2.15 and 2.50. Respondents clearly (most often) agree with statements concerning prosocial silence, that is they remain silent in the organizational reality for this very reason. For other categories of employee silence, the differences between mean values are not significant, though respondents remain silent due to fear the least frequently (or are not willing to admit that).

If we revisit the data presented in Table 1, we must note an interesting correlation. Statements that do not discriminate types of employee silence due to four basic reasons are located on extreme positions in this ranking (relatively strong or weak agreement with these statements). Respondents remain silent in an organization to avoid conflict, because they care about building and maintaining good relationships with colleagues and superiors or because they do not want to be seen as troublemakers. The bottom end of the ranking accommodates statements that refer to motives of silence in an organization that are less frequently named - the question of previous bad experience with speaking up on critical issues and questions of

building employee engagement in an organization. The middle part of the ranking accommodates two statements that refer to motivation of silence: observation of other employees who do not speak up or wanting to bring about a situation where the person who makes a mistake experiences effects of their actions (position 7 and 14, respectively).

Statements from the analysed form, not examined as verifiers of individual types of employee silence, were correlated with synthetic values for four basic types of silence. Thus I establish convergence of the motivator analysed with a basic motivator. The data is presented in Table 3, in an arrangement proposed by Knoll and van Dick (2013). It presents one or two synthetic variables that most strongly correlate with the investigated variable; a pre-determined level of the measure of correlation did not have to be exceeded, e.g. one that evidences statistical significance of the relation.

Table 3.

Correlation of non-discriminant variables with synthetic measures for four basic types of employee silence

I keep silent at work	discriminant	correlation
for fear of negative consequences	defensive	
because I fear disadvantages from speaking up	defensive	
to not make me vulnerable in the face of colleagues or superiors	defensive	
to avoid conflicts		defensive, prosocial
because I don't want to be viewed as a troublemaker		defensive, prosocial
because others say nothing, too		defensive
because I do not want to hurt the feelings of my colleagues or	prosocial	
superiors		
because I don't want to embarrass others	prosocial	
because I don't want others to get into trouble because of me	prosocial	
because I don't want to damage relationships to colleagues or superiors		prosocial
not to give away knowledge advantage	opportunistic	
for fear that others may use my ideas	opportunistic	
because I want others to experience the effects from their mistakes		opportunistic
because my superiors do not deserve my involvement		opportunistic,
		acquiescent
because it would mean having to do avoidable additional work	opportunistic	
because my opinions will not fall on fertile ground anyway	acquiescent	
because my superiors are not open to proposals or solutions	acquiescent	
because nothing will change anyway	acquiescent	
because it is not expected from me to get involved		opportunistic,
		acquiescent
because of bad experiences I've had with speaking up on critical issues		acquiescent,
in the past		defensive

Source: author's own compilation on the basis of author's own research.

One cannot resist a visual impression that the third column (correlations) fills spaces in the second column (discriminant) very logically and the filling categories (third column) may be described as lying "at the border". The Polish sample may reflect/confirm empirically the intention of the questionnaire authors to group a greater number of statements for the motivators adopted (in search of statements that correlate in a given group most strongly). Only the last statement escapes this model and it is close to the synthetic measure for acquiescent silence but also to the extremely opposing, defensive indicator (the statement pertaining to previous bad

experience with presenting critical opinions, which may trigger fear but also a sense of lack of agency).

The analysis also covers correlation coefficients between synthetic measures for four types of employee silence. This information is presented in Table 4.

Table 4.

Correlations between synthetic measures for four forms of employee silence (along with a mean for each type of silence)

	defensive	acquiescent	prosocial	opportunistic	mean
defensive	Х	0.366	0.166	0.99	0.244
acquiescent	0.366	Х	0.223	0.401	0.330
prosocial	0.166	0.223	Х	0.196	0.195
opportunistic	1.119	0.401	0.196	Х	0,266
<u>a</u> 1.1	•1 .•	.1 1	.1 .	1	

Source: author's own compilation on the basis of author's own research.

Correlation coefficients stayed between 0.401 (the strongest correlation between opportunistic and acquiescent silence) and 0.166 (the weakest correlation between defensive and prosocial silence). It is worth comparing this with information included in Table 1, where real discriminant statements for both types of silence are on opposing ends of the ranking.

When analysing average measures of correlation coefficients, we must note that it is acquiescent silence correlates the strongest with another type of silence (next to strong ties will opportunistic silence, we may see a relatively strong correlation with responses naming defensive silence). Prosocial silence correlates the weakest - correlation measures hover around 0.2.

5. Discussion and Conclusions

The category of prosocial silence was introduced to a classic arrangement of three forms of employee silence (van Dyne, Ang, Botero, 2003) by Knoll and van Dick (2013). This research shows clear specific characteristics of this form. Prosocial silence shows a markedly weakest correlation with basic forms of employee silence. At the same time, silence so motivated was declared most frequently. We can see here a clear disproportion in the intensity of silence so motivated and in silence motivated by other reasons (acquiescent silence, opportunistic silence and defensive silence).

It is worth pointing out that there is strong convergence of acquiescent silence (which in general correlates the strongest with other investigated forms of employee silence) with opportunistic silence. Fear as a reason for silence was declared the least frequently.

The information acquired from the Polish sample confirms that silence in an organization should not be treated as a uniform construct, as done so by Milliken and Morrison (2000). It seems reasonable to analyse its individual components. It appears to be important that such analysis should also include other factors that motivate employees to remain silent in an organization, usually in limiting analyses due to the specific characteristics of the construct of the measurement instrument. This study intended to fill this lacuna partially. Interestingly, "secondary" factors took extreme positions in the ranking presented herein (which point to high or low intensity of silence for these very reasons).

Limitations of this study include defectiveness of the questionnaire as a tool, which materialises in the subjectivity of respondents' declarations.

When we turn to directions for further research, we must point to the already mentioned postulate of extensive consideration of motives of employee silence, which is offered by the measurement questionnaire now commonly accepted in the literature (Knoll, van Dick, 2013). Certainly it would be recommended that regular longitudinal studies be conducted to reflect potential trends in changes of factors that motivate employees to remain silent in an organizational reality (for example, following the rhythm of cyclical changes in the economy).

References

- 1. Adamska, K. (2015). Milczenie w organizacji. Rola uważności społecznej i czynników kontekstowych. Zarządzanie Zasobami Ludzkimi, No. 1, pp. 115-130.
- 2. Adamska, K., Jurek, P. (2017). Adaptation of the Four Forms of Employee Silence Scale in a Polish Sample. *Current Issues in Personality Psychology, Vol. 5, No. 4*, pp. 303-312.
- 3. Bies, R.J., Shapiro, D.L. (1988). Voice and justification: their influence on procedural fairness judgments. *Academy of Management Journal, Vol. 31, No. 3*, pp. 676-85.
- 4. Brief, A.P., Motowidlo, S.J. (1986). Prosocial organizational behavior. Academy of Management Review, Vol. 11, No. 4, pp. 710-725.
- 5. Brinsfield, C. (2009). *Employee silence: Investigation of dimensionality, development of measures, and examination of related factors* (unpublished doctoral dissertation). Columbus, Ohio: The Ohio State University.
- 6. Dutton, J.E., Ashford, S.J. (1993). Selling issues to top management. Academy of Management Review, Vol. 18, No. 3, pp. 397-428.
- Farrell, D., Rusbult, C.E. (1992). Exploring the exit, voice, loyalty, and neglect typology: The influence of job satisfaction, quality of alternatives, and investment size. *Employee Responsibilities and Rights Journal, Vol. 5, No. 3*, pp. 201-218.

- 8. Folger, R. (1977). Distributive and procedural justice: combined impact of "voice" and improvement on experienced inequity. *Journal of Personality and Social Psychology, Vol. 35, No. 2,* pp. 108-119.
- 9. Hirschman, A.O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states.* Cambridge: Harvard University Press.
- Kish-Gephart, J.J., Detert, J.R., Trevino, L.K., Edmondson, A.C. (2009). Silenced by fear: The nature, sources and consequences of fear at work. *Research in Organizational Behavior, Vol. 29*, pp. 163-193.
- Knoll, M., Neves, P., Schyns, B., Meyer, B. (2021). A Multi-Level Approach to Direct and Indirect Relationships between Organizational Voice Climate, Team Manager Openness, Implicit Voice Theories, and Silence. *Applied Psychology: An International Review*, *Vol. 70, No. 2*, pp. 606-642.
- Knoll, M., van Dick, R. (2013). Do I Hear the Whistle...? A First Attempt to Measure Four Forms of Employee Silence and Their Correlates. *Journal of Business Ethics*, *Vol. 113, No. 2*, pp. 349-362.
- 13. LePine, J. A., van Dyne, L. (1998). Predicting voice behaviour in work group. *Journal of Applied Psychology, Vol. 83, No. 6*, pp. 853-68.
- 14. Miceli, M.P., Near, J.P. (1992). Blowing the whistle. New York: Lexington Books.
- 15. Milliken, F.J., Lam, N. (2009). Making the decision to speak up or to remain silent: Implications for organizational learning. In: J. Greenberg, M. Edwards (Eds.), *Voice and silence in organizations* (pp. 225-244). Bingley: Emerald.
- Milliken, F.J., Morrison, E.W., Hewlin, P.F. (2003). An Exploratory Study of Employee Silence: Issues that Employees Don't Communicate Upward and Why. *Journal of Management Studies, Vol. 40, No. 6*, pp. 1453-1476.
- 17. Morrison, E.W. (2011). Employee Voice Behavior: Integration and Directions for Future Research. *The Academy of Management Annals, Vol. 5, No. 1*, pp. 373-412.
- Morrison, E.W., Milliken, F.J. (2000). Organizational silence: a barrier to change and development in a pluralistic world. *Academy of Management Review*, Vol. 25, No. 4, pp. 706-725.
- 19. Noelle-Neumann, E. (1974). The spiral of silence: A theory of public opinion. *Journal of Communication, Vol. 24, No. 2*, pp. 43-51.
- 20. Peirce, E., Smolinski, C.A., Rosen, B. (1998). Why sexual harassment complaints fall on deaf ears. *Academy of Management Perspectives, Vol. 12, No. 3*, pp. 41-54.
- 21. Roberts, K.H., O'Reilly, C.A. (1974). Failures in upward communication in organizations: Three possible culprits. *Academy of Management Journal, Vol. 17, No. 2*, pp. 205-215.
- 22. Rosen, S., Tesser, A. (1970). On reluctance to communicate undesirable information: The MUM effect. *Sociometry, Vol. 33, No. 3*, pp. 253-263.
- 23. Thibaut, J.W., Walker, L. (1975). *Procedural Justice: A Psychological Analysis*. Hillsdale: L. Erlbaum Associates.

- 24. Van Dyne, L., Ang, S., Botero, I.C. (2003). Conceptualizing Employee Silence and Employee Voice as Multidimensional Constructs. *Journal of Management Studies, Vol. 40, No. 6*, pp. 1359-1392.
- 25. Williams, K.D., Sommer, K.L. (1997). Social Ostracism by Coworkers: Does Rejection Lead to Loafing or Compensation? *Personality and Social Psychology Bulletin, Vol. 23, No. 7*, pp. 693-706.
- 26. Withey, M.J., Cooper, V.H. (1989). Predicting exit, voice, loyalty, and neglect. *Administrative Science Quarterly, Vol. 34, No. 4*, pp. 521-39.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

ATTRACTIVENESS OF THE POLISH ARMY AS AN EMPLOYER – RESULTS OF EMPIRICAL RESEARCH

Dorota KUREK

War Studies University, Institute of Management; d.kurek@akademia.mil.pl, ORCID: 0000-0002-2346-6108

Purpose: The main objective of the research conducted was to determine the attractiveness of the Polish Army as an employer in Poland, to identify the independent variables determining the attractiveness of the military, and to identify what factors increase and decrease the attractiveness of the military as an employer.

Design/methodology/approach: In order to verify the set research hypotheses, an empirical study was conducted in December 2020 using a diagnostic survey method (CAWI technique) including a sample of 384 respondents – residents of Poland. The results of the survey were subjected to statistical analysis using the IBM SPSS Statistics 23 package. Kruskal-Wallis, U-Mann-Whitney and χ^2 tests were performed.

Findings: The result of the research was the identification of the attractiveness of the military as an employer, and to distinguish factors that increase and decrease attractiveness.

Research limitations/implications: The attractiveness of the military as an employer in the opinion of Poles (external attractiveness) was analysed, while the internal attractiveness of the military was not studied.

Practical implications: The results of the obtained research can be used by the military in campaigns promoting military service. They can also inspire a deeper analysis of the determinants of attractiveness, which will slowly lead to a more complete understanding of HR indicators.

Originality/value: The article presents the results of statistical analyses aimed at identifying static relationships. The presented results may inspire the implementation of research in an international environment, which would allow further exploration of factors determining the attractiveness of the military as an employer, not only in Poland.

Keywords: attractiveness, army, employer.

Category of the paper: research paper.

1. Introduction

Organisations around the world are not only beginning to implement employer branding activities, but are also increasingly creating an employer attractiveness strategy (EAS) (Bhattacharya, Sen, Korschun, 2008), the implementation of which requires a thorough study of both the market, potential and desired job candidates, as well as organisational capabilities. Introducing only the Employer Value Proposition (Zając-Pałdyna, 2020; Wojtaszczyk, 2012) as a package of benefits offered to employees, unsupported by further activities in onboarding, developing employee competencies, creating employee experience solutions and taking care of the external image, in many cases does not make it possible to build the image of the organisation as an attractive employer, the so-called employer of choice. The desire to implement, as well as evaluate the effectiveness of employer branding solutions, involves the need to identify the factors that determine the attractiveness of a given organisation as an employer in the market. Knowledge of these factors allows us to understand HR indicators, better define strategic goals, or more easily identify potential areas of action, allowing us to support the organisation in achieving its goals, or in working out the desired image (Berthon, Ewing, Hah, 2005; Edwards, Edwards, 2013; Pingle, Sharma, 2013).

The author of this article, while conducting research, analysed the attractiveness of the military as an employer in the Polish labour market. The purpose of the research conducted was to identify the level of attractiveness of the Polish Army as an employer, including factors that increase and decrease this attractiveness. An answer was sought to the following three research problems: *What is the attractiveness of the Polish Army as an employer in Poland? What factors increase the attractiveness of the Polish Army as an employer? What factors decrease the attractiveness of the Polish Army as an employer?*

The survey, conducted in December 2020 using the CAWI technique, surveyed 384 respondents. The collected survey material was subjected to statistical analysis, which made it possible to assess the level of attractiveness of the military as an employer, including the identification of factors that increase and decrease this attractiveness. It should be noted that the subject of the study was only the external dimension of the attractiveness of the Polish Army as an employer.

2. Image vs. attractiveness of the organisation as an employer

Important factors influencing the choice of employer are the image and attractiveness of an organisation (Gatewood, Gowan, Lautenschlager, 1993). Most often, image is generally defined as a picture, portrait, likeness, or as an idea of someone or something. According to Budzyński,

it is what people think of a company (1998, p. 73). The image of an organisation is defined as the subjective image that arises in the minds of the public as a result of all types of transactions, as well as experiences related to the company (Skowronek, 2012). As Boulding points out, image is the result of past experiences (1956), which are formed from the perceived components of reality. Perception, on the other hand, is both a subjective and active process. Boorstin emphasises the ambiguity of this image oscillating between imagination and reason, expectations and reality (Boorstin, 1961). The image of the organisation is constantly changing, which is determined by the transformation of the environment, trends in the labour market, or changes in the hierarchy of employee needs. The lack of constancy in the quality of an organisation's image, on the one hand, shows its transience, and on the other hand, emphasizes the need for constant attention to how the organisation is perceived as an employer in the market.

Employer attractiveness is an issue that is subjected to detailed analysis by researchers, as well as a subject of interest to management practitioners, among whom are both representatives of the business community and public institutions, including the uniformed services. Employer attractiveness can be defined after Berthon, Ewing and Hah as the anticipated benefits an employee perceives from working for a particular organisation (2005). Jiang and Iles (2011), on the other hand, capture attractiveness as the degree to which potential candidates and current employees perceive the organisation positively. Similarly, attractiveness is defined by Ray (2006), indicating that it is the degree to which a potential candidate is interested in working for an organisation. Attractiveness can also be defined as the power an organisation has to motivate a candidate to consider a particular employer brand as an entity of value in the labour market (Bakanauskiene, Bendaravičienė, Barkauskė, 2017).

Researchers dealing with the issue of attractiveness of an organisation as an employer, consider attractiveness in relation to retention rates, turnover (Pavlović, 2018), career development opportunities, salary levels, organisational culture or even leadership effectiveness. Reis, Braga and Trullen analysed the impact of, among other things, an organisation's authenticity on its attractiveness (2017), while researchers such as Reis and Braga (2016) and Santago (2019) emphasise the importance of intergenerational differences in the way an organisation's attractiveness is assessed. Martins and Parsons (2007) emphasise the influence of professed values, Hinson, Agbleze and Kuada (2018) analysed corporate social responsibility, while Eger, Mičík, Gangur and Řehoř (2019) focused attention on factors of employer attractiveness in a multicultural environment.

Other researchers have also analysed such independent variables as gender (Terjesen, Vinnicombe, Freeman, 2007), race (Thomas, Wise, 1999), labour market status related to work experience (Alniascik, Alniascik, 2012), household income level (Newburry, Gardberg, Belkin, 2006), or education level (Arachchige, Robertson, 2013). In all of the indicated studies, one can also find insights into the importance of individual preferences and diverse needs as factors

determining the level of attractiveness of an organisation (Sivertzen, Nilsen, Olafsen, 2013). Opinions about an employer provided by both employees and, for example, those who participated in the recruitment process, can both increase and decrease the level of attractiveness, which shows how important it is to take care of what internal and external stakeholders say and think about the organisation (Kietzmann, Canhoto, 2013).

3. Employer attractiveness factors – a literary references review

A number of studies conducted by both academics and representatives of the business world have focused on determining the dimensions of employer attractiveness. A review of the results leads to the conviction that attributes are multidimensional. Despite the emergence of various classifications, one can find aspects on which researchers agree in terms of allocation. The main emphasis is on the importance of three types of benefits (originally identified by Ambler and Barrow in 1996), which include functional, economic and psychological aspects (Berthon, Ewing, Hah, 2005; Reis, Braga, Trullen, 2017). Researchers also present a division of factors into instrumental (salary, benefits, career development) and symbolic (Lievens, Highhouse, 2003), hard and soft (Baum, Kabst, 2013), and monetary and non-monetary (Ray, 2006). A more elaborate division presented by Jiang and Iles (2011), Alniacik and Alniacik (2012) and Thiranagam and Dileesh (2020), among others, includes, in turn, five categories of factors determining the attractiveness of an organisation, such as social, economic, developmental, application and attribute aspects.

Comparing the above divisions, it can be pointed out that functional and economic benefits are also called instrumental or hard, while psychological benefits are referred to as symbolic or soft. Instrumental benefits are also referred to by some researchers as objective, because they are easier to identify in an organisation and in many cases have a material dimension. Symbolic benefits, on the other hand, are called subjective because they refer to intangible aspects such as the image of the organisation (Lievens, 2007) or the prestige of the profession and are related to the needs of the individual translated into self-image as a person and an employee.

In conclusion, the variety of attributes of employer attractiveness reveals the complexity of the issue and, at the same time, the multidimensionality of possible analyses, which makes employer attractiveness and the factors determining it an object of constant, intensive research (Kalińska-Kula, Staniec, 2021; Kurek, 2019, 2021).

4. The Polish Army as an employer – statistical data

The Polish Army as an employer has for years enjoyed a good image, as evidenced, among other things, by the results of surveys on public trust (in 2019, trust in the military as an institution was manifested by 69% of respondents, in 2020 - $67.7\%^{1}$). The importance of the military as an employer can also be shown through the prism of personnel data in terms of employment structure.

According to the Central Statistical Office (CSO), as of 31 December 31 2020, there were 15,825.4 thousand employees in Poland, excluding budget units conducting activities in the field of national defence and public security. In turn, the military employed 156.7 thousand people, including 110.1 thousand soldiers and 46.6 thousand civilian employees (Table 1). Thus, it can be concluded that almost one person in 100 employed in Poland, refers to the Polish Army as an employer. Not included in these statistics are soldiers of the Territorial Defence Forces (about 32 thousand in 2022) (GUS, 2021).

The number of people with professional ties to the military is steadily increasing, as evidenced by the data in Table 1. In 2010, 143.7 thousand people found work in the military, which means that from 2010 to 2020, an additional 13 thousand people were employed in the military. It is worth noting that in the main the number of soldiers in the army is increasing, in turn, analysing the employment structure of civilian employees, comparing 2010 and 2020, one can see a decrease in employment by 1.5 thousand people.

Specification	2010	2015	2019	2020		
Specification	in thousands					
Total	143,7a	141,7	153,5	156,7		
of which women	22,7	24,2	28,3	29,7		
Professional soldiers	95,4	96,2	107,7	110,1b		
Civilian employees of the military	48,1	45,5	45,8	46.6c		

Table 1.

a Including soldiers of extended mandatory military service not included in the division into professional soldiers and civilian employees. b, c Of which women: b - 8,3 thousand, c - 21,4 thousand.

Source: Mały Rocznik Statystyczny Polski 2021. Warsaw: GUS, p. 77.

Year after year, the percentage of women serving in the Polish Army is increasing, a phenomenon not only seen in Poland alone, as globally the percentage of women in the army oscillates from 0.3% in the Turkish army, to 20% in the Hungarian army (2019 data). In Poland, in 2019, 7% of women served in the army, in 2020 the percentage rose to 7.47%, and in 2021 to 8.25%. There is a growing interest among ladies in the Territorial Defence Forces in particular. In 2020, more than 27,000 soldiers served in the WOT, of which more than 16% of the soldiers were women (Women in the WOT...).

Paid employees in the Polish army in 2010-2020

¹ IBRIS, research commissioned by the Onet.pl portal.

The importance of the military as an employer will grow, which is also related to plans to increase the size of the Polish army. The Law on Defence of the Fatherland, which has been implemented, envisages an increase in the number of professional soldiers to 250,000 and up to 50,000 soldiers of the Territorial Defence Forces. The increase in the number of soldiers is also likely to be associated with an increase in the number of civilian employees in the army.

5. The Polish Army as an employer – research results

5.1. Methodological assumptions of the research conducted and the structure of the research sample

The results of the research presented in this article are part of the research material obtained in connection with the implementation of a research task at the War Studies University on the topic: Employer Branding in the Polish Armed Forces. The research sought to answer three research problems: What is the attractiveness of the Polish Army as an employer in Poland? What factors increase the attractiveness of the Polish Army as an employer? What factors decrease the attractiveness of the Polish Army as an employer?

Adequately, three research hypotheses were adopted, which, for the sake of extensiveness, were written down in abbreviated form: H1. The attractiveness of the Polish Army as an employer is high. H2. Factors that increase the attractiveness of the military as an employer are those presented in Figure 1. H3. Factors decreasing the attractiveness of the military as an employer are those presented in Figure 2.

In order to provide answers to the indicated research problems, including verification of the adopted hypotheses, empirical research was carried out using the method of diagnostic survey carried out with the CAWI technique on a sample of 384 Poles – people of working age. Three criteria were taken into account when selecting the research sample: gender, generational affiliation and the voivodeship in which the respondents resided. The selection of the research sample was quota (non-probabilistic), while the structure of the population in Poland as of 31 December 2019 was used as a reference. The results of the study were subjected to statistical analysis using the IBM SPSS Statistics 23 package. The structure of the research sample is shown using Table 2.

Voivodeship	Generation X (50-64 years)		Generation Y (35-49 years)		Generation X (18- 34 years)		Total
-	Men	Women	Men	Women	Men	Women	
Lower Silesia	4	4	6	6	5	4	29
Kuyavian-Pomeranian	3	3	4	4	4	3	21
Lublin	3	3	4	4	4	3	21
Lubusz	1	1	2	2	2	2	10
Lodzkie	4	3	5	4	4	4	24
Lesser Poland	5	6	7	6	6	5	35
Masovian	8	7	11	10	9	8	53
Opole	2	1	2	2	2	1	10
Subcarpathian	4	3	4	4	4	3	22
Podlaskie	2	2	2	2	2	2	12
Pomeranian	4	3	5	4	4	3	23
Silesia	6	6	9	8	9	7	45
Holy Cross	2	1	3	2	2	2	12
Warmian-Masurian	3	2	3	2	3	2	15
Greater Poland	6	5	7	6	6	5	35
West Pomeranian	3	2	3	3	3	3	17
Total	11	2	140	5	12	26	384

Table 2.

Research sample structure

Source: own research results.

A total of 53.6% men and 46.4% women participated in the study. The main respondents were those classified as Generation Y (38%), followed by Generation X (32.8%) and Generation Z (29.2%). Taking into account the size structure of the respondents, the largest number of people came from the Masovian Voivodeship (13.8%), while the smallest number of respondents resided in the Opole and Lubusz Voivodeships (2.6% of respondents each).

5.2. Survey results with analysis

The research first analysed the level of attractiveness of the Polish Army as an employer. Attractiveness at the level of very high and rather high was declared by 59.38% of respondents. 33.07% of respondents rated attractiveness at a medium level. Low and very low attractiveness was indicated by 7.55% of respondents. Thus, it can be concluded that the Polish Army enjoys high attractiveness as an employer in Poland. Taking into account the indicated survey results, H1 was verified positively.

Next, the factors that, according to the respondents, increase and decrease the attractiveness of the military as an employer were analysed. The factors were identified on the basis of, among others, research reports on the attractiveness of Polish employers and the results of the empirical research conducted by the author of the article on the image of the military as an employer among students of the War Studies University in 2019.

The opinions of the respondents regarding factors that increase the attractiveness of the military as an employer are presented in Figure 1.

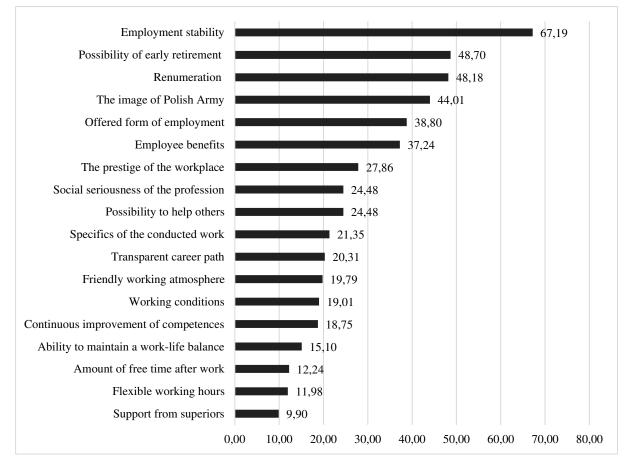


Figure 1. Factors that increase the attractiveness of the military as an employer (in %). Source: own studies results.

According to the vast majority of respondents (67.19%), the main factor in the attractiveness of the military as an employer is stability of employment. The military, as a public institution, guarantees this stability, in addition, it is related to the military's very function as a security provider. Stability of employment is also partly due to the investment in the development of soldiers' competencies, which makes them valuable and unique employees. The second factor indicated by the largest group of respondents, was the possibility of early retirement (48.70%). According to the law, those who were called up for military service no later than 31 December 2012, will gain pension rights after 15 years of service, while those called up after that time will gain pension rights after 25 years (Article 18.a and b, Pension Provision Law...). However, given the situation in the civilian labour market, such entitlements are rare, which may have a significant impact on career choices.

Another important factor, according to respondents, was the amount of salaries offered in the military (48.18%), the general image of the military (44.01%), the form of employment (38.80%) and various employee benefits (37.24%). The salaries offered in the military may determine the attractiveness of this institution, especially when the public is informed of planned salary increases. In 2022, as a result of the increase in the multiplier of the base amount for soldiers from 3.81 to 4.23, there was an increase in salaries by an average of PLN 677 gross.

As a result, military salaries, without allowances, are within the ballpark of PLN 6,830 gross on average (Higher salaries for soldiers...).

According to less than 30% of respondents, an important factor determining the attractiveness of the military as an employer is also the prestige of the workplace, social respect for the profession, the opportunity to help others and the content of the work performed. The remaining respondents also pointed to a clear career path, a friendly working atmosphere, the conditions of the work performed, continuous improvement of competencies, the ability to maintain a balance between work and family life, the amount of free time, flexibility of working hours and support from superiors.

The respondents were also asked about factors that reduce the attractiveness of the military as an employer (Figure 2).

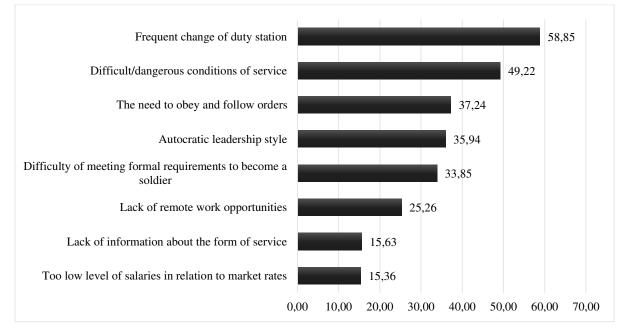


Figure 2. Factors that reduce the attractiveness of the military as an employer (in %). Source: own studies results.

More than half of the respondents indicated that the main factor lowering the attractiveness of the military as an employer is the frequent change of duty station (58.85%). This was followed by respondents emphasising the importance of difficult/dangerous conditions of service (49.22%), the need to obey and follow orders (37.24%), an autocratic leadership style (35.94%), the difficulty of meeting formal requirements to become a soldier (33.85%) and the lack of remote work opportunities (25.26%). Fewer than 20% of respondents also cited a lack of information about the forms of service (15.63%) and the fact that salaries are too low in relation to market rates (15.36%).

5.3. Statistical relationships – survey results

In order to identify the relationship between the dependent variable (the level of attractiveness of the military) and the independent variables (factors that increase and decrease attractiveness), χ^2 tests were performed, supplemented by a Phi Yul calculations. A total of 26 tests were conducted. In carrying out the statistical analyses, 26 null hypotheses (statistical hypotheses) were accepted and, correspondingly, 26 alternative hypotheses. The null hypotheses (H01-18) indicated that the factors highlighted in H2 do not increase the attractiveness of the military as an employer, and the factors indicated in H3 do not decrease this attractiveness (H019-26)². With the help of Table 3, only statistically significant correlations revealed were shown, which allowed the rejection of 6 null hypotheses in favour of 6 alternative hypotheses, and thus the identification of factors that increase and decrease the attractiveness of the Polish Army as an employer.

Table 3.

Factors increasing attractiveness	Results of research
Employment stability	$\chi^2(4) = 57,42, p < 0,001, Phi = 0,38$
The image of the Polish Army	$\chi^2(4) = 19,99, p < 0,001, Phi = 0,22$
Renumeration	$\chi^2(4) = 33,72, p < 0,001, Phi = 0,29$
Offered form of employment	$\chi^2(4) = 26,68, p < 0,001, Phi = 0,26$
Factors reducing attractiveness	Results of research
Working conditions	$\chi^2(4) = 12,34, p < 0,005, Phi = 0,17$
Difficulty in meeting formal requirements	$\chi^2(4) = 11,01, p < 0,005, Phi = 0,16$

Statistical relationships between image quality and individual attractiveness factors

Source: own studies results.

The analysis shows that there are statistically significant correlations between the attractiveness of the Army as an employer and such factors as stability of employment, general image, salary, the form of employment offered, working conditions and the difficulty of meeting formal requirements in recruitment. The attractiveness of the Polish Army as an employer is increased by the stability of employment, general image, the amount of remuneration and the form of employment offered, while factors such as working conditions and the difficulty of meeting formal requirements reduce the attractiveness of this employer.

In conclusion, the result of the research was that H2 and H3 could be verified. Both hypotheses were verified negatively.

² The hypotheses were written in summary form.

6. Summary

The study of the attractiveness of the Polish Army as an employer is important from the perspective of not only the effectiveness of employer branding and HRM activities, because the attractiveness of the army corresponds to the quality of its image, which in turn determines the sense of security and, in part, the image of the country in the international arena. Taking into account the plans to increase the size of the Polish army, including the need to constantly fill emerging vacancies, an important activity is to identify not only the level of attractiveness of the army as an employer, but also to indicate what factors increase and decrease the level of this attractiveness.

The analysis of the survey shows that the attractiveness of the military as an employer is rated as very and rather high (59.38% of respondents) by Poles. Respondents included stability of employment, the possibility of early retirement, the amount of wages offered, the general image of the military, as well as a variety of employee benefits (answers indicated by at least 30% of respondents) among the key factors of attractiveness. According to Poles, the attractiveness of the military as an employer, on the other hand, is lowered by frequent changes in the place of service making stability difficult, difficult conditions of service, the need to obey and follow orders, an autocratic style of leadership and the difficulty of meeting formal requirements in the recruitment process.

The statistical analyses carried out sought to identify the determinants of the attractiveness of the military, as well as factors that reduce this attractiveness. Out of a group of 18 factors, the existence of statistically significant relationships between the attractiveness of the military as an employer and stability of employment, general image, salary levels and the form of employment offered was confirmed. On the other hand, turning our attention to attractiveness-reducing factors, a correlation was revealed between the attractiveness of the military as an employer and working conditions and the difficulty of meeting formal requirements. In terms of the remaining 6 factors, no correlation was detected.

The author of the article would like to point out that the research does not exhaust the analyzed issues, which prompts further activity and analysis, also conducted among civilian employees of the army and soldiers, to determine the internal attractiveness of the army as an employer.

References

- Alnıaçık, E., Alnıaçık, Ü. (2012). Identifying dimensions of attractiveness in employer branding: effects of age, gender, and current employment status. *Procedia – Social and Behavioral Sciences, Vol. 58*, pp. 1336-1343, doi:10.1016/j.sbspro.2012.09.1117.
- 2. Ambler, T., Barrow, S. (1996). The employer brand. *Journal of Brand Management*, *Vol. 4, Iss. 3*, pp. 185-206, doi:10.1057/bm.1996.42.
- 3. Arachchige, B. J., Robertson, A. (2013). Employer attractiveness: Comparative perceptions of undergraduate and postgraduate students. *Sri Lankan Journal of Human Resource Management*, *Vol. 4, No. 1*, pp. 33-48.
- Baum, M., Kabst, R. (2013). Conjoint implications on job preferences: the moderating role of involvement. *International Journal of Human Resource Management*, *Vol. 24, No. 7*, pp. 1393-1417, doi: 10.1080/09585192.2012.712542.
- 5. Bernstein, D. (1984). Corporate Image and Reality: A Critique of Corporate Communication. Eastbourne.
- Berthon, P., Ewing, M., Hah, L.L. (2005). Captivating company: Dimensions of attractiveness in employer branding. *International Journal of Advertising*, Vol. 24, Iss. 2, pp. 151-172, doi:10.1080/02650487.2005.11072912.
- Bhattacharya, C.B., Sen, S., Korschun, D. (2008). Using corporate social responsibility to win the war for talent. *MIT Sloan Management Review*, *Spring*, pp. 37-44. Retrieved from https://sloanreview.mit.edu/article/using-corporate-social-responsibility-to-win-the-warfor-talent/, 20.03.2022.
- 8. Boorstin, D.J. (1961). *The Image: A Guide to Pseudo-Events in America*. New York: Harper.
- 9. Boulding, K. (1956). The Image. An Arbor, Michigan: University of Michigan Press.
- 10. Budzyński, W. (1998). Public Relations. Zarządzanie reputacją firmy. Warszawa: Poltext.
- 11. Budzyński, W. (2002). Wizerunek firmy. Kreowanie, zarządzanie, efekty. Warszawa: Poltext.
- Edwards, M., Edwards, T. (2013). Employee responses to changing aspects of the employer brand following a multinational acquisition: a longitudinal study. *Human Resource Management, Vol. 52, No. 1*, pp. 27-54, doi:10.1002/hrm.21519.
- Eger L., Mičík M., Gangur M., Řehoř P. (2019). Employer branding: exploring attractiveness dimensions in a multicultural context. *Technological and Economic Development of Economy, Vol. 25, Iss. 3*, pp. 519-541, doi:10.3846/tede.2019.9387.
- Gatewood, R.D., Gowan, M.A., Lautenschlager, G.J. (1993). Corporate Image, Recruitment, Image and Initial Job Choice Decisions. *Academy of Management Journal*, *Vol. 36, No. 2,* pp. 414-427, doi: 10.2307/256530.

- 15. Glińska, P. *Wyższe pensje dla żołnierzy*. Retrieved from http://www.polskazbrojna.pl/home/articleshow/36336#, 24.04.2022.
- Hinson R.E., Agbleze S., Kuada J. (2018). Corporate social responsibility and employer attractiveness: Perspectives of prospective jobseekers in Ghana. *African Journal of Business Ethics, Vol. 12, No. 2, November*, pp. 1-17, doi: 10.15249/12-2-190.
- 17. Jędruszczuk, I., Pietrzak, M. *Kobiety w WOT*. Retrieved from https://media.terytorialsi.wp.mil.pl/informacje/651073/kobiety-w-wot, 20.03.2022.
- Jiang, T., Iles, P. (2011). Employer-brand equity, organizational attractiveness and talent management in the Zhejiang private sector, China. *Journal of Technology Management in China, Vol. 6, Iss. 1*, pp. 97-110, doi:10.1108/17468771111105686.
- Kalińska-Kula, M., Staniec, I. (2021). Employer Branding and Organizational Attractiveness: Current Employees' Perspective. *European Research Studies Journal*, *Vol. XXIV, Iss. 1*, pp. 583-603, doi:10.35808/ersj/1982.
- 20. Kietzmann, J.H., Canhoto, A. (2013). Understanding snd Managing Electronic Word of Mouth. *Journal of Public Affairs, Vol. 13, Iss.* 2, pp. 146-159, doi: 10.1002/pa.1470.
- Kurek, D. (2019). Attributes of Uniformed Services as Employers on the Polish Labour Market – the Perspective of the Generation Z. Scientific Papers of Silesian University of Technology. Organization and Management Series, No. 138, pp. 133-154, doi: 10.29119/1641-3466.2019.138.11.
- 22. Kurek, D. (2021). Image and Attributes of the Police as an Employer in Poland Perspective of the Z-Generation. *International Conference Knowledge-Based Organization. Conference proceedings, Vol. 27, Iss. 1*, pp. 198-203, doi: 10.2478/kbo-2021-0030.
- 23. Lievens, F. (2007). Employer branding in the Belgian army: the importance of instrumental and symbolic beliefs for potential applicants, actual applicants and military employees. *Human Resource Management, Vol. 46, No. 1,* pp. 51-69, doi:10.1002/hrm.20145.
- 24. Lievens, F., Highhouse, S. (2003). The relation of instrumental and symbolic attributes to a company's attractiveness as an employer. *Personnel Psychology, Vol. 56, No. 1*, pp. 75-102, doi:10.1111/j.1744-6570.2003.tb00144.x.
- 25. Mały Rocznik Statystyczny Polski 2020. Warszawa: GUS.
- 26. Mały Rocznik Statystyczny Polski 2021. Warszawa: GUS.
- Martins, L.L., Parsons, C.K. (2007). Effects of gender diversity management on perceptions of organizational attractiveness: the role of individual differences in attitudes and beliefs. *Journal of Applied Psychology*, Vol. 92, No. 3, pp. 865-875, doi:10.1037/0021-9010.92.3.865.
- Newburry, W., Gardberg, N.A., Belkin, L.Y. (2006). Organizational attractiveness is in the eye of the beholder: The interaction of demographic characteristics with foreignness. *Journal of International Business Studies*, Vol. 37(5), pp. 666-686, doi:10.1057/palgrave.jibs.8400218.

- 29. Pavlović, G. (2018). Employer attractiveness and the employee turnover and retention. *Conference Proceedings: 2nd International Scientific Conference ITEMA, November 8*, pp. 806-811, doi: 10.31410/itema.2018.806.
- 30. Pingle, S., Sharma, A. (2013). External employer attractiveness: a study of management students in India. *Journal of Contemporary Management Research*, Vol. 7, No. 1, pp. 78-95.
- 31. Ray, J. (2006). Investigating relationships between corporate social responsibility orientation and employer attractiveness. Washington, D.C.: George Washington University.
- 32. Reis, G.G., Braga, B.M., Trullen, J. (2017). Workplace authenticity as an attribute of employer attractiveness. *Personnel Review*, *Vol. 46, Iss. 8*, pp. 1962-1976, doi: 10.1108/PR-07-2016-0156.
- 33. Reis, G.G., Braga, M.B. (2016). Employer attractiveness from a generational perspective: Implications for employer branding. *Revista de Administração*, Vol. 51, No. 1, pp. 103-116. doi: 10.5700/rausp1226.
- 34. Santago, J. (2019). The relationship between brand attractiveness and the intend to apply for a job. A millennials' perspective. *European Journal of Management and Business Economics*, *Vol. 28, No. 2,* pp. 142-157, doi: 10.1108/EJMBE-12-2018-0136.
- 35. Sivertzen, A.-M., Nilsen, E.R., Olafsen, A.H. (2013). Employer branding: employer attractiveness and the use of social media. *Journal of Product & Brand Management*, *Vol. 22, No. 7,* pp. 473-483, doi: 10.1108/JPBM-09-2013-0393.
- 36. Skowronek, I. (2012). *Marketing doświadczeń. Od doświadczeń klienta do wizerunku firmy*. Warszawa: Wydawnictwo Poltext.
- 37. Terjesen, S., Vinnicombe, S., Freeman, C. (2007). Attracting generation Y graduates. Organisational attributes, likelihood to apply and sex differences. *Career Development International*, Vol. 12, No. 6, pp. 504-522, doi:10.1108/13620430710821994.
- 38. Thiranagama A.W., Dileesha M.A.S., (2020). Demographic differences encounter in employer attractiveness. *Journal of Business and Finance in Emerging Markets*, *Vol. 3, Iss. 1*, pp. 1-12, doi:10.32770/jbfem.vol31-12.
- 39. Thomas, K., Wise, P. (1999). Organizational attractiveness and individual differences: are diverse applicants attracted by different factors? *Journal of Business and Psychology*, *Vol. 13, No. 3*, pp. 375-390.
- 40. Ustawa z dnia 10 grudnia 1993 r. o zaopatrzeniu emerytalnym żołnierzy zawodowych oraz ich rodzin (Dz.U. 2022.0.520 t.j.).
- 41. Waszkiewicz, A. (2011). *Wizerunek organizacji. Teoria i praktyka badania wizerunku uczelni*. Warszawa: Instytut Dziennikarstwa Uniwersytetu Warszawskiego.
- 42. Wojtaszczyk, K. (2012). *Employer branding czyli zarządzanie marką pracodawcy*. *Uwarunkowania, procesy, pomiar*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 43. Zając-Pałdyna, U. (2020). Employer Branging po polsku. Gliwice: Helion SA.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

ASSESSMENT OF THE PREFERENCES OF CSR ACTIVITIES ADDRESSED TO EMPLOYEES IN THE LIGHT OF THE RESULTS OF PRIMARY RESEARCH

Agnieszka KWARCIŃSKA

University of Szczecin, Institute of Management, Department of Human Capital Management; agnieszka.kwarcinska@usz.edu.pl, ORCID: 0000-0003-2766-1856

Purpose: The objectives of the article are both to characterise the issues related to companies' activities addressed to employees undertaken as part of the implementation of the concept of corporate social responsibility and to present the results of primary research on employees' identification of the most relevant, from the point of view of their benefits, activities proposed by employers.

Design/methodology/approach: The article is of theoretical and empirical nature. In order to achieve its objectives, the method of critical literature review was applied and the results of a survey conducted in 2020 on a group of 600 employees of companies in the service sector, specifically those engaged in accounting, bookkeeping and tax advisory activities as well as facility cleaning services from the West Pomeranian Voivodeship in Poland, are presented. The survey was conducted with the application of CATI (Computer-Assisted Telephone Interviewing) method, using a pre-prepared questionnaire. The selection of entities for the survey was random, while maintaining the representativeness of the population of the surveyed enterprises in terms of their structure taking into account the number of persons employed.

Findings: The results presented above all made it possible to distinguish the most desirable, expected by the surveyed employees, CSR activities undertaken by employers. It can be concluded that the surveyed employees most value the basic package of employers' activities, including above all training, working time, remuneration, occupational health and safety and medical care.

Research limitations/implications: It seems reasonable to extend the research sample to include both the number of employees surveyed and the number of enterprises operating also in other sectors. This would allow us to obtain a broader picture of employee preferences and provide a basis for cross-sectoral comparisons. At the next stage, it would also be advisable to conduct research aimed at identifying the basic determinants of employee preferences.

Practical implications: The article can contribute to encouraging employers to identify the preferences of their employees in advance through relevant research, the results of which can provide a starting point for creating a non-financial benefit offer for them. The article highlights the importance of carrying out this type of research.

Social implications: The article refers to the broad issue of corporate social responsibility and, in its content, considers the legitimacy of employers' interest in employees' expectations and preferences regarding proposals for CSR activities aimed at employees.

Originality/value: This article presents the results of primary research conducted in 2020 on a group of 600 employees from the West Pomeranian Voivodeship in Poland employed in companies running accounting, bookkeeping and tax consultancy activities as well as cleaning services.

Keywords: corporate social responsibility, CSR, employee-oriented CSR activities, human resources management, employee relations management.

Category of the paper: Research paper.

1. Introduction

Building and maintaining relationships with various types of co-workers and business partners is becoming a standard for modern companies. Probably the level of awareness of the importance of these processes, the necessity to create, supervise, control and finally comprehensively manage them, still varies in each, otherwise very individual, organisation and depends on a number of conditions. However, if these relations relate to the closest internal stakeholders, i.e. employees, then experiencing their significance is actually a part of everyday business. Perhaps this is why in business practice one can observe interest in implementing the principles of the concept of corporate social responsibility, also in terms of shaping mutual relations with employees. More or less aware of the fact that they are acting in a socially responsible manner, the employers undertake various activities for the benefit of their employees. Guided by a number of considerations related to, among other things, attracting and retaining a committed, appropriately motivated and, finally, loyal employee, they individualise their proposals for action, making the cross-section of these initiatives often multidimensional, covering, for example, various aspects of human resources management, and multifaceted, for example from the point of view of proposals for specific actions within a given aspect. This peculiar diversity of ideas generated by employers in shaping responsible relations with employees has given rise to several research questions. Is there really so much activity among the offer created by employers that employees expect? Which of the proposed activities are most desired by them? What do employees care most about in terms of shaping their responsibility towards them? On the basis of the research questions, a hypothesis was formulated, stating that out of the diverse set of proposed activities undertaken by employers in implementing the concept of corporate social responsibility towards their primary stakeholders, such as employees, one can identify the most important, and the most desired by them. Therefore, the article addresses the issue of how employers shape their offer of initiatives addressed to employees, which are part of the concept of corporate social responsibility, in the aspect of suggestions of taking into account the preferences of employees. The structure of the article includes both reflections on the essence and sense of implementing the principles of the concept of corporate social responsibility, based primarily on its utilitarian character as well as issues of responsibility towards employees in the context of their connection with human resources management and the benefits arising from such an approach by employers.

A critical review of the literature with regard to corporate social responsibility indicates, above all, an unflagging interest in this issue. This is evidenced both by the number of publications and their topicality. Having examined the selected studies, it can be concluded that their subject matter covers various strands of analysis related to the implementation of the CSR concept by various organisations. Articles relating to the benefits of adopting a responsible attitude of market actors (Zielinski, 2014; Leśna-Wierszołowicz, 2016), analysing the issues of selecting appropriate actions (van Rekom, Berens, van Halderen, 2013) as well as those capturing CSR issues in relation to employees (Remišová, Búciová, 2012; Badura-Mojza, 2016; Furmańska-Maruszak, Sudolska, 2017; Kaźmierczak, 2018; Arzenšek, Franca, Laporšek, 2018) were noticed. Moreover, a very large number of publications analysing the interrelationship between CSR and employee satisfaction, engagement and motivation have been noticed (Kim, Scullion, 2013; Kunz, 2020; Esmaeelinezhad, Singaravelloo, Boerhannoeddin, 2015; Barakat, Isabella, Boaventura, Mazzon, 2016; Story, Castanheira, 2019; Glavas, 2016; Murshed, Sen, Savitskie, Xu, 2021; Seaman, Williams, 2018). The number of the available literature on the subject and its ongoing nature underline the importance of the present issue and its very broad spectrum of reference. At the same time, this does not preclude further research inquiries and more detailed theoretical and empirical analyses.

2. The contemporary nature of the concept of corporate social responsibility – from a definitional approach to corporate activity directed at employees

The unwavering interest of researchers in the issues of corporate social responsibility, lasting for many years, generated numerous attempts to define the concept, its nature and basic principles. Definitions, although in essence each time reflecting the basic premises of its meaning, are different, and either emphasise specific areas – ethical, environmental or social – or highlight the importance of the organisation's interaction with stakeholders or finally define CSR from the perspective of its benefits, or emphasise its strategic dimension. An ordering of the definitional issues is presented in Table 1.

Table 1.

Examples of definitions of	corporate social	responsibility	according t	o emphasised aspects
Examples of acjunitons of	corporate sociat	responsibility	accoraing i	o emphasised aspects

Highlighted aspect	Examples of CSR definitions
CSR areas	CSR means that "organisations act ethically when conducting business, taking into account the social, environmental and economic impacts of their action" (Armstrong, 2011, p. 157).
Stakeholders	CSR is the concept of "the voluntary consideration by companies of social and environmental aspects in the implementation of market activities and in their relations with stakeholders" (Szczepańska, 2011, p. 177).
CSR benefits	The CSR concept is "an effective process of corporate management that, by responding to the identifiable expectations of a company's stakeholders, contributes to the company's competitiveness, ensuring its stability and sustainable development, while shaping favourable conditions for economic and social development, creating both social and economic value" (Paliwoda-Matiolańska, 2012, p. 177).
Strategic dimension of CSR	 CSR is a concept "due to which companies voluntarily take into account social and environmental interests as well as relations with different stakeholder groups, during the strategy-building phase" (Klimek, 2014, p. 270). "Corporate social responsibility is a new role for the organisation in society, a new vision of partnership and a new way of treating this idea as part of the enterprise's strategy. () In order for an enterprise to function properly on the market, it still needs to include in its strategy such elements as care for the environment, broadly understood employee safety, the interests of the local community and society as a whole" (Wolak-Tuzimek, 2019, p. 9). A strategic view of CSR "involves a company deciding in advance the extent to which it will engage with social issues, and then creating a social responsibility schedule that identifies the issues the organisation should address and to what extent" (Armstrong 2011, p. 158).

Source: own study based on: (Kwarcińska, 2021a, pp. 109-120).

The definitional examples in Table 1, firstly, do not exhaust the ways in which the essence of the concept of corporate social responsibility is presented in the literature, and secondly, they are not subject to absolute attribution to the emphasised aspects. It is worth noting that there are often convergences in the definitions. Nevertheless, thanks to the variety of definitions presented, a broad analytical context of the issue in question can be observed. It should be added that it is not without reason that several such references are presented in the section defining CSR in the strategic dimension. According to the author (Kwarcińska, 2021a, pp. 109-120), it is these definitions, emphasising its strategic dimension and the nature of multilateral interdependencies, that most adequately reflect its contemporary meaning. The adoption by organisations of this peculiar moral obligation in the form of responsibility involves, first of all, noticing all groups of influence, addressing the issue of interrelationships and selecting the appropriate tools of influence, but also, at the highest level of sophistication, directing all their activities by incorporating already at this level of management, specific assumptions regarding objectives, plans and ways of their implementation.

Among the areas of corporate social responsibility, the issues related to employees, as the primary stakeholders of any organisation, are of high importance. Responsibility towards employees is such an important aspect of the functioning of market entities that it has been included more than once in recognised international guidelines and standards. Among them, the OECD Guidelines for Multinational Enterprises, the Global Compact Principles, the ISO 26000 Standard and the SA 8000 Standard deserve special attention. The basic

postulates contained therein refer in many aspects to employees and are a kind of hints for the implementation of the assumptions and principles of the CSR concept towards employees. The priority issues related to employees included in the specified guidelines and standards are presented in Table 2.

Table 2.

Main issues related to employees in selected international guidelines and standards

Guidelines and	Main issues
standards	
OECD Guidelines	Areas of human rights and employment and labour relations, including in particular:
for Multinational	freedom of association, the right to collective bargaining, the effective abolition of child
Enterprises	labour, the elimination of all forms of forced or compulsory labour as well as the
-	abolition of discriminatory practices in employment and occupational activities (OECD
	Guidelines, 2011).
Global Compact	Issues of promoting and protecting human rights, freedom of association and the need to
principles	eradicate all forms of forced labour and to take action to abolish child labour (Kietlinski,
	Reyes, Oleksyn, 2005, pp. 152-153).
ISO 26000 standard	Aspects of respect for human rights including, inter alia, the avoidance of situations that
	threaten these rights, participation, the handling of complaints and discrimination and
	labour practices, where attention is paid to employment and labour relations, working
	conditions and social protection, social dialogue, health and safety at work, human
	development and training at the workplace (ISO 26000).
SA 8000 standard	Reference to child labour, forced or compulsory labour, health and safety, freedom of
	association and the right to collective bargaining, discrimination, labour discipline,
	working time, wages (Standard SA8000).

Source: own study based on (Kwarcińska, 2019, pp. 157-165).

The synthesis of demands to address the issue of responsibility by employers towards employees presented in Table 2 indicates first of all the basic areas and directions for shaping this commitment. In economic practice, the commitment of enterprises to building responsible relations with employees is reflected in diversified activities. It is worth mentioning at this point that in the experience of relatively small market entities, it is possible to observe their activity on the part of undertaking initiatives towards employees, while being unaware of the colligation of these activities with the CSR concept. The primary motivator for employers to take into account the interests of employees is often first and foremost the awareness of their importance to the organisation and the associated benefits.

3. Corporate responsibility for employees – a bilateral benefits perspective

Arguably, it would not be such an encouraging challenge for companies to address social responsibility if it were not for the benefits of approaching the recognition of the value of this stakeholder group of each organisation. In this manner, the "high-flown" idea takes on a utilitarian dimension and finds justification for implementation in business practice (Kwarcińska, 2021). The analysis of the benefits resulting from the implementation of CSR principles is linked to two dimensions of practical activities performed by the entities involved

in this area – internal, taking into account the interior of the organisation and external, encompassing the broadly understood external environment of companies. According to B. Rok (2004, p. 20), the examples of issues undertaken as part of the internal dimension of CSR are primarily: human resources management, ethical programmes for employees, occupational health and safety, and the ability to adapt to change. The external dimension, on the other hand, consists mainly of: the local community, business partners, suppliers and customers, global environmental issues. The presented areas of the organisation's involvement in the implementation of the CSR concept form the basis for determining the benefits resulting from responsible business. Two groups of benefits are most often specified in the literature. These are benefits for the company and social benefits. Their allocation is presented in Table 3.

Table 3.

Benefits of responsible business conduct

Benefits for the company	Social benefits
Increased investor interest	Publicise and address relevant social issues
Increasing consumer and stakeholder loyalty	Educating the public
Improving relations with the community and local authorities	Improving the environment
Increasing competitiveness – a way to differentiate from others	Access to company information
Raising the organisational culture of company	Respect for human rights
Developing a positive corporate image among employees	Increasing the sense of security
Attracting and retaining the best employees	Economic development
Employee motivation and loyalty	Improving health
Cost reduction	Higher standard of living
Good stakeholder relations	
Improving quality	
Risk mitigation	
Customer loyalty	
Avoidance of legal action	

Source: own study based on (Rok, 2004, pp. 54-55; Księżak, 2016, pp. 53-65).

The sets of benefits presented in Table 3, regardless of their allocation, demonstrate the practical positive significance of adapting the principles of the corporate social responsibility concept for a wide range of stakeholders. The subject of interest for the purposes of this article, however, is first of all the benefits for the organisation itself which decides to act responsibly towards its primary stakeholders, i.e. employees, and the benefits for these specific beneficiaries. From the company's point of view, the following benefits are of particular importance: shaping a positive image of the company among employees, improving the level of organisational culture, increasing employee satisfaction and involvement, increasing employee loyalty, attracting and retaining the best employees, increasing the company's innovativeness, improving the company's competitiveness. In turn, from the point of view of the employees, the benefits for them are mainly related to: greater remuneration, greater job security, opportunities for development and improved career prospects, secure employment, greater levels of social amenities, improved health, improved quality of life, higher standard of

living, improved interpersonal relationships within and outside the organisation, work-life balance.

The benefits for both enterprises and employees of implementing CSR in business practice are made possible, among other things, by the range of specific initiatives taken by employers and aimed at employees.

4. Research methodology and results

The starting point for the 2020 research was primarily a prior analysis of the social reports of Polish companies published mainly on the website (http://raportyspoleczne.pl, 14.02.2019). Characteristically, the examined reports were prepared by relatively large organisations representing various industries, among others: construction and real estate, energy and finance. These documents were the primary source of information on non-financial CSR activities of enterprises aimed at employees. It was their analysis that mainly made it possible to see that the planes of influence in the implementation of CSR, taking into account the interests of employees, are often linked to aspects of human resource management processes. This specific management coherence provided the opportunity to systematise a set of specific initiatives. The selected activities, while emphasising that they are treated as examples from among all possible employer activities, have been conventionally assigned to different aspects of personnel management. This is presented in Table 4.

Table 4.

The human resources management aspect	Examples of initiatives
Employment planning	programmes for school and university students, patronage agreements with schools, internship programmes, apprenticeships, scholarships, field trips for students, programmes for talented students, participation in job fairs, presence on social media and specialised websites, cooperation with career offices, employee referral programme
Recruitment and selection	applying the principle of diversity, promoting internal recruitment
Onboarding	initial training, overseas training campuses, onboarding programmes, support from experienced staff
OHS	measuring and monitoring activities, adopting additional targets e.g. "zero accidents", additional safety plans, short but frequent OHS lectures, organising OHS week, using additional protective measures, training demonstrations, OHS knowledge competitions, instructional videos, safety fairs, anonymous hotline
Health	medical care packages for employees and their families, sports cards for employees and their families, life insurance packages, cycling facilities, organisation of meetings with specialists in health, healthy eating and lifestyle, purchase of defibrillators, first aid brochures, psychologist support, swimming subsidies, instruction in preventive exercises for those working at monitors, cooperation with suppliers of healthy food for employees

Heterogeneity of CSR activities aimed at employees

Cont. table 4.	
Staff appraisal	appraisal system that takes into account the achievement of objectives and assesses competences and skills
Remuneration and rewards	uniform remuneration principles, open remuneration system, bonus remuneration system, holiday subsidies, gift cards, housing loans, non-repayable special assistance grants, subsidised theatre and concert tickets, parcels for employees' children, transport for employees, subsidised team-building events
Education and development	organising onsite trainings, e-training, online training for various positions, language learning courses, postgraduate studies, career reviews, managerial programmes, projects promoting the development of women
Motivation	implementation of improvement ideas from employees, introduction of individual objectives, regular performance appraisals, internal recruitment
Work-life balance	reduced working hours for pregnant women with full-time pay, reduced working hours for all employees, e.g. 2 hours, family day, family visits to the workplace, workshops, counselling and exercises on burnout, family bonding, stress management, supporting employees' passions through participation and rewards, one-off financial support for the birth of a child, flexible working hours, home-office
Communication	face-to-face meetings, intranet, video conferencing, posters, email, platforms – staff forums, away meetings, newsletters, corporate magazines information on boards, support in communicating change
Employee satisfaction	employee satisfaction survey, employee competitions, picnics for employees and their families
Employee volunteering	assistance programmes, involvement in charitable activities, blood donations, collections of batteries and waste electrical and electronic equipment, collections of gifts for the people in need
Separation	additional severance pay, psychological support, assistance in finding a new job

Cont. table 4.

Source: own study based primarily on selected social reports submitted as part of the 12th edition of the *Social Reports* competition, http://raportyspoleczne.pl, 14.02.2019.

When analysing the content of Table 4, it is worth highlighting, first of all, the significant diversity of employer initiative proposals. The collection presented represents a kind of exemplification drawn from a wide range of otherwise very imaginative offers from companies.

In the 2020 survey, the respondents' task was, inter alia, to indicate five of the activities specified in Table 4 that are most important, most beneficial to them, i.e. the employees, and therefore most desired, expected and preferred by them. The survey was conducted using the CATI (Computer-Assisted Telephone Interviewing) method with regard to a group of 600 employees from the West Pomeranian Voivodeship in Poland employed in companies in the service sector, specifically those engaged in accounting, bookkeeping and tax consultancy activities as well as cleaning services. The vast majority, more than 80 per cent, were organisations employing between one and nine people.

The collected statistical material allowed for an appropriate presentation of the survey results and analysis. Figure 1 presents the respondents' preferences regarding the relevance of activities undertaken by employers as part of the implementation of the concept of corporate social responsibility addressed to employees, as assessed by the beneficiaries. Only ten activities were included, ranked according to the value of the percentage of people, among the surveyed, considering a particular activity as important. The remaining initiatives were specified by a relatively smaller percentage of respondents and are not included in Figure 1.

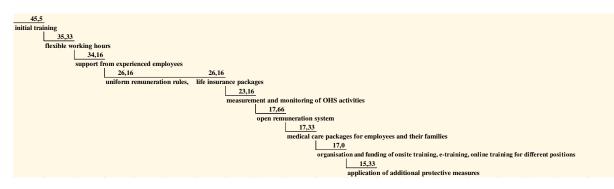


Figure 1. Preferences of activities as assessed by employees results of primary research in percentage of indications.

Source: own study based on primary research results.

Analysing the results presented in Figure 1, it is noticeable first of all that more than 45% of the respondents considered initial training to be important. This is followed by 35% of respondents indicating flexible working hours as important measures, and then support from experienced employees at 34%. Just over 26% of respondents stressed the importance of uniform remuneration rules and life insurance packages, and around 23% of them indicated the measurement and monitoring of OHS activities. A comparable proportion of about 17% of respondents considered both the openness of the remuneration system and the medical care packages for employees and their families, as well as the organisation and financing of on-site training, e-training, online training for different positions, to be important for employees. Approximately 15% of those taking part in the survey considered the application of additional protective measures – an activity included in the set of activities relating to health and safety issues in the company – to be important for employees.

5. Conclusions and discussion

In conclusion, it should first of all be stated that the issue of undertaking social responsibility by enterprises today is not just an ideological novelty shaped at the worldview level. As the analysis of the literature on the subject indicates, many scientific researchers stress the importance of the functioning of today's organisations taking into account this moral obligation. They present extremely diverse analyses and research results in this area. This article goes some way to recognising the importance of the applied nature of the CSR concept, especially in aspects directly related to the value of employees to any organisation. The article also serves as a kind of exemplification of the current activities of companies in the field of shaping the offer of specific initiatives towards employees, as well as presenting the results of a study that, to a certain extent, questions and verifies the validity of some of these activities. The survey made it possible, first of all, to identify the most important for the surveyed employees, the most desired, expected and preferred CSR initiatives undertaken by employers. On the basis of the results presented, it can be concluded that the surveyed employees most value the basic package of employer activities, including above all: training, working time, remuneration, occupational health and safety and medical care. Thus, the sense of such a large differentiation in the employers' offer remains puzzling. Simultaneously, the results of the survey also indicated the need for in-depth analyses of the determinants of such choices which are likely to include the generational factor, length of service, size of the organisation or type of activity of the companies surveyed. Knowledge of such determinants would probably make it possible, in the sense of providing the desired benefits, to better tailor the offer of action proposals by employers aimed at employees as part of the implementation of their responsibility towards them. At the same time, the importance of carrying out this type of research should be emphasised even from the point of view of the variability of preferences, expectations of employees, shaped under the influence of various factors. It is also worth noting the possibility of extending the analysis and deepening it with further threads. Conducting studies on a larger number of entities representing other sectors would undoubtedly allow to obtain a larger comparative scale. Analysis of the determinants would certainly provide the basis for further interesting conclusions. Finally, deliberating on the impact of the implementation of CSR activities aimed at employees on their employment decisions and their behaviour within the organisation (such as those concerning the shaping of employee commitment and loyalty, for example) could be an extremely interesting continuation of the cycle of considerations and research in this thematic area.

Acknowledgements

The project is financed within the framework of the program of the Minister of Science and Higher Education under the name "Regional Excellence Initiative" in the years 2019-2022; project number 001/RID/2018/19; the amount of financing PLN 10,684,000.00.

References

- 1. Armstrong, M. (2011). *Zarządzanie zasobami ludzkimi*. Warszawa: Wolters Kluwer Polska Sp. z o.o.
- Arzenšek, A., Franca, V., Laporšek, S. (2018). Corporate Social Responsibility Towards Employees – Analysis of Slovenian and Foreign Good Practices. Management International Conference 2018, Bled Slovenia, https://www.hippocampus.si/ISBN/978-961-7023-92-3/215.pdf, 17.05.2022.

- Badura-Mojza, A. (2016). Działania wobec pracowników w ujęciu zastosowania koncepcji społecznej odpowiedzialności przedsiębiorstwa (CSR) – analiza przypadku. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, nr 283, pp. 86-98.
- Barakat, S.R., Isabella, G., Boaventura, J.M.G., Mazzon, J.A. (2016). The influence of corporate social responsibility on employee satisfaction. *Management Decision, Vol. 54, Iss. 9*, https://www.emerald.com/insight/content/doi/10.1108/MD-05-2016-0308/full/html, 16.05.2022.
- Esmaeelinezhad, O., Singaravelloo, K., Boerhannoeddin, A. (2015). Linkage between perceived corporate social responsibility and employee engagement: Mediation effect of organizational identification. *International Journal of Human Resource Studies, Vol. 5, No. 3*, doi:10.5296/ijhrs.v5i3.8376, http://www.macrothink.org/journal/index.php/ijhrs/ article/view/8376, 16.04.2021.
- 6. Furmańska-Maruszak, A., Sudolska, A. (2017). Relacje z pracownikami jako obszar wdrażania CSR. *Organizacja i Kierowanie, nr 2(176),* pp. 253-267.
- Glavas, A. (2016). Corporate Social Responsibility and Employee Engagement: Enabling Employees to Employ More of Their Whole Selves at Work. Frontiers in Psychology, https://doi.org/10.3389/fpsyg.2016.00796, 16.05.2022.
- 8. http://raportyspoleczne.pl, 14.02.2019.
- 9. ISO 26000 Społeczna odpowiedzialność, www.pkn.pl/sites/default/files/ discovering_iso_26000.pdf, 19.09.2014.
- Kaźmierczak, M. (2018). Ocena działań na rzecz pracowników w ramach zarządzania społecznie odpowiedzialnego w sektorze MŚP. Zeszyty Naukowe Politechniki Śląskiej, Seria: Organizacja i Zarządzanie nr 128, pp. 177-189.
- 11. Kietliński, K., Reyes, V.M., Oleksyn, T. (2005). *Etyka w biznesie i zarządzaniu*. Kraków: Oficyna Ekonomiczna.
- Kim, C.H., Scullion, H. (2013). The effect of Corporate Social Responsibility (CSR) on employee motivation: A cross-national study. *Poznań University of Economics Review*, *vol. 13, Nr 2,* https://www.ebr.edu.pl/pub/2013_2_5.pdf, 15.04.2021.
- 13. Klimek, J. (2014). *Etyka biznesu. Teoretyczne założenia, praktyka zastosowań*. Warszawa: Difin SA.
- Księżak, P. (2016). The Benefits from CSR for a Company and Society. *Journal of Corporate Responsibility and Leadership, Vol. 3, Iss. 4*, doi: http://dx.doi.org/10.12775/ JCRL.2016.023.
- Kunz, J. (2020). Corporate Social Responsibility and Employees Motivation Broadening the Perspective. *Schmalenbach Bus. Rev.*, 72, https://doi.org/10.1007/s41464-020-00089-9, 15.04.2021.
- 16. Kwarcińska, A. (2019). Zróżnicowanie działań wobec pracowników w ramach realizacji koncepcji społecznej odpowiedzialności biznesu na podstawie analizy wybranych raportów

społecznych. In: E. Mazur-Wierzbicka, D. Janczewska (eds.), *Społeczna odpowiedzialność biznesu – perspektywa zarządzania i ekonomii. Studia i Monografie, nr 103.* Łódź-Warszawa: Społeczna Akademia Nauk.

- 17. Kwarcińska, A. (2021). CSR Activities Directed at Employees in the Light of Their Usability Assessment. *European Research Studies Journal, Vol. XXIV, Iss. 2B.*
- Kwarcińska, A. (2021a). Exemplification of the Implementation of Selected Actions Towards Employees Related to the Concept of Corporate Social Responsibility. In: G. Karanovic, P. Polychronidou, A. Karasavvoglou (eds.), *The Changing Financial Landscape. Contributions to Economics*. Cham: Springer, https://doi.org/10.1007/978-3-030-82778-6_7.
- 19. Leśna-Wierszołowicz, E. (2016). Korzyści ze stosowania zasad społecznej odpowiedzialności biznesu w przedsiębiorstwie. ASO.A.8(2)/2016.65-76.
- 20. Murshed, F., Sen, S., Savitskie, K., Xu, H. (2021). CSR and job satisfaction: Role of CSR importance to employee and procedural justice. *Journal of Marketing Theory and Practice*, *29*, *4*, doi: 10.1080/10696679.2021.1877156, 17.05.2022.
- 21. Norma SA8000 Społeczna odpowiedzialność, pp. 15-18, https://www.mpit.gov.pl, 12.11.2018.
- 22. OECD Guidelines for Multinational Enterprises 2011 Edition. OECD Publishing. http://dx.doi.org/10.1787/9789264115415-en, 20.11.2013.
- 23. Paliwoda-Matiolańska, A. (2012). Social responsibility in business in theory and practice. *Marketing Instytucji Naukowych i Badawczych, nr 223,* http://minib.pl/en/social-responsibility-in-business-in-theory-and-practice, 6.05.2019.
- 24. Remišová, A., Búciová, Z. (2012). Measuring corporate social responsibility towards employees. Journal for East European Management Studies, Rainer Hampp Verlag, Mering, vol. 17, Iss. 3, https://www.jstor.org/stable/23281713?seq=1#metadata_info_ tab_contents, 15.04.2021.
- 25. Rok, B. (2004). *Odpowiedzialny biznes w nieodpowiedzialnym świecie*. Warszawa: Akademia Rozwoju Filantropii w Polsce, Forum Odpowiedzialnego Biznesu.
- 26. Seaman, A.E., Williams, J.J. (2018). Job Satisfaction: Are Corporate Social Responsibility Initiatives Beneficial And Do Different Governance Structures Matter? *The Journal of Applied Business Research, Vol. 34, No. 1,* 16.05.2022.
- 27. Story, J.S.P., Castanheira, F. (2019). Corporate social responsibility and employee performance: Mediation role of job satisfaction and affective commitment. *Corporate Social Responsibility and Environmental Management*, https://doi.org/10.1002/csr.1752, 17.05.2022.
- 28. Szczepańska, K. (2011). Zarządzanie jakością. W dążeniu do doskonałości. Warszawa: CH Beck.
- 29. van Rekom, J., Berens, G., van Halderen, M. (2013). Corporate social responsibility: Playing to win, or playing not to lose? Doing good by increasing the social benefits of a

company's core activities. *Journal of Brand Management, Vol. 20, 9,* www.palgrave-journals.com/bm/, 12.04.2021.

- 30. Wolak-Tuzimek, A. (2019). *Społeczna odpowiedzialność przedsiębiorstwa a konkurencyjność przedsiębiorstw.* Warszawa: CeDeWu.
- 31. Zieliński, M. (2014). Korzyści z wdrożenia koncepcji CSR w zarządzaniu zasobami ludzkimi. Zeszyty Naukowe Politechniki Śląskiej, Seria Organizacja i Zarządzanie, nr 1921.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

GHOST WORKERS – THE ESSENCE AND IMPORTANCE FOR CREATING SCIENTIFIC KNOWLEDGE

Regina LENART-GANSINIEC

Jagiellonian University in Krakow; regina.lenart-gansiniec@uj.edu.pl, ORCID: 0000-0002-9266-9638

Purpose: The gig economy involves short-term employment of staff via online platforms to complete specific tasks. These workers are referred to as "giggers" or "ghost workers". While the publications to date focus on the specificity of work or the motivation of giggers, the issue of their importance in the context of creating scientific knowledge remains insufficiently recognized. More and more often it is postulated that the inclusion of various stakeholders in research becomes some obligation, which is part of the democratization of science, its openness and inclusiveness. The purpose of this article is to identify the importance of ghost workers in the creation of scientific knowledge.

Design/methodology/approach: The publication is based on a systematic analysis of the literature on the subject published in the years 2006-2022. The following databases were used to collect the publications in question: Web of Science and Scopus.

Findings: The results of the systematic literature review indicate that it is possible to include a gig worker at every stage of the research process: identifying the general study area, selecting topic and developing a focus, deciding the approach, formulating a plan, collecting information, analysing, and presenting of findings.

Originality/value: The publication contributes to the development of research on the emerging issues of gig work in the context of creating scientific knowledge using crowdsourcing platforms.

Keywords: gig workers, ghost workers, crowdsourcing in science, scientific knowledge creation.

Category of the paper: Literature review.

1. Introduction

In response to the development of new technologies (Van Doorn et al., 2020), but also as a result of the financial crisis noted in 2007-2008 – the term "gig economy" appeared (Myhill et al., 2020). The very term reflects the situation on the labour market, where the rise in unemployment and the recession forced many employees to take up occasional, informal and temporary work. Since then, the concept of "gig economy" has evolved in the literature (Heeks

et al., 2021). In turn, the practice has experienced an increase in digital platforms enabling such work (Graham et al., 2017). Good examples may be provided by the following: Amazon Mechanical Turk, Task Rabbit, Deliveroo, Upwork, TopCoder, CrowdFlower and Clickworker. According to the data of the American agency Bureau of Labour Statistics, people working that way make up 34% of all employees in the United States. In 2016, the EY Global Contingent Workforce Study report even included the name of a group of people who work like that as communities – "giggers". It is expected that by 2055 over 60% of all works will have been carried out by the so-called "giggers" (Gol et al., 2019).

Bearing in mind the above, the rapid development of technology has become not only a catalyst for remodelling the way of scientific work, in particular in the context of accelerating the creation of scientific knowledge, ensuring increased productivity, opportunities for scientists to cooperate, information exchange and matching people with demand for a given service with people ready to perform it, and disseminating scientific knowledge. Moreover, technologies have created new opportunities and provided scientists with the potential to engage a wider audience, motivate volunteers, improve data collection, control data quality or increasing the speed of decision-making in research (Uhlmann et al., 2019).

Despite the growing interest of researchers in the issues of gig workers, literature lacks publications devoted to the essence and importance of ghost workers for the creation of scientific knowledge. Understanding this is important as there is some growing interest among researchers in the involvement of ghost workers in the creation of scientific knowledge, in particular with the use of scientific crowdsourcing platforms. As indicated by Aguisin et al. (2021, p. 1) "in some areas this increase was noticeable; one recent report shows an increase of 2,117% in management research using MTurk¹ from 2012 to 2019 (...). Moreover, it is possible that the COVID-19 pandemic could increase interest in online research platforms such as MTurk as academics are more likely to work remotely (Fan, Moen, 2021). That situation seems to be confirmed by the increase in the number of publications in which the authors used various crowdsourcing platforms: Keith et al. (2017), in 2012, recorded 7 such publications in 11 management journals. Three years later, in 2015 - 63 such publications. In turn, the author of this publication in 2022 identified 99 publications in which researchers used crowdsourcing. Those articles were published in prestigious journals, including Psychology & Marketing, Journal of Organizational Behaviour, Management Decision, Information Systems Research, Management Science, Personnel Review, Leadership Quarterly, Academy of Management and Journal of Business Research. Moreover, the gig economy is seen as an example of a broader trend of job platformization, with forecasts that by 2025 platforms will have participated in one third of all employee transactions (Kenney et al., 2019).

Some discussions of the ghost workers are focused on the specifics and work ethics of "giggers", their motivations, potential benefits, types of crowdsourcing platforms (Josserand,

¹ MTurk (full name Amazon Mechanical Turk) is one of the available gig economy platforms dedicated to science: https://www.mturk.com.

Kaine, 2019). The literature shows that "giggers" are a new type of knowledge workers (Hasija et al., 2020). Despite the growing interest of researchers in the specificity of ghost workers' work, it is postulated to conduct research on their significance for the creation of scientific knowledge (Beck et al., 2022), where the creation of knowledge comes down to "generating new knowledge, usually in the form of ideas, practices, scientific and technical studies, inventions or products" (Phelps et al., 2012, p. 1119).

This article contributes to filling the cognitive gap signalled and it provides evidence on the importance of ghost workers in the production of scientific knowledge. To achieve this research goal, a systematic approach to literature review was used (Tranfield et al., 2003; Lenart-Gansiniec, 2021). The choice of a systematic literature review is supported by the fact that such a review shows the path of previous research, integrates and summarizes what is known in a given area and it can stimulate new ideas. The review also helps identify gaps in the literature that provide space for developing or testing new ideas. By using clear and systematic methods when reviewing articles and all available evidence, errors can be minimized, thus providing reliable results from which conclusions can be drawn and decisions made (Lenart-Gansiniec, 2021). Moreover, a systematic review of literature "is a review of an existing body of literature that follows a transparent and reproducible methodology in searching, assessing its quality and synthesizing it, with a high level of objectivity" (Kraus et al., 2020, p. 1026).

Our publication provides several contributions to the literature devoted to gig workers and the creation of scientific knowledge with their help. Firstly, the research so far has focused on crowdsourcing in science: "the novelty of this research technique has not yet created routine and best practices, and more importantly, there is no consensus – especially between disciplines - as to what this" method "is, how to use it, and even why use it" (Eklund et al., 2019, p. 1). On the other hand, many publications deal with the issue of gig workers, but ignore the issue of their importance for the creation of scientific knowledge. It seems important to understand this. For example, the European Commission "has sought to advance open science policy from its inception in a holistic and integrated way, covering all aspects of the research cycle from scientific discovery and review to sharing knowledge, publishing, and outreach" (Burgelman et al., 2019, p. 1) and urges academics to use crowdsourcing platforms to conduct research. This article aims to contribute to filling this gap by looking for a systematic order in the current literature (Beck et al., 2022). In this context, a systematic review of the literature provides the basis for the development of knowledge, theory and discovers new research areas (Webster, Watson, 2002). Moreover, it is a kind of map of knowledge, as it allows to analyse and synthesize the available literature (Fisch, Block, 2018). Moreover, "crowdsourcing is a nascent tool for streamlining the process of gathering, processing and analysing research data in many fields. Tasks that were previously conducted by a small team of researchers can now be parallelized and processed by millions of volunteers over the Web, making questions that seemed previously impossible now tractable" (Law et al., 2017, p. 1).

2. Theoretical background

2.1. Gig economy and ghost workers

Gig economy is referred to in the literature as "sharing economy", "collaborative economy" or "creative economy" (Kuek et al., 2015), following the report "Department for Business, Energy & Industrial Strategy" (2018, p. 12): "the gig economy involves exchange of labour for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment by task basis". The gig economy is therefore a type of economy in which the initiators (organizations or private persons) invite employees (referred to as "ghost workers", "gig workers", "giggers", "1099", "modern precariat"; Block, Hennessy, 2017) to complete a specific task.

The activity of ghost employees takes place on a digital platform, which allows, among others for transferring job description, requirements, and expectations, for coordinating work, for motivating, and for involving employees and connecting teams around short-term tasks (Meijerink, Keegan, 2019). These platforms are called "markets" or "trading platforms" and their role is to mediate between employees and initiators. On the other hand, the work performed by ghost workers is defined as "platform-based employment which uses digital technology to mediate the process of commissioning, supervising, delivery and compensating work performed by workers on a contingent, piece-work basis" (Flanagan, 2017, p. 2).

Typically, assignments targeting virtual communities are structured around three categories, such as: (1) working on an equity platform where individuals sell or rent assets via a digital platform; (2) crowdwork where digitization work is done remotely; and (3) work with applications where the work is organized via a digital platform. Additionally, within the crowdwork framework, the following can be indicated:

- online task crowdwork refers to micro tasks that are modular in nature. They are simple tasks that do not require the involvement of many people and can be performed without the need for many people to cooperate. Examples of platforms can be provided by Amazon Mechanical Turk, UpWork, Fiverr, CloudFactory, CrowdComputing Systems or InCloudCounsel;
- 'playbour' crowdwork refers to performing tasks oriented at introducing innovations or solving problems. These tasks require involvement of a larger group of people who work together. Often those tasks use a gamification mechanism. Examples of platforms include but are not limited to InnoCentive.com or Threadless.com;
- asset-based services refers to the exchange of resources (e.g., cars, bikes, vacant rooms, DIY tools and many other things) owned by people logged in to platforms, e.g., Airbnb, Uber or TaskRabbit.

 profession-based freelance crowdwork – refers to the inclusion of virtual communities in tasks requiring a specialized level of professional knowledge and competences. Such tasks may include designing products or services. Examples of platforms: Apple, Google or iStockphoto.

As previously mentioned, in gig economy, tasks are performed by members of the virtual community, often referred to as "gig employees" or "ghost employees". They are mostly freelance contractors or freelancers who typically perform short-term work for multiple clients simultaneously. Their work is project-based, part-time and temporary in nature. Generally, these employees are flexible and autonomous (Berger et al., 2019), and the work performed by them is characterized by piecework or agency work with uncertain wage conditions and irregular orders (Duggan et al., 2020). Some researchers compare such work to "digital shops" (Zittrain, 2009).

2.2. Crowdsourcing in science

The basic component of gig economy is crowdsourcing *per se* (De Stefano, 2015). Growing interest in crowdsourcing among researchers was initiated in 2006 by Howe, the publisher of Wired magazine. In his article entitled "The Rise of Crowdsourcing" he described organizations that use crowdsourcing to source ideas from a virtual community. Two years later, in 2008, Howe in the introduction to his book "Crowdsourcing. Why crowd power drives the future of business", wrote, among others: "I had often said that crowdsourcing could be applied to anything reducible to bits and bytes, but not products measured in pounds and ounces. But [...] I changed my maxim. Crowdsourcing's limits are determined by people's passion and imagination, which is to say, there aren't any limits at all" (Howe, 2008, p. IX). Howe (2006, p. 1) argued that ""act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call" had limitless application possibilities.

Crowdsourcing in science is a response to the postulates of open science (Beck et al., 2022), collaborative science (Correia et al., 2018), academic commitment (Perkmann et al., 2021) and public participation in science (Strasser et al., 2019). Moreover, crowdsourcing in science is a response to the development of information and communication technologies, Web 2.0 technologies, the democratization of science, the need for academic teachers to be open to access to research by all interested parties, and the growing interest in public participation in science is accessed to the teacher et al., 2019).

As indicated by Bücheler et al. (2010), crowdsourcing in science is combined with research collaboration, and it changes the way researchers interact with the general public. At the same time, the literature indicates that crowdsourcing in science does not lead to maximization of value or creation of innovation, as in the case of crowdsourcing used by organizations. Crowdsourcing in science is defined as an online collaborative process in which researchers engage a group of individuals of their choice with different and diverse knowledge and skills,

through open invitation via the Internet and/or online platforms, to undertake a specific research task or set of tasks. The process involves dynamic interactions between members participating in the crowdsourcing initiative, workflow, assets, and performance. They all take place on crowdsourcing platforms including, inter alia, Abstrackr, Amazon Mechanical Turk, Cochrane Crowd, CrowdFlower, CrowdScreen SR, DistillerSR, EPPI-Reviewer, Mark2Cure, RobotSearch, Systematic Review Data Repository, Upwork and Weka.

3. Research methodology

A systematic literature review was carried out to identify the importance of ghost workers for the generation of scientific knowledge (Moher, 2009). The literature review was limited to scientific articles in 2006-2022, which is due to the fact that the concept of crowdsourcing was introduced in 2006. The literature on the subject was selected based on the search of two foreign databases (Scopus and Web of Science). This approach stems from several reasons. Scopus is a multi-domain database and covers a wide range of publications, offers quick basic and advanced searches (Falagas et al., 2008). On the other hand, Web of Science, compared to other databases, such as ProQuest or Emerald, is recommended for its robustness, convenient interface and the presence of various sorting functions. To ensure the continuity of the research (Tranfield et al., 2003), initial database searches were performed first. The filter criterion included the following keywords: "gig worker* OR ghost worker* OR crowdsourcing in science* AND scientific knowledge creation*". This initial search yielded 551 hits (Scopus: 470; Web of Science: 81). The following restrictions were imposed on the identified articles:

- 1) full-text, peer-reviewed scientific articles (books, book chapters, conference materials, reviews, and editorial introductions have been excluded),
- the keywords "gig worker* OR ghost worker AND scientific knowledge creation*" in the title, summary,
- 3) category "business, economy, management".

Then, the abstracts were reviewed and verified, which allowed the publication base to be narrowed down to those focused strictly on gig workers from the perspective of management and quality sciences. Hence, 62 publications selected on the basis of foreign databases were included in the further analysis.

4. Systematic literature review results

According to Uhlmann et al. (2019, p. 727) "crowdsourcing is the next step in science's progression from individual scholars to increasingly larger teams and now massive globally distributed collaborations (...) it seeks to complement this standard approach to provide more options for accelerating scientific discovery". A literature review revealed the importance of ghost workers for the scientific knowledge creation. This importance was demonstrated in accordance with the stages of the research process (see Table 1).

Table 1.

Criteria	Task type
	Sharing resources
	Providing valuable knowledge and resources to elaborate complex scientific questions
Idoutifering the	Gathering information in design research
Identifying the general study	Identifying gaps in terms of possible variables and relationships
area	Finding problems
area	Making a systematic literature review
	Assembling resources
	Creating new ideas, designs, algorithms
Calcations to at	Conducting research into scientific questions
Selecting topic	Acquiring new knowledge
and developing a focus	Defined goals or hypotheses
a locus	Generating novel research ideas and solutions to problems
Desiding the	Managing data
Deciding the approach	Correcting/modifying content
approach	Improving existing research paradigms and interventions
	Improving optimization processes
	Clearing experimental protocols
	Designing a study
Formulating	Designing a survey
a plan	Generating data
	Recruiting participants for surveys
	Collecting validity evidence for new measurement instruments
	Sampling
	Generating data
	Collecting data
	Sampling for conducting experiments
Collecting information	Monitoring
Information	Refining measurement of latent constructs
	Testing evidence
	Tagging collaboratively

Ghost workers and scientific knowledge creation

	Analysing data
	Processing data
	Visualizing data, integrating data and providing analytic solutions
	Translating or annotating text as well as video and audio materials
	Analysing the content quantitatively
	Coding
	Gathering large volumes of data
	Validating data
	Transcribing
Analyzing	Recording and creating content
Analysing	Commenting, providing critical responses and stating preferences
	Categorizing
	Cataloguing
	Contextualizing
	Mapping
	Georeferencing
	Translating
	Editing or proofreading
	Entering structured or semi-structured data
	Replicating findings before publication
Presenting of	Writing research reports
findings	Producing knowledge
mulligs	Distributing problem solving

Cont. table 1.

Source: own study based on: Pan, Blevis (2011); Parrick, Chapman (2020); Wang, Yu (2019); Petersen (2013).

The existing scientific achievements show that the work of gig workers in line with the idea of crowdsourcing "holds the potential to greatly expand the scale and impact of scientific research. It seeks to promote inclusion in science, maximize material and human resources, and make it possible to tackle problems that are orders of magnitude greater than what could be solved by individual minds working independently" (Uhlmann et al., 2019, p. 727). Comparing traditional methods of creating scientific knowledge with those based on new technologies, it can be seen that they are not only an alternative, but also a strategy for organizing the work of researchers, an alternative model of doing science (Uhlmann et al., 2019) and a research tool supporting scientific research (Law et al., 2017). All this makes scientific crowdsourcing crucial in the context of lowering the costs of conducting scientific research (Steelman et al., 2014), increasing the scale and impact of research, inclusiveness and democratization of science, and accelerating scientific discovery (Edgar et al., 2016). Moreover, scientific crowdsourcing responds to concerns related to traditional ways of generating scientific knowledge. Those ways used to be criticized for insufficient use of science to solve problems affecting members of society (Djenontin, Meadow, 2018).

5. Conclusion

The systematic literature review was aimed at identifying the importance of ghost workers for the creation of scientific knowledge. These analyses develop research on the emerging issues of gig work in the context of creating scientific knowledge using crowdsourcing platforms. The current state of knowledge allows us for claiming that ghost workers perform a variety of tasks directed by the initiator-researcher: from the simple to the creative. To conclude, those tasks may cover all stages of creating scientific knowledge: identifying the general study area, selecting topic and developing a focus, deciding the approach, formulating a plan, collecting information, analysing, and presenting of findings. As the results of the systematic literature review show that more and more researchers see the possibility of involving gig employees in performing various tasks. Inter alia, it is possible to involve gig workers in the following tasks: sharing resources, identifying gaps in terms of possible variables and relationships, finding problems, making a systematic literature review, designing a study or a survey, generating, analysing, processing, visualizing, integrating data, and more.

Literature shows that the said employees cannot only be the main source of new ideas and new knowledge. Their work is based on the so-called "wisdom of the crowd", where a group in the right conditions could potentially work out more than many specialists in a given field – which allows you for speeding up work, but also helps you reduce costs. And finally, tasks are performed by them practically all the time and 24/7, because gig employees come from different time zones.

Additionally, more and more employees are getting registered on various digital platforms. The increase in publications in which the authors used various digital-crowdsourcing platforms should be noted. Editorial offices of journals open up to this type of research, despite the resistance. It is suggested that ghost workers are beginning to play a significant role in creating scientific knowledge, in particular, in formulating research problems or hypotheses, ideas for research, filling out surveys or submitting reviews and opinions on working-papers. This change in the creation of scientific knowledge results mainly from the expectations posed to research workers, but also from the demands of inclusiveness, openness and democratization of science.

Despite numerous positive implications, there are threats and risks that result primarily from the specificity of virtual communities and the crowdsourcing mechanism. The following can be indicated: risk of idea theft, copyright infringement, phishing, spamming, stalking, malware and fraud. Additionally, community workers are often treated as "commodities" and their work becomes a commodity (Bergvall-Kåreborn, Howcrof, 2014). Jeff Bezos, creator of the Amazon Mechanical Turk platform in 2005, said: "You've heard of software as a service. Now this is human-as-a-service" (Cater, 2021). Admittedly, press reports (Cater, Heikkila, 2021) and those published on the website of the European Commission show that the European Union recognized the need to regulate work that involves crowdsourcing platforms and started consultations on gig employees, but this does not solve the global issue of privacy and the introduction of global solutions. Therefore, despite the undisputed importance of ghost workers for the creation of scientific knowledge, it is important to pay attention to the negative implications as well. All this leads to demands to conduct research on the challenges faced by researchers who choose to involve ghost workers in the creation of scientific knowledge.

Please note that this publication is not free from limitations that may pave the way for future research. Despite the comprehensive nature of the systematic literature review, there is a risk that some publications could have been omitted. This may be due to the fact that the selection of publications was made on the basis of full-text publications available in English databases, which eliminated domestic literature and studies that were not available in the digital version. Additionally, the conducted systematic literature review takes into account only peer-reviewed scientific articles and omits post-conference materials or books. Therefore, in order to overcome potential limitations, it is suggested to extend the literature review to crowd science and crowd work magazines and consider the inclusion of conference materials and books.

Acknowledgements

This project was financed from the funds provided by the National Science Centre, Poland awarded on the basis of decision number DEC-2019/35/B/HS4/01446.

References

- 1. Aguinis, H., Villamor, I., Ramani, R.S. (2021). MTurk research: Review and recommendations. *Journal of Management*, 47, 823-837.
- Beck, S., Bergenholtz, C., Bogers, M., Brasseur, T.-M., Conradsen, M.L., Di Marco, D., ... Xu, S.M. (2022). The Open Innovation in Science research field: a collaborative conceptualisation approach. *Industry and Innovation*, 29(2), 136-185. doi:10.1080/ 13662716.2020.1792274.
- 3. Beck, S., Brasseur, T.-M., Poetz, M.K., Sauermann, H. (2019). What's the problem? How crowdsourcing contributes to identifying scientific research questions. *Academy of Management Proceedings*, *1*, 15282. doi:10.5465/ambpp.2019.115.
- 4. Berger, T., Frey, C.B., Levin, G., Danda, S.R. (2019). Uber happy? Work and well-being in the 'Gig Economy.' *Economic Policy*, *34*(99), 429-477. doi:10.1093/epolic/eiz007.

- 5. Bergvall-Kåreborn, B., Howcroft, D. (2014). Amazon Mechanical Turk and the commodification of labour, New Technology. *Work And Employment*, 29(3), 213-223.
- 6. Block, S., Hennessy, T. (2017). *Sharing economy or on-demand service economy?*, *Canadian Centre for Policy Alternatives*. Canadian Centre for Policy Alternatives.
- 7. Buecheler, T., Sieg, J.H., Füchslin, R.M., Pfeifer, R. (2010b). *Crowdsourcing, open innovation and collective intelligence in the scientific method: a research agenda and operational framework.* The 12th International Conference on the Synthesis and Simulation of Living Systems. Odense, Denmark.
- Burgelman, J.-C., Pascu, C., Szkuta, K., Von Schomberg, R., Karalopoulos, A., Repanas, K., Schouppe, M. (2019). Open science, open data, and open scholarship: European policies to make science fit for the twenty-first century. *Frontiers in Big Data*, 2, 43. doi:10.3389/fdata.2019.00043.
- 9. Cater, L. (2021, July 21). 'At the whim of Amazon' after the pandemic, gig workers are getting organized. Politico. https://www.politico.eu/article/coronavirus-pandemic-worker-rights-amazon-uber-upwork.
- Cater, L., Heikkila, M. (2021, February 24). Commission launches consultation on platform workers. Politico. https://www.politico.eu/article/commission-launches-consultation-onplatform-workers-rights.
- Correia, A., Schneider, D., Fonseca, B., Paredes, H. (2018). Crowdsourcing and massively collaborative science: A systematic literature review and mapping study. *Lecture Notes in Computer Science* (pp. 133-154). Cham: Springer International Publishing.
- 12. Djenontin, I.N.S., Meadow, A.M. (2018). The art of co-production of knowledge in environmental sciences and management: lessons from international practice. *Environmental Management*, *61*(6), 885-903. doi:10.1007/s00267-018-1028-3.
- Duggan, J., Sherman, U., Carbery, R., McDonnell, A. (2020). Algorithmic management and app-work in the gig economy: A research agenda for employment relations and HRM. *Human Resource Management Journal*, 30(1), 114-132. doi:10.1111/1748-8583.12258.
- Edgar, J., Murphy, J., Keating, M. (2016). Comparing traditional and crowdsourcing methods for pretesting survey questions. SAGE Open, 6(4), 215824401667177. doi:10.1177/2158244016671770.
- 15. Eklund, L., Stamm, I., Liebermann, W.K. (2019). The crowd in crowdsourcing: Crowdsourcing as a pragmatic research method. *First Monday*, 24(10). doi:10.5210/fm.v24i10.9206.
- 16. Falagas, M.E., Pitsouni, E.I., Malietzis, G.A., Pappas, G. (2008). Comparison of PubMed, Scopus, Web of Science, and Google Scholar: strengths and weaknesses. FASEB Journal: Official Publication of the Federation of American Societies for Experimental Biology, 22(2), 338-342. doi:10.1096/fj.07-9492LSF.

- 17. Fisch, C., Block, J. (2018). Six tips for your (systematic) literature review in business and management research. *Management Review Quarterly*, 68(2), 103-106. doi:10.1007/s11301-018-0142-x
- 18. Flanagan, F. (2017). Symposium on work in the 'gig' economy: Introduction. *The Economic and Labour Relations Review*, 28, 378-381.
- 19. Gol, E.S., Stein, M.K., Avital, M. (2019). Crowdwork platform governance toward organizational value creation. *The Journal of Strategic Information Systems*, 28(2), 175-195.
- 20. Graham, M., Hjorth, I., Lehdonvirta, V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer* (*Brussels, Belgium*), 23(2), 135-162. doi:10.1177/1024258916687250.
- 21. Hasija, S., "Paddy" Padmanabhan, V., Rampal, P. (2020, June 1). Will the pandemic push knowledge work into the gig economy? *Harvard Business Review*. Retrieved from https://hbr.org/2020/06/will-the-pandemic-push-knowledge-work-into-the-gig-economy.
- Heeks, R., Graham, M., Mungai, P., Van Belle, J.-P., Woodcock, J. (2021). Systematic evaluation of gig work against decent work standards: The development and application of the Fairwork framework. *The Information Society*, *37*(5), 267-286. doi:10.1080/01972243.2021.1942356.
- 23. Howe, J. (2006). The rise of crowdsourcing. Wired Magazine, 14(6), 1-4.
- 24. Howe, J. (2009). *Crowdsourcing: How the power of the crowd is driving the future of business*. London, England: Random House Books.
- 25. Kaine, S., Josserand, E. (2019). The organisation and experience of work in the gig economy. *The Journal of Industrial Relations*, 61(4), 479-501. doi:10.1177/0022185619865480.
- 26. Keegan, A.E., Meijerink, J. (2019). Conceptualizing human resource management in the gig economy: Toward a platform ecosystem perspective. *Journal of Managerial Psychology*, *34*(4), 214-232.
- Keith, M.G., Tay, L., Harms, P.D. (2017). Systems perspective of Amazon Mechanical Turk for organizational research: Review and recommendations. *Frontiers in Psychology*, 8, 1359. doi:10.3389/fpsyg.2017.01359
- 28. Kraus, S., Breier, M., Dasí-Rodríguez, S. (2020). The art of crafting a systematic literature review in entrepreneurship research. *International Entrepreneurship and Management Journal*, *16*(3), 1023-1042. doi:10.1007/s11365-020-00635-4.
- 29. Kuek S.C., Paradi-Guilford C., Fayomi T., Imaizumi S., Ipeirotis P., Pina P., Singh M. (2015). *The global opportunity in online outsourcing*. Washington, DC: World Bank, https://openknowledge.worldbank.org/handle/10986/22284.
- 30. Law, E., Gajos, K.Z., Wiggins, A., Gray, M.L., Williams, A. (2017). Crowdsourcing as a tool for research: Implications of uncertainty, ACM conference on computer supported cooperative work and social computing.

- 31. Lenart-Gansiniec, R. (2021). Systematyczny przegląd literatury w naukach społecznych: Przewodnik dla studentów, doktorantów i nie tylko. Warszawa: Scholar.
- 32. Lepanjuuri, K., Wishart, R., Cornick, P. (2018). *The characteristics of those in the gig economy*. Department for Business, Energy and Industrial Strategy, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment _data/file/687553/The_characteristics_of_those_in_the_gig_economy.pdf.
- 33. Moher, D. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement (Chinese edition). *Zhong Xi Yi Jie He Xue Bao [Journal of Chinese Integrative Medicine]*, 7(9), 889-896. doi:10.3736/jcim20090918.
- 34. Myhill, K., Richards, J., Sang, K. (2021). Job quality, fair work and gig work: the lived experience of gig workers. *The International Journal of Human Resource Management*, *32*(19), 4110-4135. doi:10.1080/09585192.2020.1867612.
- 35. Pan, Y., Blevis, E. (2011). A survey of crowdsourcing as a means of collaboration and the *implications of crowdsourcing for interaction design*. IEEE, International Conference on Collaboration Technologies and Systems (CTS), 397-403.
- 36. Parrick, R., Chapman, B. (2020). Working the crowd for forensic research: A review of contributor motivation and recruitment strategies used in crowdsourcing and crowdfunding for scientific research. *Forensic Science International: Synergy*, *30*(2), 173-182.
- 37. Perkmann, M., Salandra, R., Tartari, V., McKelvey, M., Hughes, A. (2021). Academic engagement: A review of the literature 2011-2019. *Research Policy*, 50(1), 104114. doi:10.1016/j.respol.2020.104114.
- Petersen, S.I. (2013). Crowdsourcing in design research-Potentials & limitations, DS 75-1. Proceedings of the 19th International Conference on Engineering Design (ICED13), Design for Harmonies, Vol. 1. Seoul, Korea.
- 39. Phelps, C., Heidl, R., Wadhwa, A. (2012). Knowledge, networks, and knowledge networks: A review and research agenda. *Journal of Management*, *38*(4), 1115-1166.
- 40. Steelman, Z.R., Hammer, B.I., Limayem, M. (2014). Data collection in the digital age: Innovative alternatives to student samples. *MIS Quarterly: Management Information Systems*, 38(2), 355-378. doi:10.25300/misq/2014/38.2.02
- 41. Stefano, D. (2015). The rise of the just-in-time workforce: On-demand work, crowdwork, and labor protection in the gig-economy, Comp. *Comp. Lab. L. & Pol'y J*, 37.
- 42. Strasser, B., Baudry, J., Mahr, D., Sanchez, G., Tancoigne, E. (2019). Citizen science? Rethinking science and public participation. *Science & Technology Studies*, *32*, 52-76.
- 43. Tranfield, D., Denyer, D., Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207-222.
- 44. Uhlmann, E.L., Ebersole, C.R., Chartier, C.R., Errington, T.M., Kidwell, M.C., Lai, C.K., ... Nosek, B.A. (2019). Scientific utopia III: Crowdsourcing science. *Perspectives on*

Psychological Science: A Journal of the Association for Psychological Science, *14*(5), 711-733. doi:10.1177/1745691619850561.

- 45. van Doorn, N., Vijay, D. (2021). Gig work as migrant work: The platformization of migration infrastructure. *Environment & Planning A*, 0308518X2110650. doi:10.1177/0308518x211065049.
- 46. Wang, G., Yu, L. (2019). The game equilibrium of scientific crowdsourcing solvers based on the Hotelling model. *Journal of Open Innovation Technology Market and Complexity*, *5*(4), 89. doi:10.3390/joitmc5040089.
- 47. Webster, J., Watson, R.T. (2002). Analyzing the past to prepare for the future writing a literature review. *MIS Quarterly*, 26(2), 13-23.
- 48. Zittrain, J. (2009, December 7). *The internet creates a new kind of sweatshop*. Retrieved, from: https://www.newsweek.com/internet-creates-new-kind-sweatshop-75751, July 8, 2022.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

EMPLOYEE SUPPORT FOR HRM COVID-19 STRATEGIES AS A FACTOR SHAPING JOB REDESIGN INFLUENCE ON JOB PERFORMANCE

Kamila LUDWIKOWSKA

Wrocław University of Science and Technology; e-kamila.ludwikowska@pwr.edu.pl, ORCID: 0000-0002-2975-7539

Purpose: The impact of the COVID-19 pandemic has been complex and disruptive at the organizational level. It has prompted organizations to implement many necessary changes to continue organization operations. The maintenance of employee performance became the main factor of interest of human resource experts and resulted in the design of HRM strategies that support employees through these changes. It seems important to investigate factors that influence job performance. Therefore, this study aims to examine the relationship between job redesign and employee performance and the mediating effects of employee support for HRM COVID-19 strategies on this relationship.

Design/methodology/approach: The study was conducted among 378 organizations operating in Poland during the 2nd wave of the COVID-19 pandemic. To verify the hypothesis, a mediation analysis was performed using model 4 of the SPSS macro-PROCESS.

Findings: The results showed that redesigning the work environment during a crisis in accordance with the preferences and resources of the employees will increase their job performance if they support the changes implemented by the organization.

Practical implications: The knowledge gained from this study can be used by employee development practitioners to design various training programs on job crafting, which can contribute to stress reduction, increased well-being and engagement in the tasks at hand, and consequently employee and organizational performance.

Originality/value: The study advances the HRM literature on HRM explaining how HRM practices have changed and have been adopted to the changed nature of the work during COVID-19. The study revealed that the redesign of the job is a key HRM strategy in the times of COVID-19 and it seems to remain the same importance for the future.

Keywords: job redesign, job crafting, job performance, COVID-19, HRM strategies.

Category of the paper: Research paper.

1. Introduction

Nowadays, it became obvious that the nature of work has changed due to the COVID-19 pandemic. The outbreak of COVID-19 created an urgent need to redesign the entire work environment to ensure continuous performance efficiency. As response organizations created policies to enable employees to work from home or in the hybrid mode. That new mode of work created increased demands for employees to adjust to the new work environment. This change caused more long-term consequences. Employees are expected to contribute to create their own working environment. They will no longer be given a specific list of defined duties and tasks that remain fixed over a long period of time. The new paradigm in the workplace is based on continuous employee motivation in creating their own tasks to ensure high performance. Therefore, the redesign of the job became one of the key HRM strategies used to increase employee efficiency.

Several studies revealed a positive influence of job redesign on employee performance (Pila-Ngarm, Siengthai, 2017). However, it is crucial to understand the conditions to create its positive impact.

This study aims to provide more information into the literature on the importance of job redesign, especially in a time of crisis such as the one caused by COVID-19. There are no previous studies which have identified the mediating role of the employees support for HRM COVID-19 related strategies. To fill in this gap in this study, the author asserts the mediating role of employee support for HRM COVID-19 strategies on the relationship between job redesign and employee performance.

In this context, the author argues that the current crisis provides scholars with the opportunity to reflect on established HRM approaches, as well as future directions for research. Specifically, the author posits the need for a greater focus on job redesign as a practice and a long-term investment in human resources.

The objective of this paper is threefold. First, it presents an overview of job redesign conceptualizations. The second purpose of this paper is to examine the relationship between job redesign and employee performance through the mediating role of employee support for HRM COVID-19 strategies. Next, based on findings from the literature, this article has attempted to underline the importance of job redesign in predicting positive individual and organisational outcomes. The implications for managers and researchers are discussed at the end of this paper.

2. Review of the literature

2.1. Job performance

In the human resource management literature, there are numerous definitions of job performance (Darvishmotevali, Ali, 2020). Campbell et al. (1993) argued that perceptions of employee's job performance may be determined by one's point of view. This results in understanding employee's job performance as outcomes or as behaviors. Job performance perceived by outcomes assesses the results of employee's behavior in the organization, hence the perception of employee's job performance in the context of outcomes is expected to remain mostly related to the behavioral aspect (Darvishmotevali, Ali, 2020). Therefore, an employee's job performance in the human resource management literature is most often defined in terms of the expected by company employees' behaviors (Campbell, Wiernik, 2015; Kell, Motowidło, 2012).

Motowidlo and Kell (2012) argue that job performance is the total expected value to the organization, which is represented by a set of certain behaviors that an individual performs during the lifetime in the organization. This set of behaviours determines a high level of job performance. Hence, it is crucial to define them (Podsakoff, MacKenzie, 1997; Smith, Organ, Near, 1983). Some researchers also indicate that job performance is shaped by the knowledge, skills, and characteristics that an employee has and manifests them through behaviours (Campbell et al., 1993). Therefore, these behaviors affect not only the organization's value being generated, but also its goals being achieved (Cambell, Wiernik, 2015). It can be measured through the outcomes of the organization, such as productivity and company performance. The others also add employees' motivations to perform the job better (Pila-Ngarm, Siengthai, 2017).

The impact of job performance on organizations highlights how important this factor is to organizational performance. Therefore, there is still a need among researchers to verify the phenomenon of job performance and recognize the components that shape it.

2.2. Job redesign influencing job performance

There are many job performance models in the contemporary literature in the field of management science (Schmitt, Chen, 1998; Campbell et al., 1993; Borman, Motowidlo, 1993). Many researchers try to answer the question of which factors have a significant impact on employee job performance (Rich et al., 2010). Undoubtedly, one of the main factors is the way how the job is designed, mainly how the tasks and roles are structured and modified to meet individual, group, and organizational outcomes.

The pandemic has caused many changes in the way work is done and approached. The pace of adoption of modern technology has been greatly accelerated by the pandemic. Previously performed tasks have been transferred in large part to the virtual world. Working from home forced employees to create their own work environment, the architecture of offices, and the nature of tasks also has changed. These changes have often led to the loss of the sense of work. Therefore, to better support employees and maintain work efficiency, managers needed to know not only how to manage remote teams, but above all, they needed to rethink work requirements and expectations. This required planning how work should be done so that employees' needs and expectations were considered more than ever before. Therefore, the redesign of the job as an HRM practice became especially important during the pandemic period.

Job design describes how the job, tasks, and roles are structured and modified to meet individual, group, and organizational outcomes (Grant, Parker, 2009). Job redesign is a process of changing the job together with its tasks and roles; however, it requires new job requirements, tasks, knowledge, skills, and abilities.

Hackman and Oldham (1980) stressed the person-job relationship as a major factor in organizational improvement. They claimed that many problems in the organization can be solved by proper design of the work (Mayrowetz et al., 2007). Redesign of the work creates greater meaningfulness in employee work due to using variety of skills, accomplishing a unique and identifiable task, stressing significance of the task and job. In addition, employees should feel more responsible for their work due to the autonomy that is given to them. Finally, employees will know the results of their work as long as they are provided with feedback related to their work (Mayer, Bardes, Piccolo, 2008).

Recently, the concept of job crafting gained popularity in the job redesign literature (Rai, 2018; Kapica, Baka, 2021). It is an employee-initiated behavior aimed at transforming working conditions in order to increase job satisfaction and match it to the needs and abilities of employees. The concept of job crafting was introduced by Wrzesniewski and Dutton (Wrzesniewski, Dutton, 2001). According to the researchers, the purpose of the job crafting in its definition was primarily to give meaning and relevance to work, to increase job satisfaction, and to increase engagement, resilience, and productivity. Job crafting is an innovative and spontaneous practice to create a different job within the context of the jobs already defined. Employees can take the actions to redefine jobs through changing the meaning of their work. They can change the scope, quantity, or nature of the task to emphasize tasks related to one's passion, alter one's opinion about his job to redefine the purpose of the work or change beliefs about the job, or change the quality or frequency of interactions with other people at work to build meaningful relationships (Rai, 2018). Employees can change their job and environment to ensure an optimal fit between the job and themselves to enhance the level of well-being for better individual and organizational performance.

In later years, more models of job crafting have been proposed (Kapica, Baka, 2021). Tims and Bakker (2010), the creators of the job demands-resources (JD-R) model, recognized that the classic view does not consider the role of job demands and resources in the context of both the nature of job crafting itself and its determinants and consequences (Tims, Bakker, 2010).

In order to deal with risk factors at work, resources are needed, e.g., task resources, social resources, organizational factors (Baka, 2018). These resources stimulate learning, personal development, and are a source of positive attitudes towards work. Job crafting occurs in the situation of high job demands and lack of resources to cope with them. Therefore, job crafting can be seen as a specific form of proactive behaviour in which the employee initiates change in the level of job demands and job resources (Tims, Bakker, 2010). According to the authors of the model, job crafting restores the balance between demands and resources, which results in increased job involvement, job satisfaction, and increased productivity.

One of the more recent approaches to job crafting is the model proposed by Kooij et al. (2017). According to the authors, job crafting aims to adapt the way work is performed to the employee's resources, which results in better job performance. This is done by making changes within the job tasks to fit not only the passion of the worker but also their resources.

Today's researchers emphasize that job crafting is a systemic activity and involves adapting the way work is done to the individual's preferences, abilities, motives, or passions (Tims et al., 2012). Most recently, work design researchers are recognizing that jobs, roles, tasks, and projects are embedded in interpersonal relationships, connections, and interactions (Grant, Parker, 2009).

The redesign of the job seems to have an important influence on job performance. Various studies have confirmed this positive impact (Pila-Ngarm, Siengthai, 2017). Redesigning jobs reduces job dissatisfaction by changing the meaning of routine tasks and work and improving motivation to act.

Therefore, based on the previous studies, the following hypothesis is formulated: *H1. Job redesign has a positive influence on job performance.*

2.3. The role of employee support for HRM Covid-19 strategies in shaping job performance by job redesign

Employee performance is often investigated in relation to HRM practices in the organization. HRM practices determine how employees cope with the uncertain work environment, and therefore the role of HRM became critical during COVID-19 (Agarwal, 2021). It is especially important during the COVID-19 pandemic because many HRM practices have changed and have been adopted due to the changed nature of work.

Perhaps the most significant HRM challenges arising from the COVID-19 pandemic involve adjusting employees to altered work conditions. Shifting employees to remote work required organizations to redesign the working environment in the organization, as well as help employees create their own spaces in their homes.

However, the key to the successful implementation of new HRM practices is how employees support these changes. Employee support for HRM COVID-19 strategies may have a significant meaning in allowing organizations to better adapt to the new working conditions forced by the COVID-19 pandemic. The engaging attitude of employee support in implementing change in an organization is characterized by significant dedication leading the organization to the successful implementation of change and an employee's enthusiasm for change and promoting it to other employees (Herscovitch, Meyer, 2002).

To stimulate a supportive attitude in employees towards the changes taking place in the organization and the introduction of new HRM practices, it is necessary to ensure that they understand the sense and purpose of the upcoming changes (Raeder, Bokova, 2019).

This understanding may be ensured by informing employees about the planned change process in the organization and making them aware of the meaning and purpose of the changes. These actions can reduce employee stress occurring due to the lack of a sense of stability and can lead to the employee's belief in acceptance of the changes (Aurelia, Momin, 2020). Additionally, an employee in turn identifies much more with its goals and with the organization itself (Agote et al., 2016).

In the view of COVID-19, the support of employees for changes implemented by the organization in terms of work nature and environment gained a significant meaning. Employers had to help employees find themselves in the new work conditions. Therefore, the way employees support proposed changes can have a positive impact on employee performance. Therefore, the author proposed the following hypothesis:

H2: The effect of job redesign on employee performance is mediated by employee support for COVID-19 strategies.

The model is presented in Figure 1:

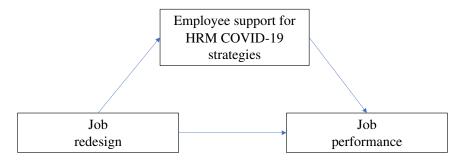


Figure 1. Job redesign based model of job performance. Source: own elaboration.

3. Research methodology and results

3.1. Research sample

To verify the proposed hypothesis a questionnaire has been developed. The survey questions were related to organizational HRM practices and job-related attitudes. In the first stage, the pilot study has been conducted among 25 managers who played the role of competent

judges. The purpose was to determine the quality of the research tool. The comments allowed us to improve the questionnaire. The second stage has been conducted in the first quarter of 2021. Only one anonymous survey was carried out in one organisation, and it was completed by employees who had a broad view of the entire organisation. The only limitation of the sample was the geographical scope of the activity.

The data was collected from 378 organizations located in Poland using the CAWI method. The characteristics of the sample obtained are presented in Table 1, showing the sampling variability.

Table 1.

	Source of revenue			Total
Organization size	production	trade	service	
Micro (below 10 people)	10	12	8	30
Small (11-50 people)	29	56	33	118
Medium (51-250 people)	45	27	43	115
Large (above 250 people)	46	14	55	115
Total	130	109	139	378

Size and source of revenue of the organizations included in the sample.

Source: own elaboration.

3.2. Variables overview

The measures of the study constructs are adapted from previous studies. Respondents were asked to share their opinion about the behavior of the organization in response to COVID-19. All scales were measured on a five-point Likert scale where the responses ranged from 1 (strongly disagree) to 5 (strongly agree).

Job redesign was measured with a two-item scale tested whether the organization offered employees during the COVID-19 pandemic alternative work location, such as work from home, hybrid, or rotation mode), flexible work hour arrangements. Moreover, the scale measured whether organization created new skill demands (Aurelia, Momin, 2020; Vardarlier, 2016).

Employee support for HRM Covid-19 strategies was measured with a 4-item scale that focused on employee engagement and willingness to contribute to the company's HRM Covid-19 strategies (Shen, Zhang, 2019; Chen et al., 2020).

Job performance was measured with a 7-items sale that focused on the Task proficiency, Task meticulousness and work discipline (Ali-Hassan et al., 2015; Kwahk, Park, 2018).

4. Empirical Research Results

4.1. Variables scales analysis

All scales were tested using Cronbach's α and factor analysis in order to assess whether conceptualized scales can be used for the study (Table 2). This approach seems to be sufficient due to the fact that the scales used have been previously validated by the creators (Bieńkowska, Tworek, 2020). The Cronbach's Alpha of all research variables is near or above 0.6. The acceptable value of Cronbach's Alpha that ranges from 0.55 to 0.81 (Taber, 2018). Hence, it maybe concluded that the existing questionnaire variables are reliable and are acceptable values and provided adequate support for the use of all proposed scales for further analysis of the measurement model and hypothesis testing (van Griethuijsen et al., 2015).

Table 2.

Reliability of scales

Variable	No. of Scales	Cronbach's &	Factor Analysis
Job redesign	2	0,552	69.102
Employee support for HRM COVID-19 strategies	4	0,767	58.939
Job performance	7	0,812	47.428
Source: own elaboration.			

4.2. Mediation model

To answer the question about the mediating role of employee support for HRM COVID-19 strategies in the relationship between job redesign and job performance, a mediation analysis was performed using model 4 of the SPSS macro-PROCESS (Hayes, 2013).

Table 3.

Correlations analysis between analysed constructs

		EmplSup	JobPerf	ReDesiC
EmlpSup	Pearson Correlation	1	.713**	.515**
	Sig.		.000	.000
	Ν	378	378	378
JobPerf	Pearson Correlation	.713**	1	.530**
	Sig. (2-tailed)	.000		.000
	Ν	378	378	378
ReDesiC	Pearson Correlation	.515**	.530**	1
	Sig. (2-tailed)	.000	.000	
	N	378	378	378

Source: own elaboration.

The results obtained show that there is a statistically significant and high correlation between all variables analyzed. Such a conclusion enabled one to verify the mediation model of job performance. The MACRO PROCESS Model 4 has been employed to test the direct effect of job redesign on job performance and whether the employee engagement in HRM COVID-19 strategies mediates the effect of this relation (H2). The employee engagement in HRM COVID-19 strategies was tested in the model as the mediator. The results revealed that the relation between job redesign and job performance is stronger when employees support HRM COVID-19 strategies (Table 4).

Table 4.

Mediation effect of Employee support for COVID-19 strategies on predicting organizational commitment

Mediator	Direct effect value	Indirect effect value	Boot LLCI	Boot ULCI	R ²
Employee support for HRM COVID-19 strategies	.1784	.2496	.1838	.3233	.5445
Source: own elaboration.					

The regression model obtained with mediator is statistically significant. Furthermore, employee support for HRM COVID-19 strategies is a statistically significant mediator of the model (p < 0,001, coeff. = 0.5445, se = 0.0370). The mediating effect is also statistically significant, as can be observed in Table 5 (BootLLCI and ULCI are both above the value of 0).

5. Discussion

The article examined the role of job redesign in shaping employee job performance. The results of the research prove that the formulated model is correct and interesting to further develop. It is also important to consider other factors that influence the relationship. Due to the fact that employee performance is often investigated in the relation with HRM practices in the organization (Agarwal, 2021), hence it seemed natural to consider their support for HRM strategies implementation, particularly in the times of the crisis. The role of HRM became critical during COVID-19 because many of HRM practices have changed and have been adopted to the changed nature of the work.

The key to the successful implementation of some changes in HRM practices may be the support of employees for these strategies (Shin et al., 2012).

The results show that there is a direct relation between job redesign and employee performance, however the relation is stronger when employees support HRM COVID-19 strategies.

6. Conclusions

The redesign of the job revealed to be a key HRM strategy in the times of COVID-19 and it seems to remain the same importance for the future. The more contemporary approach to job redesign described in this article, namely job crafting, explains how employee-initiated behavior aimed at transforming working conditions may improve output of the work and job

satisfaction in turn. The proactive approach to shaping your own work environment and the meaning of work gained significance during the COVID-19 crisis. Organization may support employees providing them trainings on how to develop the job crafting attitude. Thanks to that, employees will be able to apply these interventions on the daily basis.

However, the study also has some limitations. First, there was a limited number of participating organizations, and second, all were operating in Poland.

Despite these imitations, the study has implications for researchers and practitioners. There is room to do research to investigate other factors influencing the relationship between job redesign and job performance. Further research may look for other benefits of job redesign and job crafting on organizational performance.

The knowledge gained from this study can be used by employee development practitioners to design various training programs on job crafting, which can contribute to stress reduction, increased well-being and engagement in the tasks at hand, and consequently employee and organizational performance.

References

- Agarwal, P. (2021). Shattered but smiling: Human resource management and the well-being of hotel employees during COVID-19. *International Journal of Hospitality Management*, *Vol. 93*. doi: 10.1016/j.ijhm.2020.102765.
- Agote, L., Aramburu, N., Lines, R. (2016). Authentic leadership perception, trust in the leader, and followers' emotions in organizational change processes. *The Journal of Applied Behavioral Science, Vol. 52, No. 1*, pp. 35-63.
- 3. Ali-Hassan, H, Nevo, D, Wade, M. (2015). Linking dimensions of social media use to job performance: The role of social capital. *J. Strateg. Inf. Syst.*, *Vol. 24, No. 2*, pp. 65-89.
- Aurelia, S., Momin, M.M. (2020). Global reverberation and prediction for HRM amid and after COVID-19: A technological viewpoint. Materials Today: Proceedings. https://doi.org/10.1016/J.MATPR.2020.11.544
- Baka, Ł. (2018). Mechanizmy kształtowania się zdolności do pracy w świetle modelu wymagania w pracy – zasoby. *Czas. Psychol. Psychol. J., Vol. 24, No. 3*, pp. 481-490, https://doi.org/ 10.14691/CPPJ.24.3.481
- Barrick, M.R., Mount, M.K., Li, N. (2013), The theory of purposeful work behavior: The role of personality, higher-order goals, and job characteristics. *Academy of Management Review, Vol. 38, No. 1*, pp. 132-153. doi: 10.5465/amr.2010.0479.
- 7. Bieńkowska, A., Tworek, K. (2016), Job performance model based on Employees' Dynamic Capabilities (EDC). *Sustain., Vol. 12, No. 6.*

- 8. Borman, W.C., Motowidlo, S.M. (1993), Expanding the criterion domain to include elements of contextual performance. In: N. Schmitt, W.C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-97). San Francisco: Jossey-Bass.
- Campbell, J.P., Wiernik, B.M. (2015), The modeling and assessment of work performance. *Annual Review of Organizational Psychology and Organizational Behavior, Vol.* 2, pp. 47-74. https://doi.org/10.1146/annurev-orgpsych-032414-111427.
- Campbell, J.P., McCloy, R.A., Oppler, S.H., Sager, C.E. (1993), A Theory of Performance. In: N. Schmitt, W.C. Borman (Eds.), *Personnel Selection in Organizations* (pp. 35-70). San Francisco: Jossey-Bass Publishers.
- Chen, P.-K., Lujan-Blanco, I., Fortuny-Santos, J., Ruiz-de-Arbulo-López, P. (2020). Lean Manufacturing and Environmental Sustainability: The Effects of Employee Involvement, Stakeholder Pressure and ISO 14001. *Sustainability, Vol. 12, No. 18*, p. 7258.
- 12. Darvishmotevali, M., Ali, F. (2020). Job insecurity, subjective well-being and job performance: The moderating role of psychological capital. *International Journal of Hospitality Management, Vol. 87, No. 102462.*
- Grant, A.M., Parker, S.K. (2009). 7 Redesigning Work Design Theories: The Rise of Relational and Proactive Perspectives. *The Academy of Management Annals, Vol. 3, No. 1*, pp. 317-375. doi: 10.1080/19416520903047327.
- 14. Hackman, J.R., Oldham, G.R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- 15. Hayes, A.F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Press.
- Kapica, Ł., Baka, Ł. (2021). Czym jest job crafting? Przegląd koncepcji teoretycznych dotyczących kształtowania pracy. *Medycyna pracy, Vol. 72, No. 4*, pp. 423-436. doi: 10.13075/mp.5893.01115.
- Kell, H.J., Motowidlo, S.J. (2012), Deconstructing organizational commitment: Associations among its affective and cognitive components, personality antecedents, and behavioral outcomes, *Journal of Applied Social Psychology, Vol. 42, No. 1*, pp. 213-251. https://doi.org/10.1111/j.1559-1816.2011.00874.x
- Kooij D.T.A.M., van Woerkom M., Wilkenloh J., Dorenbosch L., Denissen J.J.A. (2017). Job crafting towards strengths and interests: The effects of a job crafting intervention on person-job fit and the role of age. J. Appl. Psychol., Vol. 102, pp. 971-981, https://doi.org/10.1037/apl0000194.
- Kristof-Brown, A.L., Zimmerman, R.D., Johnson, E.C. (2005), Consequences of Individuals 'Fit At Work : a Meta-Analysis of Person-Jo. *Personnel Psychology, Vol. 58*, pp. 281-342.
- 20. Kwahk, K.Y., Park, D.H. (2017). Leveraging your knowledge to my performance. The impact of transactive memory capability on job performance in a social media. *Computers in Human Behavior, Vol. 80*, pp. 314-330. https://doi.org/10.1016/j.chb.2017.10.047.

- Mayer, D.M., Bardes, M., Piccolo, R.F. (2008), Do servant-leaders help satisfy follower needs? An organizational justice perspective. *European Journal of Work and Organizational Psychology, Vol. 17, No. 2*, pp. 180-197. doi: 10.1080/ 13594320701743558.
- 22. Mayrowetz, D. et al. (2007). Distributed Leadership as Work Redesign: Retrofitting the Job Characteristics Model. *Leadership and Policy in Schools, Vol. 6, No. 1*, pp. 69-101. doi: 10.1080/15700760601091275.
- 23. Pila-Ngarm, P., Siengthai, S. (2017). Job redesign and employee performance: The mediating effects of human capital investment and job satisfaction. *Organization Development Journal, Vol. 35, No. 2,* pp. 79-99.
- Podsakoff, P.M., MacKenzie, S.B. (1997). Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance, Vol. 10, No. 2, pp. 133-151. https://doi.org/10.1207/s15327043hup1002_5.*
- 25. Raeder, S., Bokova, M.V. (2019). Committed to change? Human resource management practices and attitudes towards organizational change. *Open Psychology, Vol. 1, No. 1,* pp. 345-358.
- 26. Rai, A. (2018). Job crafting intervention: fostering individual job redesign for sustainable organization. *Industrial and Commercial Training, Vol. 50, No. 4*, pp. 200-208. doi: 10.1108/ICT-11-2017-0089.
- 27. Rich, B.L., Lepine, J.A., Crawford, E.R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, Vol. 53*, pp. 617-635.
- 28. Schmitt, N., Chan, D. (1998). *Personnel selection: A theoretical approach*. Thousand Oaks: Sage.
- 29. Shen, J., Zhang, H. (2019). Socially Responsible Human Resource Management and Employee Support for External CSR: Roles of Organizational CSR Climate and Perceived CSR Directed Toward Employees. J. Bus. Ethics, Vol. 156, pp. 875-888. https://doi.org/10.1007/s10551-017-3544-0.
- 30. Smith, C.A., Organ, D.W., Near, J.P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, Vol. 68, No. 4*, pp. 653-663. https://doi.org/10.1037/0021-9010.68.4.653.
- van Griethuijsen, R.A.L.F., van Eijck, M.W., Haste, H., Brok, P.J., Skinner, N.C., Mansour, N., Gencer A.S., BouJaoude Vardarlier, P. (2016). Strategic Approach to Human Resources Management During Crisis. *Procedia*—Soc. Behav. Sci., Vol. 24, No. 235, pp. 463-72.
- 32. van Griethuijsen, R.A.L.F., van Eijck, M.W., Haste, H. et al. (2015). Global patterns in students' views of science and interest in science. *Research in Science Education*, Vol. 45, No. 4, 581-603. https://doi:10.1007/s11165-0149438-6.
- 33. Wrzesniewski, A., Dutton, J.E. (2001). Crafting a Job: Revisioning Employees as Active Crafters of Their Work. *Acad. Manage. Review, Vol. 26, No. 2,* pp. 179-120, https://doi.org/10.5465/amr.2001.4378011.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

DIAGNOSIS OF EDUCATIONAL NEEDS AND EXPECTATIONS FOR MENTORING ENTREPRENEURIAL COMPETENCE: THE CASE OF THE EUROPEAN FOOD SECTOR

Karolina ŁUDZIŃSKA

University of Warsaw, Faculty of Management; k.ludzinska@uw.edu.pl, ORCID: 0000-0002-0322-489X

Purpose: The purpose of the study is to contribute to the debate on the entrepreneurial context of the curriculum of business and management training programs by diagnosing the educational needs and expectations of mentors in developing entrepreneurial competence in the European food sector.

Design/methodology/approach: Two qualitative methods, Latent Semantic Analysis (LSA) and content analysis, were applied to analyze a set of 17 interviews with start-up mentors about their educational needs and expectations. The paper builds on the study by Bisk (2002), who indicated that what entrepreneurs primarily seek from their mentors is career-related advice of a general business nature, not sector-specific.

Findings: The study confirms that mentors in the food sector predominantly need managerial competencies and business tools to guide entrepreneurs and start-ups, and there are specific areas of these competencies that need to be addressed in the curricula of professional training programs designed for mentors.

Research limitations/implications: The results cannot be generalized to all mentors or each mentoring program, as the sample size was small, the research project was limited to an online format, and the respondents were predominantly recruited by one organization. To further build on the results, studies are recommended to be carried out in other sectors, in other mentoring training programs, as well as in the context of sustainable and entrepreneurial circular economy. Furthermore, research on the mentees' prospects could also complement the findings.

Practical implications: The study offers practical insight into the curriculum of the training programs designed for mentors in the food sector.

Originality/value: The study takes an innovative, methodological approach to produce transferable evidence from the combination of conventional text analysis, and Latent Semantic Analysis (LSA), which combined led to the development of an integrative SWOT matrix framework for future mentoring training programs built around the entrepreneurial context. The research results are addressed to educators and academics who design and organize training programs for mentors and support the development of entrepreneurial competencies.

Keywords: mentors, start-ups, entrepreneurial competence, business mentoring, training programs.

Category of the paper: Research paper.

1. Introduction

The European Union, through its official bodies including the European Commission and the European Institute of Innovation and Technology (EIT), places a great deal of attention and emphasis on entrepreneurship to strengthen sustainable innovation ecosystems while complying with the Sustainable Development Goals of the United Nations. The outcome expected from this policy is to increase competitiveness, sustainable economic growth, and job creation throughout Europe (EIT, 2022). That approach, in turn, requires new businesses, startups, and entrepreneurs that prove to lead to increased economic efficiency, innovations, employment, and equity (Shane, Venkataraman, 2000; Valerio, Parton, Robb, 2014). Since universities are under pressure to provide effective entrepreneurship education and research (Pittaway, Cope, 2007; Gibb, 2013; Henry, 2013), there is an ongoing debate on the contribution of the entrepreneurial context to the curriculum of business and management programs. Moreover, entrepreneurship education is something that goes beyond teaching students about entrepreneurship, and therefore new pedagogies that create entrepreneurs are needed (Kirby, 2007; Kubberød, Hagen, 2015). Consequently, the field of entrepreneurial education has grown exponentially in recent decades as a global trend with significant investments in curriculum development, externally funded projects, and research (Jones, Penaluna, Pittaway, 2014). Studies focus on the impact that training and education programs have on entrepreneurial drive and self-efficacy (Zhao, Seibert, Hills, 2005; Florin, Karri, Rossiter, 2007; Wilson et al., 2009), and point to mentoring and peer learning as effective interventions to support the development of entrepreneurial capabilities (Mills, Bakarat, Vyakarnam, 2012; Elliott, Mavriplis, Anis, 2020). However, research on mentoring support for entrepreneurs and start-ups is still relatively limited (St-Jean, Audet, 2009). Therefore, the objective of the study is to further evidence this debate by diagnosing the needs and expectations of mentors in the food sector who support the development of entrepreneurial competence. At the same time, the study does not claim to provide an exhaustive review of the prospects of food sector mentors, nor the complete curriculum of training programs designed specifically for them. However, it could shed new light on the support that mentors need to do their job.

2. Entrepreneurship Mentoring in Research

In the literature, the concept of entrepreneurial mentoring has been predominantly related to novice entrepreneurship (St-Jean, Audet, 2012; Nabi, Walmsley, Akhtar, 2021), start-up entrepreneurs (Bisk, 2002), and entrepreneurial self-efficacy and satisfaction (Elliott, Anis, Mavriplis, 2016; St-Jean, Tremblay, 2020; St-Jean, Radu-Lefebvre, Mathieu, 2018; Ting, Feng, Qin, 2017). At the same time, we only have a limited understanding of the factors and decision processes that lead an individual to become an entrepreneur. Mentoring appears to be a supportive tool, and typically its functions for novice entrepreneurs are divided into three categories: psychological functions, entrepreneurial career-related functions, and a role model function (Wanberg, Welsh, Hezlett, 2003; St-Jean, 2011).

In the category of psychological functions, research findings point at the importance of socio-emotional support and the development of entrepreneurial maturity, especially in relation to knowledge development (Kuratko, Neubert, Marvel, 2021). Studies also highlight the factors that maximize mentee learning which occurs throughout a mentoring relationship (Gimmon, 2014; McKevitt, Marshall, 2015). The results show that when entrepreneurs understand similarities and share mutual trust with mentors, they maximize learning outcomes (El Hallam, St-Jean, 2016).

Studies on the entrepreneurial career-related functions of mentors focus primarily on the effects on business performance and venture success through the improvement of the skill set and self-efficacy (Kubberød, Fosstenløkken, Erstad, 2018). The lack of experience and business-related skills of new entrepreneurs proves to be the main cause of high failure rates among young businesses (van Praag, 2003; Van Gelder et al., 2007). A match between the mentor's industry and the mentee's industry experience is found to be irrelevant (Bisk, 2002). Additionally, a mentor does not have to be an entrepreneur in order to be supportive (St-Jean, Mitrano-Méda, 2016), however mentoring is far more effective when mentors are business owners (Sullivan, 2000). Mentoring influences satisfaction and career retention among novice entrepreneurs (Ozgen, Baron, 2007; St-Jean, Mathieu, 2015). Further research specifically indicates that mentoring supports the development of entrepreneurial self-efficacy (St-Jean, Radu-Lefebvre, Mathieu, 2018), however achieving objective results such as sales or profitability growth through mentoring are less likely (Barrett, 2006).

A role model function is realized when mentorship builds self-efficacy through co-learning and social capital development (Le Cornu, 2005; Nabi, Walmsley, Akhtar, 2021). Intentions of a mentor are the most important factors that influence the effects of mentoring (Ting, Feng, Qin, 2017). The low directivity mentoring style combined with a high level of mentor involvement in the relationship generates greater positive outcomes for the mentees and leads to success (Cull, 2006; Gravells, 2006).

As mentoring is examined, various benefits emerge (Allen et al., 2008). Recent research confirms that mentoring is an effective alternative to support entrepreneurs and their businesses versus traditional training programs (EL Hallam, St-Jean, 2016). Effective learning is well served by mentoring relationships (Sullivan, 2000), and matching mentors and mentees wisely can efficiently promote mentoring efficiency (Ting et al., 2017). Studies also show that mentoring provides considerably more benefits than drawbacks for both the mentor and the mentee (Gravells, 2006; Hansford et al., 2002).

The conducted analysis of the literature demonstrates that the research findings on mentoring entrepreneurs remain inconsistent and mentoring process outcomes have not been fully understood yet (Kar, Sarangi, 2021; St-Jean, Audet, 2009; Valerio, Parton, Robb, 2014). Furthermore, it seems that more attention has been paid to mentees than to mentors, and therefore, this study is to investigate the latter.

3. Methods

The purpose of the investigation is to diagnose the educational needs and expectations of mentors in the food sector to shape the curriculum of programs designed specifically for them. The paper builds on the study by Bisk (2002), who has indicated that what entrepreneurs primarily seek from their mentors is career-related advice of a general business nature, not industry- or sector-specific. Therefore, it has been hypothesized that today's mentors in the food sector predominantly need general managerial competencies and tools to mentor entrepreneurs and start-ups. Since developing entrepreneurial competencies is a complex process that requires tailored learning support (Kutzhanova, Lyons, Lichtenstein, 2009; Kubberød, Fosstenløkken, Erstad, 2018), there are specific areas of competence that need to be addressed and included in the curriculum of professional training programs for mentors.

The research was carried out among n = 17 of 31 mentors participating in the open call training program entitled "Mentor Academy" that was organized in November 2020 by the Food Branch of the European Institute of Innovation and Technology (EIT Food), the University of Reading, the University of Cambridge, the University of Aarhus and the University of Warsaw.

After completing the Mentor Academy program, the mentors were invited to participate in a one-on-one online interview in English with a researcher. To guarantee validity and confidentiality, the interviews were conducted by a researcher who was not involved in the course as a teacher or a grader. The interview scenario was semi-structured, included openended questions, and provided guidance to the interviewer, but also allowed the interviewees to elaborate in more detail on the research areas. The group of respondents was very diverse, both in terms of mentoring experience, level of education, and professional experience. In geographical terms, the majority of the respondents were residents of the European Union (90%).

The experiential learning approach derived from Experiential Learning Theory, ELT (Kolb, 1984; Kolb and Kolb, 2005), was applied in the study. Taking part in the Mentor Academy program represented an experience on which respondents were asked to reflect and provide feedback on both their competencies and skills in mentoring, and expectations towards training programs that would help them develop further as mentors.

Qualitative methods were adopted as a small sample size did not support quantitative methods, although Automated Content Analysis (ACA) was included. Methodological triangulation was applied to increase the credibility and validity of the research output. Consequently, two methods were employed in the qualitative analysis: the Latent Semantic Analysis (LSA), and the conventional content analysis of the body of textual data. LSA lies at the intersection of ACA and information retrieval and provides more objective approaches to the analysis of textual data (Evangelopoulos, Prybutok, Zhang, 2022). It is solely based on patterns of word co-occurrence and does not presuppose any linguistic analysis (Dam, Kaufmann, 2008). In the study, the LSA made a tool to translate semantic content into textual data that was not predicted a priori by any assumptions or a predefined list of narratives. Therefore, LSA was applied a posteriori for clustering the interview texts into common keyword themes as precursors to subsequent conventional content analysis. The process of merging the results of the two was conducted to present the research findings as pragmatic, objective, and comprehensive as possible, and to directly lead to the synthesis of the research results and the development of an integrative conceptual matrix framework for future mentoring training programs built around the entrepreneurial context. The stages of this process are presented in Table 1.

Table 1.

Stages of Primary Data Analysis	Methods and Description	Results
1. Latent Semantic Analysis (LSA)	Through the Otter.ai application, each passage of text was automatically examined to determine the presence or absence of individual words.	A set of 44 individual words, most frequently occurring in the 17 interview body of text.
2. LSA results analysis	Analysis of a set of 44 individual, most frequent words retrieved by the AI application and clustering them by their connotation and context into the 32 keyword phrases.	A set of 32 keyword phrases most frequently occurring in the 17 interview body of text.
3. Keyword phrases analysis	Comparison of frequency and occurrence of all keyword phrases and their participation in the content of the textual data.	A set of comparative data of keyword phrases.
4. Analysis of common categories of keyword phrases	Analysis of a set of 32 most common keyword phrases and clustering them by frequency, connotation, and context into 4 common group categories.	Four common group categories of 32 keyword phrases.
5. Content analysis of the interviews	Analysis of the interviews, clustering their context into the four common categories of keyword phrases and other subsequent categories resulting from the content of the body of textual data. The categories were then labeled according to the preceding LSA and the findings of the content analysis.	Descriptive and interpretive presentation of the content analysis of the interviews. Summarizing and categorizing the narratives into four common keyword categories.
6. Connecting the dots	Deductive analysis and interpretation of all research findings based on data derived from the LSA, keywords and their common categories, and content analysis of the interview narratives.	An integrative conceptual matrix framework for future mentoring training programs built around an entrepreneurial context.

Stages of the Primary Data Analysis

Source: Author's own study.

4. Results

4.1. Latent Semantic Analysis

The 17 interviews were audio-recorded and transcribed verbatim using an AI tool to analyze the content of the textual data. The goal of this process was to provide insight into the semantic data to identify important narratives and their themes. The LSA resulted in the collection of 49 455 words, of which 44 most frequently occurring ones were retrieved by the AI application (0,089% of all transcribed words). The 44 most frequently repeated words were discussed, confirmed, and coded in common 32 keyword phrases with a total of 1702 occurrences which represented 3,44% of all the transcribed words. After the keyword phrases were confirmed, they were grouped into four common categories of mentoring skills shared by the interview respondents: 1. Personal skills, 2. Interpersonal skills, 3. Teamwork and leadership, and 4. Business skills. All detailed data are presented in Figure 1.

Category	Keywords	Number of occurrences	Number of respondents
n.a.	Mentoring	471	17
1. Personal skills	Experience	94	16
	Learning	70	15
	Knowledge	51	16
	Competencies	44	15
	Development	39	13
	Education	38	16
	Skills	32	13
	Training	18	8
	Self-awareness	5	1
	Adapting	6	4
	Sub-total	397	101
	Mean	39,7	11,7
	Median	38,5	14,0
	Percentage of occurrences in 4 categories	32,25%	14,0
2. Interpersonal skills	Problem-solving	21	10
2. Interpersonal skins	Communication	17	6
	Advising	16	10
	Relationships	15	4
	Trust	8	8
	Sub-total	8	64
	Mean	15,4	7,6
	Median	16,0	8,0
2 m 1 0	Percentage of occurrences in 4 categories	6,26%	12
3. Teamwork &	Teams	63	13
leadership skills	Leader or Leadership	19	8
	Support	16	10
	Inspiring	7	5
	Sub-total	105	52
	Mean	26,3	9,0
	Median	17,5	9,0
	Percentage of occurrences in 4 categories	8,53%	
4. Business skills	Business	101	15
	Start-ups	83	15
	Technology	63	17
	Understanding the mentee's business	63	17
	Tools	63	14
	Company	60	15
	Commercialization or Marketing	56	14
	Manager or Management	51	13
	Sustainability	47	10
	Entrepreneur or Entrepreneurship	31	10
	Money or Funding	22	11
	MBA (program)	12	4
	Sub-total	652	169
	Mean	54,3	12,9
	Median	58,0	14,0
	Percentage of occurrences in 4 categories:	52,97%	, í
	Keyword phrases in total ("Mentoring" excluded)	1231	
	Keyword phrases in total in % ("Mentoring" excluded)	100%	

Figure 1. Keyword Phrases and Common Semantic Categories.

Source: Author's own study.

4.2. Content analysis

The four common categories of mentoring skills were also confirmed in the content analysis of the interviews, where the respondents explicitly named and elaborated on them when asked about their strengths and weaknesses in mentoring. Furthermore, respondents shared their opinions on the Mentor Academy, both positive (transcribed as opportunities for future mentoring programs) and negative (lessons learned for program organizers).

4.2.1. Strengths and weaknesses in mentoring

The respondents plan to continue to mentor and develop their competencies, especially in the field of sustainable development, and circular economy, and hope to "become ambassadors of change". However, when asked about their strengths and weaknesses in mentoring, they seemed less comfortable describing in which areas they felt the most competent and what they found challenging. Regarding strengths, the respondents mainly mentioned the creation of teams, the building of trust-based relationships, inspiring people, and making them perform better. They also communicated "a joy of working with people", good communication skills, and the ability to listen carefully to others. They perceived curiosity and constant attempts to learn new things as an advantage and a demonstration of their good coaching capabilities. Some of the respondents felt comfortable reviewing a business and identifying key elements that the mentees needed to work on. Some also reported on their technical background and experience in business technologies. Other interviewees found themselves competent in the fields of sustainability, climate change, and environmental protection. In summary, among the strengths, the respondents listed their competencies and skills that could be found across all four common semantic categories elicited through the LSA analysis, while among the challenges they faced and shared in the interviews, only three of them were present, i.e. 1. Personal skills, 2. Interpersonal and 4. Business skills, while the third category, 3. Teamwork and leadership, was missing.

In terms of weaknesses, the ones most frequently mentioned were the lack of adequate business skills, and management tools. In particular, the respondents identified the need for improvement in the areas of commercialization, market and business development, production, and scaling. Some reported a need to better understand financial issues and intellectual property rights, while others perceived mentoring for mature companies as a true challenge.

4.2.2. Opportunities and Threats - Expectations toward training programs designed for mentors and lessons learned

Training programs were expected to provide a wide variety of prospects for their participants. Not only were they supposed to deliver useful information over a short period of time, but they were also meant to leave space for individual reflection and inspiration. They should equip their attendees with new knowledge to ensure that start-ups and companies

that they work with were "on the cutting-edge with trends". The interviewees appreciated peerto-peer interaction and the discussions during sessions that they found to be as important as lectures and presentations. In their opinion, any training program should start with some basic tools and knowledge that all mentors might need. They would prefer to plan the training in stages where one could move from one step to another.

The interviewees noticed that most of the mentoring courses they had previously participated in focused on self-awareness and different mentoring styles. Although the respondents agreed that soft skills were important elements of the training agenda, they would prefer to allow more time for business-oriented topics and competencies that would equip them with managerial tools to provide feedback to their mentees. Regarding management tools, respondents would expect a module on financial perspectives, especially accounting standards, and investment management. The completion of real-life business case studies appeared to be the most preferred learning method. The schedule of a training program was perceived as a challenge, and therefore the respondents recommended planning the sessions in an agile way and in small tutorial groups. Finally, the interviewees underlined that knowing more about the professional background and experience of their peers in the training group would be beneficial to the learning process, as it would facilitate more effective networking and discussions.

5. Discussion

To combine the results of the LSA and the content analysis derived from the interviews with the mentors, the SWOT analysis approach was applied as the frame perspective summarizing and categorizing the research output. Although the SWOT matrix is a scheme predominantly used for strategic management in organizations, it is also a powerful tool for sizing up a project or venture with respect to capabilities, deficiencies, opportunities, and threats to its existence and further development (Chermack, Kasshanna, 2017). From the narratives on expectations and needs for the training programs designed for mentors, the lessons learned from the Mentor Academy, as well as the perceived strengths and weaknesses in the mentoring process (as reported by the respondents), a course was drafted for the educational programs designed for mentors in the entrepreneurial context of the food sector (Figure 2).

Strengths	Weaknesses
Full of a learning experience	Concentrated on self-awareness and adaptation
Full of knowledge and building competencies	Focused primarily on building relationships
Peer-learning and flipped classroom approach	among mentors and mentees
Business-oriented	Designed to mainly inspire the participants
Focused on start-ups Technology-driven	Passive, and lecture-driven
Managerial tools provided	
Proactive and engaging	
Opportunities	Threats
Building competencies that can be applied in different	Designed like MBA or executive training
sectors and ecosystems	programs
Developing business skills, along with personal and	Focused predominantly on hard management
interpersonal skills	tools, while neglecting the soft ones
Focused on business cases and based on a problem- solving approach	Not flexible in organization and structure
Developing communication skills	Not business or start-up oriented
Focused on the marketing and commercialization of	Too intense in both: schedule and learning
products and services	100 mense m bour. senedule and rearning
Entrepreneurial in the curriculum, context and approach	
Testing new mentoring tools	
Agile in schedule and organization	

Figure 2. SWOT Matrix for Educational Programs Designed for Food Sector Mentors in the Entrepreneurial and Start-Up Context.

Source: Author's own study.

Comparing the data derived from the LSA and the findings from the content analysis, we might conclude that what mentors expect to develop through training programs are personal and interpersonal skills, teamwork and leadership, and business skills. Teamwork and leadership skills are listed only among the strengths perceived by the respondents, which could mean that the respondents see themselves as adequately trained and prepared for the challenge of building and leading teams. However, personal and interpersonal skills can be seen as both weaknesses and strengths, with a clear dominance among perceived strengths, not weaknesses. Although most of the respondents confirm that they are well equipped with soft skills through previous training courses, they lack managerial training and appear to be unconfident with their knowledge and skills in embracing areas of competencies such as finance, operations, and marketing. These topics seem to be missing from their agenda, which they fully acknowledge.

In terms of methods, peer learning plays an important role in the educational programs expected by mentors. A flipped classroom approach, in which course participants learn as much from lecturers, readings, and case studies as from their classmates, appears to be suitable for mentoring programs. Whether conducted in a lecture room, online, or hybrid format, the courses are expected to be custom-made and planned in an agile way.

The respondents are dedicated to further building their mentoring competence, as well as developing learning tools and methods to improve their effectiveness. They find identifying and responding to the needs of mentees a very crucial part of the process of which the expected

outcome is achieved once the mentees take action and develop their businesses. They would willingly continue their education, especially in the area of management, industry-specific ventures, and sustainable business models. However, they oppose courses that are too intense and could result in a diminishing learning curve.

6. Conclusion

The research results demonstrate that mentors in the food sector need personal and managerial competencies, skills, and tools to help their ecosystems grow and develop, and therefore there are specific areas of competence that should be addressed and included in the curriculum of professional development programs designed for mentors.

Regarding the limitations of the study, the results cannot be generalized to all mentors or each mentoring program: the sample size was small, the project was limited to an online format, and the food mentors who participated in the Mentor Academy were predominantly recruited by one organization, EIT Food. However, the sample size allowed for more in-depth qualitative analysis, which revealed the strengths and weaknesses of the mentoring process perceived by the mentors and gave a snapshot not only of their career-related concerns but also of their future plans. The online format allowed the respondents to participate in the project at a convenient time and place, and the EIT Food consortium provided a suitable platform to address mentors from the food sector.

To build on the research findings, studies on mentoring practice and training programs for mentors are recommended in food systems, but also in other sectors. Little is still known about specific mentoring competencies that allow effective sustainability entrepreneurship and an entrepreneurial circular economy. Research on the mentees' perspective, discovering what they find particularly useful, and what types of skills and approaches of mentors allow them to act and make their business or start-up successful, would also greatly complement the findings.

Acknowledgments

I would like to thank Dr. Shima Bakarat, University of Cambridge, and Barbara Mason, University of Reading, for organizing, conducting, and overseeing the Mentor Academy, and Katarzyna Rozenkowska, University of Warsaw, for language editing and useful feedback.

The project was funded by the European Institute of Innovation and Technology, Food Branch, co-funded by the European Union.

References

- Allen, T.D., Eby L.T., O'Brien, K.E. (2008). The state of mentoring research: A qualitative review of current research methods and future research implications. *Journal of Vocational Behavior*, 73(3), pp. 343-357, doi:10.1016/j.jvb.2007.08.004.
- 2. Barrett, R. (2006). Small business learning through mentoring: Evaluating a project. *Education* + *Training*, 48(8/9), pp. 614-626, doi:10.1108/00400910610710047.
- Bisk, L. (2002). Formal entrepreneurial mentoring: The efficacy of third-party managed programs. *Career Development International*. 7(5), pp. 262-270, doi:10.1108/ 13620430210440082.
- 4. Chermack, T.J., Kasshanna, B.K. (2007). The use and misuse of SWOT Analysis and implications for HRD professionals. *Human Resource Development*, *10(4)*, pp. 383-399, doi:10.1080/13678860701718760.
- 5. Dam, G., Kaufmann, S. (2008). Computer assessment of interview data using latent semantic analysis. *Behavior Research Methods*, 40(1), pp. 8-20, https://doi.org/ 10.3758/brm.40.1.8.
- EIT, European Institute of Innovation and Technology, A body of The European Union Mission and Vision. Retrieved from https://eit.europa.eu/who-we-are/eit-glance/mission, 8.12.2021.
- El Hallam, H., St-Jean, É. (2016). Nurturing entrepreneurial learning through Mentoring. Journal of Developmental Entrepreneurship, 21(2), pp. 21(2), 273-288, doi:10.1142/ \$1084946716500126.
- Elliott, C., Anis, H., Mavriplis, C. (2016), *Peer mentoring in engineering entrepreneurship:* a learning environment for women students. Proceedings of the Canadian Engineering Education Association (CEEA) Conference. Halifax: Dalhousie University, pp. 1-8. Retrieved from: https://ojs.library.queensu.ca/index.php/PCEEA/article/download/6477/ 6025, 8.01.2022.
- Elliott, C., Mavriplis, C., Anis, H. (2020). An entrepreneurship education and peer mentoring program for women in STEM: mentors' experiences and perceptions of entrepreneurial self-efficacy and intent. *International Entrepreneurship and Management Journal*, 16(1), pp. 43-67. doi:10.1007/s11365-019-00624-2.
- Evangelopoulos, N., Prybutok, V.R., Zhang, X. (2022). Latent Semantic Analysis: Five Methodological Recommendations. *European Journal of Information Systems*, 21(1), pp. 70-86. https://doi.org/10.1057/ejis.2010.61.
- Florin, J., Karri, R., Rossiter, N. (2007). Fostering Entrepreneurial Drive-in business education: An Attitudinal approach. *Journal of Management Education*, 31(1), pp. 17-42, doi:10.1177/1052562905282023.

- Gibb, A.A. (2013). Entrepreneurial university: From concept to action. NCEE publication. Retrieved from: https://ncee.org.uk/wp-content/uploads/2018/01/From-Concept-To-Action.pdf, 20.07.2021.
- 13. Gimmon, E. (2014). Mentoring as a practical training in higher education of entrepreneurship. *Education* + *Training*, *Vol. 56, No. 8/9*, pp. 814-825.
- 14. Gravells, J. (2006). Mentoring start-up entrepreneurs in the East Midlands: Troubleshooters and trusted friends. *The International Journal of Mentoring and Coaching*, *4*, pp. 3-23.
- 15. Hansford, B., Tennent, L., Ehrich, L.C. (2002). Business mentoring: Help or hindrance? *Mentoring and Tutoring*, *10*(2), pp. 101-15, doi:10.1080/1361126022000002428.
- 16. Henry, C. (2013). Entrepreneurship Education in HE: Are policy makers expecting too much? *Education and Training*, *55(8)*, pp. 836-848, doi: 10.1108/ET-06-2013-0079.
- Jones, P., Penaluna, A., Pittaway, L. (2014). Entrepreneurship Education: A recipe for change? *International Journal of Management Education*, 12(3), pp. 304-306, doi:10.1016/J.IJME.2014.09.004.
- Kar, B., Sarangi, S.(2021). Factors of Small Business Mentoring and Practices. Small Enterprises Development, Management & Extension Journal (SEDME), 47(2), pp. 104-114, doi:10.1177/09708464211032554.
- 19. Kirby, D.A. (2007). Changing the Entrepreneurship Education Paradigm. In: A. Fayolle (Ed.), *Handbook of Research in Entrepreneurship Education, Vol. 1* (pp. 21-45). Cheltenham, UK: Edward Elgar.
- Kolb, A., Kolb, D.A. (2005). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education*, 4(2), pp. 193-212.
- 21. Kolb, D.A. (1984). *Experiential Learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- 22. Kubberød, E., Fosstenløkken, S.M., Erstad, P.O. (2018). Peer mentoring in entrepreneurship education: towards a role typology. *Education & Training, Vol. 60, No. 9*, pp. 1026-1040.
- 23. Kubberød, E., Hagen, S.T. (2015, July). *Mentoring models in entrepreneurship education*. Proceedings of EDULEARN15 Conference, pp. 6-8. Retrieved from https://www.nmbu.no/sites/default/files/pdfattachments/kubberoed2015men.pdf, 14.10.2021.
- 24. Kuratko, D.F., Neubert, E., Marvel, M.F. (2021). Insights on the Mentorship and Coachability of Entrepreneurs. *Business Horizons*, Vol. 64, Iss. 2, pp. 199-209, doi:10.1016/j.bushor.2020.11.001.
- 25. Kutzhanova, N., Lyons, T.S., Lichtenstein, G.A. (2009). Skill-Based Development of Entrepreneurs and the Role of Personal and Peer Group Coaching in Enterprise Development. *Economic Development Quarterly*, 23(3), pp. 193-210, doi:10.1177/0891242409336547.

- 26. Le Cornu, R. (2005). Peer mentoring: engaging pre-service teachers in mentoring one another. *Mentoring & Tutoring*, *13(3)*, pp. 355-366, doi:/10.1080/13611260500105592.
- McKevitt, D., Marshall, D. (2015). The legitimacy of entrepreneurial mentoring. International Journal of Entrepreneurial Behavior & Research. Vol. 21, No. 2, pp. 263-280, doi:10.1108/IJEBR-05-2014-0089.
- 28. Mills, J., Barakat, S., Vyakarnam, S. (2012). *Impact of mentoring and peer-learning within a global entrepreneurship programme*. 1st ASEAN Entrepreneurship Conference Paper. Retrieved from https://www.researchgate.net/publication/303766477_Impact_of_mentoring_and_peer-learning_within_a_global_entrepreneurship_programme, 5.12.2021.
- 29. Nabi, G., Walmsley, A., Akhtar, I. (2021). Mentoring functions and entrepreneur development in the early years of university. *Studies in Higher Education*, 46(6), pp. 1159-1174, doi:10.1080/03075079.2019.1665009.
- 30. Ozgen, E., Baron, R.A. (2007). Social sources of information in opportunity recognition: Effects of mentors, industry networks, and professional forums. *Journal of Business Venturing*, 22(2), pp. 174-192, doi:10.1016/j.jbusvent.2005.12.001.
- Pittaway, L., Cope, J. (2007). Entrepreneurship Education: A systematic review of the evidence. *International Small Business Journal*, 25(5), pp. 477-506, doi:10.1177/0266242607080656.
- 32. Shane, S., Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, pp. 217-226, doi:10.2307/259271.
- 33. St-Jean, E., Audet, J. (2011). The Effect of Mentor Intervention Style in Novice Entrepreneur Mentoring Relationships'. *Academy of Management Annual Meeting Proceedings*, *1*, pp. 1-6, doi:10.5465/AMBPP.2011.65869654.
- 34. St-Jean, E. (2011). Mentor functions for novice entrepreneurs. *Academy of Entrepreneurship Journal*, *17(1)*, pp. 65-84.
- 35. St-Jean, E. (2012). Mentoring as professional development for novice entrepreneurs: Maximizing the learning. *International Journal of Training and Development*, *16*(3), pp. 200-216, doi:10.1111/j.1468-2419.2012.00404.x.
- 36. St-Jean, E., Audet, J. (2012). The Role of mentoring in the learning development of the Novice Entrepreneur. *International Entrepreneurship and Management Journal*, *Vol.* 8, *No.* 1, pp. 119-140.
- 37. St-Jean, E., Mathieu, C. (2015). Developing attitudes toward an entrepreneurial career through mentoring. The mediating role of entrepreneurial self-efficacy. *Journal of Career Development*, *42(4)*, pp. 325-338, doi:10.1177/0894845314568190.
- 38. St-Jean, É., Mitrano-Meda, S. (2016). Should mentors of entrepreneurs be trained or their experience is enough? In: M. Franco (Eds.), *Entrepreneurship-practice-oriented perspectives* (pp. 39-61). London: InTech Open, doi: 10.5772/65625.
- 39. St-Jean, E., Radu-Lefebvre, M., Mathieu, C. (2018). Can less be more? Mentoring functions, learning goal orientation, and novice entrepreneurs' self-efficacy. *International*

Journal of Entrepreneurial Behaviour and Research, 24(1), pp. 2-21, doi:10.1108/IJEBR-09-2016-0299.

- 40. St-Jean, É., Tremblay, M. (2020). Mentoring for entrepreneurs: A boost or a crutch? Longterm effect of mentoring on self-efficacy. *International Small Business Journal: Researching Entrepreneurship*, 38(5), pp. 424-448, doi:10.1177/0266242619901058.
- 41. Sullivan, R. (2000). Entrepreneurial learning and mentoring. *International Journal of Entrepreneurial Behaviour & Research*, *6*, pp. 160-175, doi:10.1108/13552550010346587.
- 42. Ting, S.X., Feng, L., Qin, W. (2017). The effect of entrepreneur mentoring and its determinants in the Chinese context. *Management Decision*, 55(7), pp. 1410-1425, doi: 10.1108/MD-07-2016-0477.
- 43. Valerio, A., Parton, B., Robb, A. (2014). *Entrepreneurship training and education programs around the World: dimensions of success*. Washington, D.C.: World Bank.
- 44. Van Gelder, J.R., De Vries, M., Frese, Goutbeek, J. (2007). Differences in psychological strategies of failed and operational business owners in the Fiji Islands. *Journal of Small Business Management*, 45(3), pp. 388-400, doi:10.1111/j.1540-627X.2007.00219.x.
- 45. van Praag, C.M. (2003). Business survival and success of young small business owners. *Small Business Economics*, 21, pp. 1-17, doi: 10.1023/A:1024453200297.
- 46. Wanberg, C.R., Welsh, E.T., Hezlett, S.A. (2003). Mentoring Research: A Review and Dynamic Process Model. In: J.J. Martocchio, G.R. Ferris (eds.), *Research in Personnel and Human Resources Management* (pp. 39-124). Oxford, U.K.: Elsevier Science Ltd.
- 47. Wilson, F., Kickul, J., Marlino, D., Barbosa, S.D., Griffiths, M.D. (2009). An analysis of the role of gender and self-efficacy in developing female entrepreneurial interest and behavior. *Journal of Developmental Entrepreneurship*, 14(2), pp. 105-119, doi:10.1142/S1084946709001247.
- 48. Zhao, H., Seibert, C., Hills, C. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, *90*(2), pp. 1265-1272, doi:10.1037/0021-9010.90.6.1265.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

PERSONAL BRAND OF A START-UP LEADER IN CREATING THE ONLINE EMPLOYER'S BRAND

Joanna MACALIK

Wroclaw University of Economics and Business; joanna.macalik@ue.wroc.pl, ORCID: 0000-0003-3946-8834

Purpose: The primary, explanatory and empirical objective of the study is to investigate and clarify several aspects of a leader's personal branding in the context of venture employer branding (EB), attracting and recruiting talents, and providing unique Employee Value Proposition (EVP).

Design/methodology/approach: The article presents inductive reasoning and the qualitative content analysis method was used, which enables to identify patterns and make some conclusions about the communicator, message, and its effects or the situation and sociocultural background.

Findings: The research conducted enabled to initially investigate and clarify several aspects of a leader's personal branding in the context of employer branding, attracting and recruiting talents, and providing a unique EVP. Using personal brand dimensions from Hai-Ming and Hsin-Mei scale, the author presented how they are used in reinforcing start-up external image among candidates and broader – social media users.

Research limitations: The research presented in the article is qualitative, which makes it impossible to infer the entire start-up population. It is why it requires deepening and continuation in the course of quantitative research, like quantitative content analysis and survey research. It is also crucial to analyze candidates' opinions on the topic.

Practical implications: It is important for start-up leaders to understand that the personal brand of the leader firmly, on the basis of co-branding, aligned with the employer brand, may help create a positive venture image, attracting talents and - in turn - converting personal brand authority into profit.

Originality/value: The paper supplements the management sciences literature with the knowledge about the leader's personal branding role in creating a start-up external image.

Keywords: start-up, personal brand, leader, employer branding, Employee Value Proposition, qualitative content analysis

Category of the paper: research paper.

1. Introduction

A large and growing body of scientific and popular literature has already investigated startups activity. It stems from the fact that start-ups, together with the whole business ecosystems around them, are booming worldwide, generating significant revenue, offering new, often groundbreaking products or services, and creating employment in various economic sectors. What is more, start-ups often represent an eye-catching "from rags to riches" myth (Macalik, 2021) which is a tempting topic not only for researchers but also for business students and practitioners.

Recently, scientists have shown an increased interest in various measurable predictors and criteria of start-up success (both objective and subjective). Among various predictors of start-up failure or success, one seems to be particularly important: its leader (founder, CEO), whose personal characteristics, skills, and competencies seem to be crucial in achieving the company's competitive advantage. It was confirmed repeatedly by empirical research in the relatively long academic tradition of searching for so-called "entrepreneurial personality" (Baluku et al., 2016; Boyatzis, 2006; Chatterjee, Das, 2015; Gibb, Ritchie, 1982; Korunka et al., 2010; Zaech, Baldegger, 2017).

In the modern era, among various skills of the start-up leader, some of them seem to be particularly important - namely, the ability to build relationships, transformational leadership, and – more and more often – branding skills. The author of the following paper focuses on start-up leaders and their personal branding abilities as an essential factor in the venture operation. However, the challenge of creating a personal brand of an enterprise leader is a recognized scientific problem in the management sciences literature (Macalik, 2020), far too little attention has been paid to the issue of the leader's personal branding role in creating start-up external image. As start-ups are more and more important jobs creators, the primary, explanatory and empirical objective of this study is to investigate and clarify several aspects of a leader's personal branding in the context of venture employer branding (EB), attracting and recruiting talents and providing unique Employee Value Proposition (EVP).

The paper has been divided into four parts. In the following, second part, a brief overview of the previous research on start-ups, leadership, and personal branding in the context of EB and EVP is presented. The third part is concerned with the methodology used, research questions, and sample selection method. The fourth section presents the main findings of the research. Finally, the fifth part gives the conclusion, summary, and critique of the findings.

2. Literature review

According to one of the most recent definitions, a personal brand is "an individual, intangible asset defined as a real person's name combined with all the notions intended to identify and differentiate this person from others" (Kucharska, Mikołajczak, 2018). Nowadays, personal branding skills are considered a "leadership imperative" (Loppis, 2013; Perkins, 2015). The issue is analyzed both from the internal and external perspectives. The research on the organizational context of personal branding puts particular emphasis on managers and the organizations' leaders because they are – according to Zarkada - people who look for social integration, support, or uniqueness (Zarkada, 2012) and their role is crucial for effective internal communication and, in turn, in creating competitive advantage of the company.

Several attempts have also been made to investigate the role of the leader's (CEO) personal brand in the organization's external reputation. In 2006 Ranft et al. demonstrated that CEO reputation is directly linked to organizations' higher profits and competitive advantages (Ranft et al., 2006). According to Zeitoun et al., CEOs and employees can be solid levers for gilding the corporate brand image (Zeitoun et al., 2020). In turn, Montoya stated that the CEO's personal brand is more effective in generating goodwill and brand equity than a business brand because society trusts people more than businesses (Montoya, 2002). Bendisch, Larsen, and Trueman reported that successful CEO branding enhances perceived brand value and creates value for organizations (Bendisch et al., 2013). Fetscherin investigated how certain aspects of the CEO as a persona (CEO experience and education, physical appearance, facial expressions) impact the CEO's image and, subsequently, company reputation and performance (Fetscherin, 2015). In the course of quantitative research, it was also proven that public engagement with CEOs on social media directly influences the quality of organization-public relationships (Men, Tsai, 2016). Saad and Yaacob stated that the CEO's personal branding gives the company's brand a human dimension by allowing brands to create an emotional connection with the online users and become parts of their lives (Saad, Yaacob, 2021).

Although there is a strong link found between the leader's personal brand and the company brand, there has been little discussion about the role of the CEO's personal branding in terms of the company employer branding, mainly external, which is directed to the organization's environment: professionals, students, graduates, and other stakeholders and tends to manage and influence the company reputation among them. In the era of the employee-orientated market, when organizations fight to make recruitment processes more efficient, attract talents and get attractive workers that help build effective work teams, having strategic external employer branding seems to be particularly important.

The competitive labor market also applies to start-ups, which operate in a relatively small but intensive business environment characterized by high network density (Gueguen et al., 2021). Start-ups are young and – initially - very small enterprises whose staffing and human

relationships are different from the internal environment of larger enterprises (Slavik et al., 2020).

However, the definition of a start-up is still not conceptualized in the form, which could satisfy most researchers (Macalik, 2021), it is already confirmed that the position of this kind of business entity within its ecosystem is relevant for its future success (Bonaventura et al., 2020). It also refers to the job seekers' and candidates' venture perception. Working in start-ups seems trendy and attractive, as they are unconventional, fast-paced, seem to have cut down on hierarchy, give freedom to experiment, and provide numerous opportunities to deserving candidates. Also, as Tumasjan et al. investigated, collaborative team climate and the early assignment of responsibilities are a start-up's most attractive job attributes for prospective applicants (Tumasjan et al., 2011).

At the same time, it was proven that entering a start-up instead of an incumbent firm is associated with considerable drawbacks in terms of workers' wages, yearly income, and employment (Fackler et al., 2022) and may occur risky. High failure rates of start-ups and limited public recognition indicate that not only consumers' but also candidates' initial trust perceptions are make-or-break for their survival (Konya-Baumbach et al., 2019; Moser et al., 2015). Usually, they are quite chaotic, do not have a proper recruitment function - this is why they need to implement employer branding as a part of their survival strategy, especially that so-called "Generation Z" is entering the workforce, and the "Genzers" share some specific personal and professional values (Bălan, Vreja, 2018). Seemiller & Grace stated that representatives of this generation are entrepreneurial-minded, loyal, inventive, determined, and desire to make the world a better place (Seemiller, Grace, 2018), which makes them perfect candidates to work in a start-up. At the same time, they value stability and security of employment, followed by relationships and high compensation and benefits (Palen-Tondel, Smolbik-Jeczmien, 2021), which are expectations that start-ups not always can meet. To become an employer of choice (Rampl, 2014) and create a precise, consistent and compelling Employee Value Proposition (EVP), which is understood as the unique set of rational and emotional benefits that an employee receives in return for the skills, capabilities, and experience they bring to a company (Minchington, 2010), start-ups need to consciously create their image as an employer, especially in social media, which are now the central area of public discourse.

3. Methods

In order to investigate and clarify a leader's personal branding place in the context of venture employer branding (EB), attracting and recruiting talents, and providing a unique Employee Value Proposition (EVP), the content analysis method was used. According to the definition by

Berelson, content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication (Berelson, 1952, p. 18). It involves determining and describing the linguistic features of texts to explain their authors' non-linguistic properties, such as attitudes, assessments, or intentions. It is a universal and highly flexible research method with varying achievable research goals and objectives. In the following paper, the author uses qualitative content analysis based on inductive reasoning to identify patterns and make some conclusions about the communicator, message, and its effects or the situation and sociocultural background (White, Marsh, 2006, pp. 27, 34).

To avoid controversy and misleading results, the qualitative content analysis should be systematic, objectivized and consistently follow explicitly formulated rules and procedures, which, according to most cited authors (McMillan, 2000; Riffe et al., 2005) should include the following steps: formulating the research questions and/or hypotheses, sample selection, defining and coding the categories, coders training, coding the content gained, assessment of reliability and analysis and interpretation of the data collected.

3.1. Research questions

Considering the above assumptions and the research problem identified in the introduction to this article, it was decided to formulate the following research questions:

RQ1: In what way do start-ups use and expose their leader's personal brand to build a positive external image of the venture in the labor market and creative employer brand?

RQ2: What dimensions of a leader's personal brand are used in creating start-up EB and EVP?

3.2. Method of sample selection

The author defined one social media post as a unit of analysis and decided to limit the research sample to meet methodological criteria. The first phase of limitation referred to the start-up definition, and the second consisted in limiting the area of operation of start-ups, which was set to Poland. Both criteria were ensured by considering only ventures listed in the opinion-leading ranking of the Internet portal MyCompany Polska (Dobroszek, 2021).

Additionally, the author established four criteria for the unit of analysis, which was:

- 1. posts published on official Twitter (TT), LinkedIn (IN), and Facebook (FB) of the start-up, together with users' reactions,
- 2. posts that directly refer to the CEO/leader/founder of the start-up,
- 3. posts published between 1.01.2022 and 26.04.2022,
- 4. organic content posts (paid content was excluded).

In total, 1213 Twitter, LinkedIn, and Facebook posts were analyzed, of which 54 (~4,5%) were identified as referring to the start-up CEO/leader/founder's personal brand in the company's context (Table 1).

	Name	Total number of posts on TT/ IN/ FB	Number of posts referring to CEO
1.	Uncapped	14/10/2	6
2.	eStore Media	9/40/0	1
3.	Tylko	3/-/25	0
4.	Saule Technologies	5/9/6	2
5.	Ramp	88 / 1 / 2	2
6.	Jutro Medical	0/11/22	2
7.	SonarHome	- / 18 / 50	2
8.	Sundose	-/4/29	1
9.	Spacelift	78 / 40 / 0	1
10.	SunRoof	- / 41 / 64	8
11.	Spoko.app	5/0/20	0
12.	Omnipack	-/41/33	5
13.	Molecule.one	7/1/1	0
14.	Airly	105 / 68 / 24	5
15.	Saleor	20/9/0	1
16.	LiveKid	-/33/31	0
17.	Future Collars	0 / 88 / 89	14
18.	PsiBufet	-/10/57	4

Table 1.*Research sample characteristics*

Source: own elaboration based on MyCompany Polska ranking (Dobroszek, 2021) and social media channels of start-ups listed. "0" means that no post was published in the period indicated, and "-" means that the particular start-up is (according to the author's best knowledge) not present in the given social medium.

3.3. Defining and coding the categories

To ensure theory-based coding categories, the author decided to follow a relatively recent but widely cited and reliable scale for CEO personal brand measurement constructed by Hai-Ming Chen and Hsin-Mei Chung (Hai-Ming, Hsin-Mei, 2018) which uses seven evaluative dimensions to mathematically measure the work standards, competency, charisma, personality, values, character, and leadership qualities of a CEO. Each dimension is followed by four or five items, as in Table 2. In the conducted research, the author uses them as coding categories.

Table 2.

A scale for CEO personal brand measurement by Hai-Ming Chen and Hsin-Mei Chung

	Dimension	Items
1.	Standards	process focus, financial focus, experience, rule orientation, planning
2.	Style	toughness, creativity, consistency, key point awareness
3.	Leadership	ambition, charisma, leading ability, sense of environment
4.	Personality	outgoing, curios, human spirit, energy, daringness
5.	Values	family security, happiness, friendliness, politeness
6.	Character	reliability, commitment, honesty, sense of obligation
7.	Teamwork	cooperation, trusting subordinates, respect for others, willingness to accept
		suggestions, forgiveness

Source: (Hai-Ming, Hsin-Mei, 2018, p. 32).

4. Findings

First, additional initial observations can be made following the research sample selection. Namely, seven among 25 start-ups were excluded from the sample because of the lack of current posts or even social media channels. Also, significant differences are visible in start-ups' scope and type of social media activity. Some businesses choose Twitter or Facebook, but LinkedIn seems to be the most popular as a business and employment-oriented online service. It is also the channel where most posts directly related to their CEO/leader/founder were published, as it is a great tool to promote the personal brand itself. Also, a small group of start-ups does not use their leaders/CEOs' personal brands in their social media communication. These are mainly high-tech and financial companies or companies that implement a product-oriented strategy.

Following the presented above qualitative content analysis procedure, several significant findings regarding the role of the personal brand of the start-up leader in creating online employer branding were obtained. First, dimensions of the CEO's personal brand, which are eagerly used by start-ups in their external online communications, were identified. If possible, they were assigned to the proper dimension of Hai-Ming and Hsin-Mei. The analysis shows that each scale dimension was represented in analyzed posts; however, some seem to be more willingly used in start-ups' social media. These are:

- 1. Standards (mainly previous business experience of the leader).
- 2. Leadership (mainly his charisma and leading ability).
- 3. Character.
- 4. Teamwork (understood not only as internal cooperation in a start-up but also as networking with the start-up environment CEO's participation in debates, fairs, presentations, podcasts, interviews).

The results of this analysis stage, together with illustrative examples, are presented in Table 3.

Table 3.

Dimension of CEO personal brand measurement by Hai-Ming Chen and Hsin-Mei Chung and examples from author's research

Dimension	Items	
Standards	process focus, financial focus, experience, rule orientation, planning	
	• tomorrow our CEO will take part in a conference () during which () he will share his experience	
	• () experience with start-ups gave him first-hand experience with business funding challenges	
Style	toughness, creativity, consistency, key point awareness	
	has developed a breakthrough production technology	
Leadership	ambition, charisma, leading ability, sense of environment	
	• How to be a good leader? How to build a good team? These questions were answered by	
	the founder ()	

	 Our co-founder () gave a keynote talk on 'How to get funding and become Amazon bestseller.' The result? We have had over 300 Amazon sellers reach out to us for funding 200 wonderful, strong women managing IT companies, including our founders
Personality outgoing, curios, human spirit, energy, daringness	
	• Congratulations for winning the title and statuette () in the category Personality of the Year 2021
Values family security, happiness , friendliness, politeness	
	• check how our CEO () cares about his mental health ()
	• Tomek shares some tips that help to keep a balance between private and professional life
Character	reliability, commitment, honesty, sense of obligation
	• our co-founder () is focused on offering support in the war zone as this humanitarian crisis unfolds before our eyes
	• Today our co-founder flew in from Poland where he is organizing medical supplies for Ukraine, gave a brilliant keynote speech () then flew back again to continue helping the relief efforts
1	Szymon tells us about our obsession over UX
Teamwork	cooperation, trusting subordinates, respect for others, willingness to accept suggestions, forgiveness
	• I give my people full confidence. Thanks to trust, we delegate, share, are open, we talk not only about good things, but also more difficult ones, we try to solve problems – says our CEO
	• the challenge we face is to make our team understand our mission and product and get along well with each other. Our diversity and comprehensive knowledge are not a barrier, but a great strength – says our CEO

Source: own elaboration based on (Hai-Ming, Hsin-Mei, 2018, p. 32). In case of posts in Polish - translation from the author. All abbreviations come from the author.

Also, another dimension, which seems to be particularly significant for start-ups and not covered in Hai-Ming and Hsin-Mei scale, was identified and named: "expertness". Being an expert in a narrow, modern, developing field of business is an essential asset of a start-up leader's personal brand, and it is often underlined by start-ups in their social communication, which confirms the following examples:

- *Here is an article that our CEO recently wrote for Puls Biznesu, in which he briefly explained the specific nature of the controversy surrounding...,*
- *our CEO shared his insight (...) including commentary on how world events have impacted consumer behavior and (...) industry generally.*

The linguistic analysis of the published texts also provides an important insight. First, in most cases, the founder is presented as an equal member of the start-up team. It is shown by using the possessive pronoun: "our" and describing the CEO only by his/her first name as a part of the team. This kind of wording is often accompanied by semi-formal or even unformal photos of the CEO or CEO with his/her employees, illustrating a flat structure of this type of organization and partnership, which is their essential feature. A specific exception here is some start-ups representing a highly technical, scientific, and medical area of operation, where the founder's academic degree and background are often emphasized.

An essential aspect of the results worth noticing is the impact of the CEO's gender. However, the sample analyzed is relatively small and not representative, one can observe that start-ups led by one or more women present slightly different characteristics of their leaders, like the ability to achieve work-life balance or empowerment.

The research conducted enabled to initially investigate and clarify several aspects of a leader's personal branding in the context of venture employer branding (EB), attracting and recruiting talents, and providing a unique Employee Value Proposition (EVP). Using personal brand dimensions from Hai-Ming and Hsin-Mei scale, the author presented how they are used in reinforcing start-up external image among candidates and broader – social media users. It was described that, however, start-up leaders personalize some top career priorities of young professionals, like entrepreneurial opportunities, autonomy, personal growth, and work-life balance, their personal brands seem not to be utilized in a strategic, consistent way. Also, start-ups significantly differ in the extent to which they use their CEO's personal brand, from not using it at all trough simply sharing leader social media posts without commenting on it to present them as the most important ambassador of the company brand. Also, other strategies exist, like presenting all managers or even all employees as employer brand ambassadors, using employee-generated content, or choosing another company's face than the founder (e.g. Sales Director or - rarely - Communication manager). However, the founder is at the heart of start-up brand storytelling, and it is critical to understand that consistent communication of the employer brand needs to start at the top. The personal brand of the leader firmly, on the basis of co-branding, aligned with the employer brand, may help create a positive venture image, attracting talents and - in turn - converting personal brand authority into profit.

References

- Bălan, S., Vreja, L.O. (2018). Management Perspectives in the Digital Era: Generation Z: Challenges for Management and Leadership. *Journal of Business and Management*, 16(7), 59-63. www.IOSRjournals.org.
- Baluku, M.M., Mabunda, M., Kikooma, J.F., Kibanja, G.M. (2016). *Psychological capital* and the startup capital – entrepreneurial success relationship. 6331. https://doi.org/ 10.1080/08276331.2015.1132512.
- Bendisch, F., Larsen, G., Trueman, M. (2013). Fame and fortune: A conceptual model of CEO brands. *European Journal of Marketing*, 47(3), 596-614. https://doi.org/ 10.1108/03090561311297472.
- 4. Berelson, B. (1952). Content analysis in communication research. Free Press.
- 5. Bonaventura, M., Ciotti, V., Panzarasa, P., Liverani, S., Lacasa, L., Latora, V. (2020). Predicting success in the worldwide start-up network. *Scientific Reports*, *10*(1).

https://doi.org/10.1038/s41598-019-57209-w.

- 6. Boyatzis, R.E. (2006). Using Tipping Points of Emotional Intelligence and Cognitive Competencies to Predict Financial Performance of Leaders. *Psicothema*, *18*(1), 124-131.
- 7. Chatterjee, N., Das, N. (2015). Key psychological factors as predictors of entrepreneurial success: A conceptual framework. *Academy of Entrepreneurship Journal*, 21(1), 105-117.
- Dobroszek, K. (2021). Ranking 25 najlepszych polskich startupów. https://mycompanypolska.pl/artykul/ranking-25-najlepszych-polskich-startupow-edycja-2021/7521.
- Fackler, D., Hoelscher, L., Schnabel, C., Weyh, A. (2022). Does working at a start-up pay off? *Small Business Economics*, 58(4), 2211-2233. https://doi.org/10.1007/s11187-021-00508-2.
- 10. Fetscherin, M. (2015). The CEO branding mix. *Journal of Business Strategy*, *36*(6), 22-28. https://doi.org/10.1108/JBS-01-2015-0004.
- 11. Gibb, A., Ritchie, J. (1982). Understanding The Process Of Starting A Small Business. *International Small Business Journal*, 1(1), 26-45.
- 12. Gueguen, G., Delanoe-Gueguen, S., Lechner, C. (2021). Start-ups in entrepreneurial ecosystems: the role of relational capacity. *Management Decision*, 59(13), 115-135. https://doi.org/10.1108/MD-06-2020-0692
- Hai-Ming, C., Hsin-Mei, C. (2018). A scale for CEO personal brand measurement. South African Journal of Business Management, 48(2), 23-32. https://doi.org/ 10.4102/sajbm.v48i2.25.
- 14. Konya-Baumbach, E., Schuhmacher, M.C., Kuester, S., Kuharev, V. (2019). Making a first impression as a start-up: Strategies to overcome low initial trust perceptions in digital innovation adoption. *International Journal Of Research In Marketing*, 36(3, SI), 385-399. https://doi.org/10.1016/j.ijresmar.2019.01.008.
- Korunka, C., Kessler, A., Frank, H., Lueger, M. (2010). Personal characteristics, resources, and environment as predictors of business survival. *Journal of Occupational and Organizational Psychology*, 83(4), 1025-1051. https://doi.org/10.1348/096317909X 485135.
- 16. Kucharska, W., Mikołajczak, P. (2018). Personal branding of artists and art-designers: necessity or desire? *Journal of Product & Brand Management*, 27(3), 249-261.
- Loppis, G. (2013). Personal Branding Is A Leadership Requirement, Not a Self-Promotion Campaign, https://www.forbes.com/sites/glennllopis/2013/04/08/personal-branding-is-aleadership-requirement-not-a-self-promotion-campaign/?sh=85d1531226fa.
- Macalik, J. (2021). Do They Even Care? Start-Up Leaders' Attitude Towards Personal Branding Role in Creating Start-Up Performance. Research Assumptions. *Transformations in Business & Economics*, 20(2B), 969-988.
- 19. Macalik, J. (2020). Start-up leaders in the media results of qualitative content analysis of online press news. In Soliman Khalid (Ed.), *Education Excellence and Innovation*

Management: A 2025 Vision to Sustain Economic Development during Global Challenges (pp. 6529-6537).

- 20. McMillan, S.J. (2000). The microscope and the moving target: The challenge of applying content analysis to the World Wide Web. *Journalism & Mass Communication Quarterly*, 77(1), 80-98.
- 21. Men, L.R., Tsai, W.H.S. (2016). Public engagement with CEOs on social media: Motivations and relational outcomes. *Public Relations Review*, 42(5), 932-942. https://doi.org/10.1016/j.pubrev.2016.08.001.
- 22. Minchington, B. (2010). *Employer Brand Leadership: A Global Perspective*. Collective Learning Australia.
- 23. Montoya, P. (2002). The Personal Branding Phenomenon: Realize Greater Influence, Explosive Income Growth and Rapid Career Advancement by Applying the Branding Techniques of Oprah, Martha and Michael. Personal Branding Press.
- 24. Moser, K., Tumasjan, A., Welpe, I.M. (2015). Small, but attractive: the effect of employer branding and legitimacy on startup attractiveness. *Academy of Management Proceedings*, *1*.
- 25. Palen-Tondel, P., Smolbik-Jeczmien, A. (2021). Looking for a Fulcrum Are Preferred Work Values Different for Four Generation Cohorts Co-existing in the Labour Market of Poland? *European Research Studies Journal*, XXIV(3), 102-119. https://doi.org/10.35808/ ersj/2343.
- 26. Perkins, R. (2015). Entrepreneurial Leadership Theory: An Exploration of Three Essential Start-Up Task Behaviors. In: C. Ingley, J. Lockhart (Eds.), *Proceedings of the 3rd International Conference on Management Leadership and Governance (Icmlg 2015)* (pp. 215-223). Acad Conferences Ltd.
- 27. Rampl, L.V. (2014). How to become an employer of choice: transforming employer brand associations into employer first-choice brands. *Journal of Marketing Management, Vol. 30, Iss. 13-14*, pp. 1486-1504, https://doi.org/10.1080/0267257X.2014.934903.
- Ranft, A.L., Zinko, R., Ferris, G.R., Buckley, M.R. (2006). Marketing the Image of Management: The Costs and Benefits of CEO Reputation. *Organizational Dynamics*, 35, 279-290.
- 29. Riffe, D., Lacy, S.R., Fico, F.G. (2005). *Analyzing media messages: Using quantitative content analysis in research*. Lawrence Erlbaum Associates.
- 30. Saad, N.H.M., Yaacob, Z. (2021). Building a Personal Brand as a CEO: A Case Study of Vivy Yusof, the Cofounder of FashionValet and the dUCk Group. *Sage Open*, 11(3). https://doi.org/10.1177/21582440211030274.
- 31. Seemiller, C., Grace, M. (2018). Generation Z: A Century in the Making. Routledge.
- 32. Slavik, S., Srovnalikova, P., Navickas, V., Girchenko, T. (2020). *Human Dimension of Start-Up. Financial and Credit Activity-Problems of Theory and Practice*, *3*(34), 392-401.
- 33. Tumasjan, A., Strobel, M., Welpe, I.M. (2011). Employer brand building for start-ups:

which job attributes do employees value most? *Zeitschrift Für Betriebswirtschaft*, 81(6), 111-136. https://doi.org/10.1007/s11573-011-0507-2.

- 34. White, M.D., Marsh, E.E. (2006). Content analysis: A flexible methodology. *Library Trends*, 55(1), 22-45.
- 35. Zaech, S., Baldegger, U. (2017). Leadership in start-ups. *International Small Business Journal*, *35*(2), 157-177. https://doi.org/10.1177/0266242616676883.
- 36. Zarkada, A. (2012). Concepts and Constructs for Personal Branding: An Exploratory Literature Review Approach. *SSRN Electronic Journal*, 2012. https://doi.org/10.2139/ ssrn.1994522.
- 37. Zeitoun, V., Michel, G., Fleck, N. (2020). When brands use CEOs and employees as spokespersons: A framework for understanding internal endorsement. *Qualitative Market Research*, 23(2), 241-264. https://doi.org/10.1108/QMR-01-2019-0011.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

GREENWASHING – CONSUMER'S PERSPECTIVE

Ewa MAZUR-WIERZBICKA

University of Szczecin; ewa.mazur-wierzbicka@usz.edu.pl, ORCID: 0000-0001-7874-6417

Purpose: The purpose of this study is to identify and assess the occurrence of greenwashing from the perspective of the company' main external stakeholder, that is consumer.

Design/methodology/approach: The paper is based on a critical review of literature, research studies, secondary data and reports.

Findings: The discussion carried out in this article showed that consumer pressure is one of the main reasons why organizations apply both real and apparent (greenwashing practices) actions that serve to protect the natural environment. Greenwashing practices used by companies for whom consumers are the main recipients are not to their benefit in the long run (which some of the consumers do not realise). As consumers' ecological knowledge and awareness improve, we may hope that greenwashing practices will become scarcer. This trend may benefit from placing a greater emphasis (for example coming from the legislator) on the processes of sustainable production and consumption.

Research limitations/implications: This paper includes a discussion based on a critical analysis of relevant literature and existing secondary data, which is its limitation. Due to the significance and validity of the subject matter discussed in the article, it seems important to take another step, that is a discussion on the impact of sustainable consumption on the development of greenwashing practices.

Practical implications: The study identifies how important it is to be able to recognize greenwashing. It is because greenwashing is detrimental not only to consumers, but also to honest companies that treat the issues of environmental protection and sustainable development seriously.

Social implications: The argumentation presented in the article points to the dangerous phenomenon of greenwashing. It is alarming because it gives the consumer an "ecological" product, a sense of satisfaction and involvement in environmental protection, whereas the use of greenwashing practices (e.g. overrating, false information) reinforces the social sense of mistrust and ignorance towards products and companies that take real environmental efforts. It is suggested that awareness-raising measures (e.g. campaigns) be undertaken so that consumers are more conscious of greenwashing practices and the resulting negative consequences.

Originality/value: Showing the role of the consumer as an external shareholder from the point of view of an initiator and recipient of pro-ecological actions taken up by organizations (unfortunately also greenwashing practices), directed at creating environmentally-friendly (pro-ecological) products.

Keywords: greenwashing, natural environment, consumer, stakeholder.

Category of the paper: research paper.

1. Introduction

Companies are increasingly aware of the fact that their "environmental reputation", an environmentally-friendly attitude and care about environmental protection do have an impact on their products being purchased. This is also encouraged by the noticeable trend for a dynamic development of the market of ecological products (the value of the global ecological food market in 2019 was more than EUR 106 billion). Consumer awareness of environmental protection also rises, which may be seen in market choices, for example in the increased demand for ecological products (Nguyen et al., 2020) and in the changes in behaviour models and values (Kim, Chung, 2011). Eco-friendly products are preferred due their marginal or no direct negative and/or indirect impact on the natural environment during their entire life cycle (Choi, Johnson, 2019). Also, they are increasingly associated with prestige and a desired status (Ahmad, Zhang, 2020).

Unfortunately, some companies use this increased interest in environmental protection (being "eco" is becoming more and more fashionable and politically correct) and offer goods that are classified as eco-friendly. Companies communicate their affirmed care about the natural environment, which in some cases is fake and superficial and used to satisfy the companies' sale- and marketing-related needs. Sometimes it is just a financial calculation and conscious consumer manipulation.

This is why more and more place in the public debate is devoted to greenwashing (Dahl, 2010), which has many forms but one objective - the company is to be seen as environmentally friendly even though it is not truly the case.

Given the above, the author's objective in this study is to identify and assess the occurrence of greenwashing from the perspective of the company' main external stakeholder, that is consumer. The prime goal was achieved through the formulation of an adequate model.

2. Greenwashing - theoretical introduction

A debate on greenwashing first appeared in the 1960s, when the interest in the questions of environmental protection grew. J. Westerveld, a biologist and activist for environmental protection, is considered the father of the term "greenwashing". He first defined it in 1986. Since then, there have been plenty of interpretations of the term greenwashing, which is seen in the analysis of relevant literature dedicated to this concept. Examples of approaches to and interpretations of greenwashing are presented in Table 1. Greenwashing is also known as whitewash, green washing, eco-washing, green image washing green makeup or as green sheen

Table 1.

Author(s)	Definition of the concept		
Delmas,	"The act of misleading consumers regarding the environmental practices of organisations		
Burbano	(firm-level greenwashing) or the environmental benefits of a product or service (product-level		
	greenwashing)".		
	"Poor environmental performance and positive communication about environmental		
	performance".		
Lyon,	"Greenwash can be characterized as the selective disclosure of positive information about a		
Maxwell	company's environmental or social performance, while withholding negative information on		
	these dimensions".		
Lyon,	"The word greenwash is used to cover any communication that misleads people into adopting		
Montgomery	overly positive beliefs about an organization's environmental performance, practices,		
	or products".		
Marquis,	"Greenwashing is the practice of promoting environmentally friendly programs to deflect		
Toffel	attention from an organisation's environmentally unfriendly or less savory activities".		
Seele,	"a green message must combine falsity (information-related element) with an accusation of		
Gatti	being misleading (external-distortion element)".		
Tateishi	"Communication that misleads people (e.g., consumers and stakeholders) regarding		
	environmental performance/benefits by disclosing negative information and disseminating		
	positive information about an organisation, service, or product".		
TerraChoice	"Greenwashing is the act of misleading consumers regarding the environmental practices of		
	a company or the environmental benefits of a product or service".		
Walker,	"Symbolic information emanating from within an organization		
Wan	without substantive actions".		

Selected definitions of greenwashing

Źródło: (Delmas, Burbano, 2011, pp. 65-66; Lyon, Maxwell, 2011, pp. 5, 11; Lyon, Montgomery, 2015, p. 226; Marquis, Toffel, 2011, p. 19; Seele, Gatti, 2017, p. 241; Tateishi, 2018, pp. 372-373; TerraChoice Group Inc., 2009; Walker, Wan, 2012, p. 231).

The literature lacks a uniform definition of greenwashing (Lyon, Montgomery, 2015). After an analysis of numerous descriptions of this term it may be concluded that we are dealing with greenwashing where there is a discrepancy (sometimes great) between reality and the perception created in stakeholders' minds (Walker, Wan, 2012; Ramus, Montiel, 2005) when it comes to eco-friendly actions taken up by companies, manufacturing of eco-friendly products or provision of eco-friendly services. The analysis of the literature shows that greenwashing demonstrates dependence on especially two features of an organization, that is poor environmental performance and positive environmental performance communication. It may be assumed that greenwashing occurs at the interface of these two features (Nguyen et al., 2019).

The different approaches to greenwashing give rise to a few possibilities of its classification. We may take TerraChoice's 2009 definition as an example, which covers only one category of stakeholders (consumers) interested in greenwashing and its two levels (the level of the company and the level of the product (cf.: Kahle, Gurel-Atay, 2015). This is the definition that should be taken as a basis from the point of view of the discussion carried out in this article.

Delmas and Burbano (2011), on the other hand, classified greenwashing drivers grouping them into four main categories, that is non-market external drivers, market external drivers, organizational-level drivers and individual-level psychological drivers. When selecting such drivers in the discussion presented in this article, special focus should be given to consumer

demand (market external drivers category), which has an impact on organizational-level drivers.

An increased interest in the subject matter of greenwashing is determined by the growing importance of this phenomenon in the economic practice and by the fact that this subject matter brings research challenges and opportunities at the interface of various scientific disciplines (Table 2). Scholarly investigations of greenwashing commenced in mid-1990s. Its pioneers, Greer and Bruno (1996), discussed it in their book about environmental marketing. These investigations continue till this day.

Table 2.

Examples of research perspectives and research interest areas relating to "greenwashing"

Research interest areas relating to greenwashing	Research authors
financial perspective	Du, 2015; Lyon, Maxwell, 2011;
	Walker, Wan, 2012
marketing perspective	TerraChoice, 2009; Delmas, Burbano,
	2011; Nguyen et al. 2019
corporate communication perspective	Walker, Wan, 2012; Yu et al., 2020
corporate leadership perspective	Blome et al., 2017
natural environment perspective in a corporate context	Geerts, 2014, Berrone et al., 2017
natural environment perspective in the context of public, legal and	Berrone et al., 2015; Sun, Zhang, 2019;
regulation-related actions	Przybojewska, 2022
perspective of sharing information about companies' environmental	Cho et al., 2009; Vries et al., 2015
actions against the perception of "greenwashing" by stakeholders in	
companies	
Source: outhor's own compilation	

Source: author's own compilation.

Summing up the review of greenwashing-oriented literature, it needs to be noticed that adoption of one definition of this concept would probably have a limited usability due to its complexity and interdisciplinary nature, whereby many researchers investigate greenwashing by addressing it from different angles.

3. Consumer from the perspective of green market choices – consumers' green behaviours

According to the stakeholder theory (Freeman, 1984), various groups of stakeholders have an impact on the functioning of an organization. External stakeholders are one of such groups and include consumers next to, for example, suppliers, regulatory authorities and community.

Since the mid-1960s we have been observing a constant growth in the importance of the question of environmental protection (eco-development, then sustainable development (also in the context of companies)) in social and economic life. This has an impact on the development of relevant knowledge and this in turn translates into, for example, increased environmental awareness of many stakeholder groups, including consumers. Modelling consumers' environmental awareness depends on their knowledge and the resulting sense of personal threat,

the sense of one's own responsibility for the condition of the environment, the sense of health security and readiness for personal self-limitations (Łuczka-Bakuła, 1996). Importantly, the growing environmental awareness - a currently observable trend - leads to the development of eco-friendly behaviours (for example, research entitled "Investigating ecological awareness and behaviours of residents of Poland" [original title: Badanie świadomości i zachowań ekologicznych mieszkańców Polski] demonstrates that Poles hold the questions of caring about the natural environment most at heart; the following issues have been identified: environmental protection - 52%, health protection - 48% and economy - economic development - 20% (MKiŚ, 2020)). Increased knowledge about changes that occur in the natural environment and their consequences (including climate change) for life on earth has a direct impact on the sense of personal threat and thus the development of consumers' emotional attitudes towards protection of the environment (climate change/environmental protection are a top concern of young people, both in Poland and internationally (Deloitte, 2020)). Therefore, we may assume that there is a certain regularity. The more the society is concerned about the consequences of detrimental changes in the natural environment, about its pollution and about excessive exploitation of its resources (renewable and non-renewable), the greater the likelihood that when they take market decisions they will be guided by environmental criteria, thus we will observe intensified "green consumer behaviour" (Baum, 2012; Paul et al., 2016; Wu et al., 2018). It is especially noticeable among communities that reside in areas with a high degree of environmental pollution. Special ecological values become more important there because the threat affects the consumer directly, including what is very valuable to him, that is his health (Mazur-Wierzbicka, 2020). This translates into increased importance of health-related motives when buying products and services.

Research shows (Stern, 2000; Nguyen et al., 2019) that there is a positive feedback between consumers' ecological knowledge and awareness and their attitudes to consumption of ecological products and environmentally friendly products (in the production process and their use alike), that is "green consumption" (Witek, 2017). Such findings also demonstrate that an increase in consumers' ecological awareness encourages them to choose eco products (Witek, Kuźniar, 2020; Sheehan, Atkinson, 2012). In addition, consumers who recognize the importance of the quality of ecological products, environmentally friendly products and their manufacturing process (often more expensive than that of "traditional" products) are willing to pay a higher price for them (Li et al., 2016). Results of research conducted in 2014-2015 on more than 30,000 consumers from more than 60 countries have shown that as early as seven years ago 66% of respondents declared that they agree to paying a higher unitary price for a given product on the condition that the company that manufactures it is guided by the principles of sustainable development. Moreover, in the under-34 age group (generations Y and Z), who as the years go by will shape the market in terms of demand, three out of four people declared they would pay a higher price (Nielsen, 2015). More than 50% of respondents admitted to looking at product packaging for information about producers' activities related to

corporate social responsibility (CSR). It mainly concerned the product's impact on the natural environment and whether it was natural, that is whether it contained chemicals (Nielsen, 2015). This situation is slightly different in the perspective of a Polish consumer. According to research conducted in 2019 only 12% of Poles agreed to bear the costs of their pro-eco choices. On the other hand, while 16% of respondents tried to be eco, i.e. they recycled, saved electricity or water, they still would rather shift the cost onto the government or industry representatives. As shown in the research findings, the younger the generation, the more important being eco is (Deloitte, 2020). At the same time, studies show that in 2021 the share of eco-centric consumers in the general population in Poland, that is consumers who focus less on the brand or quality but who in turn look for products and services designed with the natural environment in mind, was 12% (Kantar, 2021).

4. The force of customers' impact on companies' pro-eco decisions

In the times when the importance of the question of environmental protection grows and when there is a strive for sustainable development, increasingly conscious external stakeholders begin to exert pressure on companies so that the latter aim to minimise their negative impact on the natural environment and rationally use resources to operate sustainably (Mazur-Wierzbicka, 2016). Consumers play the prime role among external stakeholders; they begin to report greater demand for products' ecological attributes (Mazur-Wierzbicka, 2015; Groening et al., 2018). As a consequence, companies take actions that evidence their involvement in environmental protection, which allows them to position themselves as environmentally-friendly entities (Schons, Steinmeier, 2016). Companies do so by, for example, implementing the strategy of ecological production and distribution (Huang et al., 2016; Groening et al., 2018) and also by communicating it when using green marketing. There is empirical evidence that consumers accept companies' building an image of a green brand so that they may strengthen their position on the market and gain competitive advantage (Wu, Lin, 2016). Such an attitude will encourage companies to take environmental actions consciously and responsibly, to demonstrate authentic care for environmental protection and to develop sustainably.

Failure to take into account consumers' pro-eco preferences and their orientation on the choice of environmentally friendly products may result in a loss of the market share and decreased profits (Gualandris, Kalchschmidt, 2014) - despite, of course, waiving the opportunity to build a reliable image of a company that cares about the condition of the environment.

Some companies may have difficulties complying with ecological standards. However, if they are under consumers' pressure and see benefits that pro-green engagement may bring, they may communicate false or partially false information about activities that serve

environmental protection. The research shows that enterprises that have built a good image of "eco-friendly companies" are perceived favourably (at least at the beginning) by consumers, even if in fact their efficiency and green activity are insufficient (compared to the information given to consumers) (Marin et al., 2009). Some companies try to use it and begin to apply greenwashing practices (Coskun et al., 2016) that may take different forms, e.g. hidden alternative costs (hiding information about product's negative features), lack of evidence on whether a given product has eco-friendly attributes, vague terms, insignificant terms, intentional communication of untrue information about the offer's green attributes, application of "false eco-labels", or communicating using the "lesser evil" rule or white lies (TerraChoice, 2010).

5. Consequences of greenwashing

By carrying out a critical analysis of relevant literature and also taking into consideration research results (also those quoted above), we may specify greenwashing's consequences both for consumers and companies that apply them.

Companies often use such forms of greenwashing which aim to provide consumers with large amounts of information, which is often incomprehensible or uses commonplace slogans. This greatly prevents them from assessing products reliably (Gosselt et al., 2017). Companies' motives for taking eco-friendly actions may be unclear and they may perceive them in a negative light. Such behaviours from companies lead to increased scepticism among consumers towards environmentally-oriented companies (Nguyen et al., 2019).

Given the above, it is essential to point to the question of consumers' green trust (that is the degree of belief in the company's environmental performance - Chen, 2010). Unfortunately, it may not be objectively measured because consumers often have problems with comparing ecological products and services with their regular counterparts (condition: they must have the same functions and satisfy the same needs), and also with an assessment of how eco-products and eco-services solve specific environmental problems (Woo, 2021). When observing the growth of the number of greenwashing cases, we may assume that this trend will have a major impact on consumers' trust in ecological products and services and in the companies that produce or provide them. When consumers feel cheated by the greenwashing exercised by a company, they may doubt their initiatives for sustainable development and may not want to maintain long-term relations with them.

Therefore, when companies communicate untrue information about their engagement in environmental protection and about their green actions, consumers may feel disoriented (Hamann, Kapelus, 2004; Parguel et al., 2011; Dahl, 2018), and in consequence such organizations may lose prestige and consumers' trust (Polonsky et al., 2010; Hsu, 2011).

In turn, this will contribute to decreasing the company's profits and may result in it losing its position on the market, let alone bad reputation of an "unreliable business". It needs to be borne in mind that rebuilding consumers' trust is both time-consuming and requires considerable financial outlays.

We must also bear in mind that the growth of consumers' ecological awareness as well as the emergence of more and more information about reliable and unreliable eco-friendly actions (including greenwashing practices) that companies take mean that consumers begin to verify the level of their green trust in the companies using measures and means available to them. This, in turn, affects their attitudes towards the brand and their intentions or purchase choices (Akturan, 2018; Nguyen et al., 2019). For example, the 2021 study "Climate Sentiment Index" includes information that more than every second Pole checks whether companies are as green as declared (Deloitte, 2021). Similar conclusions may be drawn from a report which was published in November 2021, just before the COP26 climate conference, by a leading Australian research institute - SEC Newgate Research. More than half of investigated residents of large developed countries declare readiness to boycott companies with poor performance in the ESG area, that is the area related to their environmental and social impact and corporate governance (SEC Newgate, 2021).

Greenwashing practices applied by some companies act to the detriment of the "green (eco) case" and call for questions about companies' fairness towards their consumers. This negative perception is a true challenge for companies which are authentically environmentally engaged and take efforts to minimise their negative impact on the natural environment. It may lead to a situation where consumers demonstrate great scepticism and lack of trust in solutions intended to protect the environment in production, distribution or commercialisation processes (Braga et al., 2016). They will communicate it by a drop in their interest to buy green products offered by companies that genuinely care about the natural environment (Wang et al., 2019) and that sometimes allocate considerable financial resources to it.

6. Avoiding greenwashing

This discussion brings yet another question: how can consumers cope with a threat like greenwashing? The answer to this question is not unequivocal.

The starting point here is the consumers' desire to learn which producers of brands they are interested in truly care about the condition of the natural environment and which of them are only trying to boost their profits through a fictionally built eco-image. Consumers should certainly be sensitive to words used by companies which may be misleading. Such words may include: natural, ecological, clean, green, Earth-friendly, environmentally friendly, reduced emissions, or carbon neutral. They may also look for evidence on the companies' websites and

in their reports on corporate social responsibility and sustainable development to verify pro-environment statements used by a company for their own activity, products and services. They may also check the reliability and authenticity of eco-labels and certificates that a company uses (are these ecological labels?; are the certificates issued by relevant institutions recognized nationally and internationally in the industry?). More aware and more educated consumers may also carry out life cycle assessments (LCA). It is very helpful in identifying truly ecological products.

7. Summary

It seems reasonable to include in the summary a model that presents consumers' significance and role in the greenwashing process. We open with the external stakeholder who by his actions contributes to unfair enterprises engaging in greenwashing practices towards their stakeholders, in particular (in the context of this discussion) a consumer and a silent stakeholder, that is the natural environment. We close with a consumer who acts as a recipient of the effects of greenwashing practices applied by companies (Figure 1).

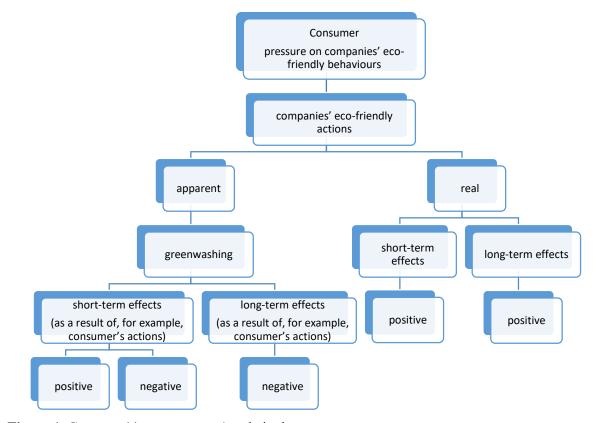


Figure 1. Greenwashing - consumer's role in the process.

Source: author's own compilation.

Consumers stand at the front and at the end of the process of companies' pro-eco actions, both those that are fair (which is rewarded with loyalty and increased trust) and those that apply greenwashing practices (in this case it is important that consumers are able to verify a company's unfair behaviour quickly). They may then adjust their opinions of and attitudes towards the unfair undertaking and share this information with other market participants. Such an attitude will certainly boost the position of companies that are authentically engaged in environmental matters and expose entities that are environmentally unfair. However, in all of this it is important that a consumer has adequate knowledge and is ecologically aware. Knowledge and awareness are the basis to verify the authenticity of actions taken up by companies for the environment and to not let themselves be deceived. Since a society has found itself in a moment when consumption becomes a synonym of not only "buying", but also "responsibility", it is important that it be accompanied by the creation of uncomplicated, communicative and verifiable tools thanks to which consumers will find it easier to take decisions when choosing ecological products and thanks to which unfair enterprises will find it more difficult to practice greenwashing. Additionally, we need to bear in mind the actions taken by the legislator and companies for sustainable production and consumption. Their strong anchoring in economic practice and adequate regulations may be one of the more important factors that make greenwashing practices unprofitable.

References

- Ahmad, W., Zhang, Q. (2020). Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of Cleaner Production*, Vol. 267, p. 122053. https://doi.org/10.1016/j.jclepro.2020.122053.
- Akturan, U. (2018) How does greenwashing affect green branding equity and purchase intention? An empirical research. *Marketing Intelligence & Planning*, *Vol. 36*, pp. 809-824. https://doi.org/10.1108/MIP-12-2017-0339.
- Baum, L.M. (2012). It's not easy being green... or is it? A content analysis of environmental claims in magazine advertisements from the United States and United Kingdom. *Environmental Communication: A Journal of Nature and Culture, Vol. 6(4),* pp. 423-440. DOI:10.1080/17524032.2012.724022.
- 4. Berrone, P., Fosfuri, A., Gelabert, L. (2017). Does greenwashing pay off? Understanding the Relationship Between Environmental Actions and Environmental Legitimacy. *Journal of Business Ethics*, *Vol. 144*(2), pp. 363-379. https://doi.org/10.1007/s10551-015-2816-9.
- Blome, C., Foerstl, K., Schleper, M.C. (2017). Antecedents of green supplier championing and greenwashing: An empirical study on leadership and ethical incentives. *Journal of Cleaner Production, Vol. 152*, pp. 339-350. DOI:10.1016/j.jclepro.2017.03.052.

- Braga, S.S., Jr., Merlo, E.M., Silva, D. (2016). I do not believe in green consumption: The reflection of ceticism in consumer purchasing behavior. *Revista de Gestão Social e Ambiental*, *Vol. 10*, pp. 2-15. DOI: 10.5773/rgsa.v10i3.1133.
- 7. Chen, Y.S. (2010). The Drivers of Green Brand Equity: Green Brand Image, Green Satisfaction, and Green Trust. *Journal of Business Ethics, Vol.* 93(2), pp. 307-319.
- Cho, C.H., Phillips, J.R., Hageman, A.M., Patten, D.M. (2009). Media richness, user trust, and perceptions of corporate social responsibility: An experimental investigation of visual web site disclosures. *Accounting, Auditing and Accountability Journal, Vol. 22(6)*, pp. 933-952.
- Choi, D., Johnson, K.K.P. (2019). Influences of environmental and hedonic motivations on intention to purchase green products: An extension of the theory of planned behavior. *Sustainable Production and Consumption, Vol. 18*, pp. 145-155. https://doi.org/10.1016/j.spc.2019.02.001.
- Coskun, S., Ozgur, L., Polat, O., Gungor, A. (2016). A model proposal for green supply chain network design based on consumer segmentation. *Journal of Cleaner Production*, *Vol. 110*, pp. 149-157. DOI 10.1016/j.jclepro.2015.02.063.
- 11. Dahl, R. (2010). Greenwashing: Do you know what you're buying? *Environmental health perspectives. Vol. 118*, p. A246-52. 10.1289/ehp.118-a246.
- 12. Delmas, M.A., Burbano, V.C. (2011). The drivers of greenwashing. *California Management Review, Vol. 54(1),* pp. 64-87. https://doi.org/10.1525/cmr.2011.54.1.64.
- 13. Deloitte (2020). Raport: Deloitte Global Millennial Survey 2020 Troska o środowisko naturalne i postawa proekologiczna. Warszawa: Deloitte Polska.
- 14. Deloitte (2021). Raport Climate Sentiment Index. Warszawa: Deloitte Polska.
- 15. Du, X. (2015). How the market values greenwashing? Evidence from China. *Journal of Business Ethics, Vol. 128(3),* pp. 547-574. DOI: 10.1007/s10551-014-2122-y.
- 16. Freeman, E.R. (1984). *Strategic Management: A stakeholder approach*. Marshfield (Mass): Pitman.
- 17. Geerts, W. (2014). Environmental certification schemes: hotel managers' views and perceptions. *International Journal of Hospitality Management*, Vol. 39, pp. 87-96. https://doi.org/10.1016/j.ijhm.2014.02.007.
- Gosselt, J.F., Rompay, T.V., Haske, L. (2017). Won't get fooled again: The effects of internal and external CSR eco-labeling. *Journal of Business Ethics*, Vol. 2, pp. 1-12. https://doi.org/10.1007/s10551-017-3512-8.
- 19. Greer, J., Bruno, K. (1996). *Greenwash: the reality behind corporate environmentalism*. New York: Apex Press.
- Groening, C., Sarkis, J., Zhu, Q. (2018). Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Cleaner Production, Vol. 172*, pp. 1848-1866. DOI:10.1016/j.jclepro.2017.12.002.

- 21. Gualandris, J., Kalchschmidt, M. (2014). Customer pressure and innovativeness: Their role in sustainable supply chain management. *Journal of Purchasing and Supply Management*, *No. 20*(2), pp. 92-103. DOI:10.1016/j.pursup.2014.03.001.
- 22. Hamann, R., Kapelus, P. (2004). Corporate social responsibility inmining in Southern Africa: Fair accountability or just greenwash? *Development*, *Vol.* 47(3), pp. 85-92.
- 23. Hsu, T. (2011). Skepticism grows over products touted as eco-friendly. *Los Angeles Times*. http://articles.latimes.com/2011/may/21/business/la-fi-greenwash-20110521.
- 24. Huang, X.X., Hu, Z.P., Liu, C.S., Yu, D.J., Yu, L.F. (2016). The relationships between regulatory and customer pressure, green organizational responses, and green innovation performance. *Journal of Cleaner Production, Vol. 112*, pp. 3423-3433.
- 25. Kahle, L.R., Gurel-Atay, E. (2015). *Communicating sustainability for the green economy*. New York, NY: Routledge.
- 26. Kantar. (2021). Ekocentryczni. Poznań: Blix, Kantar.
- 27. Kim, H.Y., Chung, J.E. (2011). Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*, Vol. 28(1), pp. 40-47. https://doi.org/10.1108/07363761111101930.
- 28. Li, Y., Lu, Y., Zhang, X., Liu, L., Wang, M., Jiang, X. (2016). Propensity of green consumption behaviors in representative cities in China. *Journal of Cleaner Production*, *Vol. 133*, pp. 1328-1336. https://doi.org/10.1016/j.jclepro.2016.06.012.
- 29. Lyon, T.P., Maxwell, J.W. (2011). Greenwash: Corporate environmental disclosure under threat of audit. *Journal of Economics & Management Strategy*, *Vol. 20*, pp. 3-41. https://doi.org/10.1111/j.1530-9134.2010.00282.x.
- 30. Lyon, T.P., Montgomery, A.W. (2015). The means and end of greenwash. *Organization & Environment*, *Vol. 28(2)*, pp. 223-249. https://doi.org/10.1177/1086026615575332.
- 31. Łuczka-Bakuła, W. (1996). Czynniki warunkujące proekologiczne zmiany modelu konsumpcji. *Człowiek i Przyroda, No.4*.
- Marin, L., Ruiz, S., Rubio, A. (2009). The role of identity salience in the effects of corporate social responsibility on consumer behavior. *Journal of business ethics, Vol. 84(1)*, pp. 65-78. DOI:10.1007/s10551-008-9673-8.
- 33. Marquis, C., Toffel, M.W. (2011). The Globalization of Corporate Environmental Disclosure: Accountability or Greenwashing? Cambridge, MA, USA: Harvard School of Business.
- 34. Mazur-Wierzbicka, E. (2015). Wpływ konsumentów na rozwój społecznej odpowiedzialności przedsiębiorstw. *Handel Wewnętrzny*, *No. 4*, pp. 296-306.
- 35. Mazur-Wierzbicka, E. (2020). Changes of The Environment as A Creator of New Trends in Consumer Behavior. In: K.S. Soliman (Ed.), Proceedings of the 35th International Business Information Management Association Conference (IBIMA), pp. 6042-6049.

- 36. Mazur-Wierzbicka. E. (2016). Zachowania konsumenckie w kontekście społecznej odpowiedzialności biznesu. *Studia i Prace Wydziału Nauk Ekonomicznych i Zarządzania Uniwersytet Szczeciński, No. 43(3)*, pp. 241-250. DOI: 10.18276/sip.2016.43/3-22.
- 37. MKiŚ (2020). Raport Badanie świadomości i zachowań ekologicznych mieszkańców Polski, Problemy Polski. Największe wyzwania dla Polski a problemy środowiska naturalnego. Warszawa: Ministerstwo Klimatu i Środowiska.
- 38. Nguyen, H.V., Nguyen, C.H., Hoang, T.T.B. (2019). Green consumption: Closing the intention behavior gap. Sustainable Development, Vol. 27(1), pp. 118-129. https://doi.org/10.1002/sd.1875.
- 39. Nguyen, T.K.C., Nguyen, D.M., Trinh, V.T., Tran, T.P.D., Cao, T.P. (2020). Factors affecting intention to purchase green products in Vietnam. *The Journal of Asian Finance, Economics, Business, Vol.* 7(4), pp. 205-211. doi:10.13106/JAFEB.2020.VOL7.NO4.205.
- Nguyen, T.T.H., Yang, Z., Nguyen, N., Johnson, L.W., Cao, T.K. (2019). Greenwash and green purchase intention: The mediating role of green skepticism. *Sustainability*, *Vol. 11*, p. 2653. https://doi.org/10.3390/su11092653.
- 41. Nielsen (2015). *Global Corporate Sustainability Report: The sustainability imperative. New insights on consumer expectations.* Nielsen.
- 42. Parguel, B., Benoît-Moreau, F., Larceneux, F. (2011). How sustainability ratings might deter 'greenwashing': A closer look at ethical corporate communication. *Journal of Business Ethics, Vol. 102*, pp. 15-28. https://doi.org/10.1007/s10551-011-0901-2.
- 43. Paul, J., Modi, A., Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, Vol. 29, pp. 123-134. https://doi.org/10.1016/j.jretconser.2015.11.006.
- 44. Polonsky, M.J., Grau, S.L., Garma, R. (2010): The new greenwash? Potential marketing problems with carbon offsets. *International Journal of Business Studies, Vol. 18(1)*, pp. 49-54.
- 45. Przybojewska, I. (2022). Greenwashing w kontekście unormowań prawnych. *Prawne Problemy Górnictwa Ochrony* Środowiska, *No. 1*, pp. 1-26. https://doi.org/10.31261/ PPGOS.2022.01.07.
- 46. Ramus, C.A., Montiel, I. (2005). When are corporate environmental policies a form of greenwashing? *Business & Society*, Vol. 44, pp. 377-414. https://doi.org/10.1177/ 0007650305278120.
- 47. Schons, L., Steinmeier, M. (2016). Walk the talk? How symbolic and substantive CSR actions affect firm performance depending on stakeholder proximity. *Corporate social responsibility and environmental management, Vol. 23(6)*, pp. 358-372. https://doi.org/10.1002/csr.1381.
- 48. SEC Newgate (2021). Report Global ESG Monitor. Sydney: SEC Newgate.

- 49. Seele, P., Gatti, L. (2017). Greenwashing revisited: In search of a typology and accusationbased definitione incorporating legitimacy strategies. *Business Strategy and the Environment, Vol. 26*(2), pp. 239-252. https://doi.org/10.1002/bse.1912.
- 50. Sheehan, K., Atkinson, L. (2012). Special Issue on Green Advertising, *Journal of Advertising*, *Vol.* 41(4), pp. 5-7, DOI: 10.1080/00913367.2012.10672453.
- 51. Stern, P.C. (2000). New environmental theories: toward a coherent theory of environmentally significant behavior. *Journal of social issues, Vol. 56(3)*, pp. 407-424.
- 52. Sun, Z., Zhang, W. (2019). Do government regulations prevent greenwashing? An evolutionary game analysis of heterogeneous enterprises. *Journal of Cleaner Production*, Vol. 231, pp. 1489-1502. https://doi.org/10.1016/j.jclepro.2019.05.335.
- 53. Tateishi, E. (2018). Craving Gains and Claiming 'Green' by Cutting Greens? An Exploratory Analysis of Greenfield Housing Developments in Iskandar Malaysia. *Journal of Urban Affairs, Vol. 40*, pp. 370-393. DOI: 10.1080/07352166.2017.1355667.
- 54. TerraChoice (2009). *The Seven Sins of Greenwashing. Environmental Claims in Consumer Markets. Summary Report: North America.* Retrieved from: https://www.ul.com/insights/ sins greenwashing, 4.05.2022.
- 55. Vries, G., Terwel, B.W., Ellemers, N., Daamen, D.D.L. (2015). Sustainability or profitability? How communicated motives for environmental policy affect public perceptions of corporate greenwashing. *Corporate Social Responsibility and Environmental Management*, *Vol. 22(3)*, pp.142-154. https://doi.org/10.1002/csr.1327.
- 56. Walker, K., Wan, F. (2012). The harm of symbolic actions and green-washing: Corporate actions and communications on environmental performance and their financial implications. *Journal of Business Ethics, Vol. 109*, pp. 227-242. https://doi.org/10.1007/s10551-011-1122-4.
- 57. Wang, H., Ma, B., Bai, R. (2019). The spillover effect of greenwashing behaviours: An experimental approach. *Marketing Intelligence & Planning*, *Vol. 38(3)*, pp. 283-295. https://doi.org/10.1108/MIP-01-2019-0006.
- 58. Witek, L. (2017). Idea konsumpcji ekologicznej wśród kobiet. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, No.337*, pp. 194-203.
- Witek, L., Kuźniar, W. (2020). Green Purchase Behavior: The Effectiveness of Sociodemographic Variables for Explaining Green Purchases in Emerging Market. *Sustainability, Vol. 13(1)*, pp. 1-18. https://doi.org/10.3390/su13010209.
- 60. Woo, E.-J. (2021). The Relationship between Green Marketing and Firm Reputation: Evidence from Content Analysis. *The Journal of Asian Finance, Economics and Business, Vol.* 8(4), 455-463. doi:10.13106/JAFEB.2021.VOL8.NO4.0455.
- Wu, H.C., Wei, C.F., Tseng, L.Y., Cheng, C.C. (2018). What drives green brand switching behavior? *Marketing Intelligence & Planning, Vol. 36*,(6), pp. 694-708. DOI:10.1108/MIP-10-2017-0224.

- 62. Wu, S.I., Lin, S.R. (2016). The effect of green marketing strategy on business performance: a study of Organic farms in Taiwan. *Total Quality Management & Business Excellence, Vol. 27(1-2)*, pp. 141-156. https://doi.org/10.1080/14783363.2014.959256.
- Yu, E.P.-Y., Luu, B.V., Chen, C.H. (2020). Greenwashing in environmental, social and governance disclosures. *Research in International Business and Finance*, *Vol.* 52, p. 101192. https://doi.org/10.1016/j.ribaf.2020.101192.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

FAMILY POLICY AND SOCIAL JUSTICE – OR WHY INVEST IN HUMAN CAPITAL?

Michał A. MICHALSKI

Adam Mickiewicz University; mmichal@amu.edu.pl, ORCID: 0000-0002-9854-0069

Purpose: The article attempts to analyze family policy as an area for the realization of the idea of social justice, a concept which seems to be somewhat marginalized and less popular than social equality at present. Therefore, the main purpose of the article is to revisit the concept of social justice and point at the potential and importance of this perspective and its supportive role in designing, developing and evaluating family policy in particular, and social policy in general.

Design/methodology/approach: This is achieved by reviewing the definition and scope of meaning of concepts and issues key to this study, their interconnectedness, and showing the legitimacy of their joint application to achieve the adequacy and effectiveness of actions designed within social policy. In terms of specific family policy tools, the article is illustrated with selected examples from Poland from the period 2015-2021. The concepts of the "tragedy of the commons" and the "free-rider problem" are also evoked, which – when applied to describe a particular way of thinking about parenthood and its economic and demographic effects - may prove useful for grasping important interactions and interdependencies within not only social policy, but socio-economic development in general.

Findings: The article argues that families raising children – thus creating human capital – are the group whose contribution to welfare and socio-economic development is proportionally greater. This fact – contributing to demographic challenges we face today – has not always been adequately recognized and compensated. This began to change with the introduction of the "Family 500+" programme and with subsequent tools of family policy developed in Poland over the last few years.

Originality/value: The paper proposes to approach social policy in general, and family policies in particular from the perspective of social justice with regard to human capital creation. Therefore, paper offers innovative and coherent perspective for designing, developing and evaluating social policy for those engaged in decision-making, implementation and control processes.

Keywords: family policy, social policy, social justice, human capital, responsibility.

Category of the paper: Conceptual paper, General review.

1. Introduction – Human capital as a target outcome of social policy

In public discourse, as well as in academic publications, one can find different opinions and positions on family policy¹. In the context of Poland, these disputes most often concern the "Family 500+" programme, which can be regarded as a kind of breakthrough in the state's efforts for families with children. It seems that in the often heated ongoing discussions, the arguments are much more frequently about its effectiveness and cost-effectiveness, and much less frequently about social justice. The latter seems today to be, on the one hand, a somewhat forgotten perspective and, on the other hand, not understood clearly enough. This problem is alluded to by Dariusz Pieńkowski, who notes that '(...) the very concept of justice is not popular among economists and is often relegated to "non-economic" areas of consideration' (Pieńkowski, 2013, p. 9, cf. Wilkin, 1997, p. 23).

It seems, however, that in view of the disputes concerning social policy - and family policy in particular - implemented in Poland over the last three decades, it is worth revisiting this category, as it may indeed help to structure and adequately link the various elements, tools and understand certain interdependencies.

Social policy is understood as '(...) activities of public institutions aimed directly at people's well-being. In a broader sense, it includes such areas as education, health care, the labour market or housing conditions, while in a narrower sense it covers income and - less frequently – consumption' (Panek, 2020, p. 437). From this definition, it follows that the goal of social policy can be most briefly described as human capital formation. Since we otherwise know - if only on the basis of the invaluable contribution of Gary S. Becker (Becker, 1993, p. 21) - that the family is the main source of this capital, it can be concluded that the essential task of social policy is to shape and influence the broad socio-cultural context in such a way as to create optimal conditions in which families can effectively perform their functions with regard to, among other things, the essential task of human capital creation.

In turn, its fundamental relationship to social justice can be perceived in the way in which we understand the function of social policy. The aforementioned entry edited by Tomasz Panek indicates that '(...) the assessment of the rationality of social policy revolves around the answer to the question: who are benefits directed to, and how does their receival affect the position of the recipient? In particular, it is necessary to answer the question whether benefits are received by those who need them most and whether the amount of benefits allows recipients to achieve a noticeable improvement in their material situation' (Panek, 2020, p. 437).

Thus, the object that social policy deals with automatically directs us towards social justice as the final perspective and desired framework within which society would like to locate all interactions, processes and influences.

¹ In public discourse, the term also appears in the form of 'family-friendly policies' - we will consider the two terms as synonymous.

The aforementioned position is confirmed by Stein Ringen, who, when analysing the broad context of family functioning in society and social policy settlements, states that 'in the broad perspective of the social sciences, where I feel at home, justice becomes the vision' (Ringen, 2009, p. 175). Of course, the issue is not so simple, probably due, on the one hand, to the complexity of the concept of justice and, on the other, to its socio-cultural mediation. This problem is aptly summarised by David Miller, who states that:'each basic conception [of justice] is linked to a different model of society, and no model of society is so widely accepted that disputes about justice can be resolved. To shed further light on the concept of justice, it would first be necessary to investigate in greater detail what factors influence people to adopt one model of society rather than another; and second to consider whether any of the models offered can be given a rational justification' (Miller, 1974, p. 399).

What emerges from the above passage is the fundamental observation that the field of social policy, as it were, naturally directs any consideration of the subject towards the question of social justice. In turn, social justice, especially in political narratives concerning social issues, seems to be often replaced by the idea of equality in recent years. Therefore, it is all the more important in this situation to recall what available knowledge and research say about justice. In this regard, we will refer to the work of John Rawls, arguably the most recognized scholar on the subject, who formulated the well-known two principles of justice, which read as follows: '(...) The first: every person is to have an equal right to the widest possible system of equal fundamental freedoms reconcilable with a similar system of freedoms for others. The second: social and economic inequalities are to be so arranged that they are both (a) reasonably expected to benefit everyone and (b) associated with positions and services open to all' (Rawls, 2009, p. 107).

These two principles lead to a more general conception of justice, which Rawls formulates as follows: 'All social values - liberty and opportunity, income and wealth, and the social basis of self-respect - are to be equally distributed, unless an unequal distribution of any (or all) of these values benefits everyone' (Rawls, 2009, p. 109).

The essence of justice is considered similarly, though in a slightly different way, by Chaïm Perelman, according to whom the essence of the principle of justice is to treat similar cases alike, which he expresses as follows: 'We can thus define formal or abstract justice as a principle of action according to which entities in the same essential category must be treated in the same way' (Perelman, 1963, p. 16; quoted in Perlikowski, 2020, p. 23).

Oddly enough, the concept of a fair level of social inequality, as pointed out by, among others, Michał Gabriel Woźniak and Łukasz Jabłoński (Woźniak, Jabłoński, 2008 p. 47), resonates with such an understanding of justice on economic grounds.

Invoking both Rawls's and Perelman's definitions seems particularly necessary today, when the argument of the aforementioned equality as a political *panaceum* is often unreflectively used in discussions, and the long-term perspective of intergenerational interactions and interdependencies, which are highly visible in the family, is completely ignored.

This issue is also addressed by Rawls, who first states that '(...) generations follow one another in time' (Rawls, 2009, p. 419), and that the flow of actual material benefits takes place in only one direction. Herein, one can certainly object when considering, for example, pension schemes based on intergenerational solidarity. It seems that in the following sentences Rawls completes his position when he writes that 'this situation can change, and in view of this the question of justice does not arise here. What is just or unjust is how institutions deal with natural constraints, and the way in which they are constructed to take advantage of historical possibilities' (Rawls, 2009, p. 419). At this point, it seems that the category of justice is straightforward referred as a necessary criterion for the construction and evaluation of social policy solutions, a point to which we will return later.

3. Social policy and the family - between justice and injustice

In order to illustrate these dilemmas of justice and equality understood in different ways, as well as responsibility as an important - and largely underrated - category, it is worth tracing how approaches to families have played out within social policy. To a large extent, the picture presented in this paper corresponds to the situation in many European countries, and relates primarily to the Polish context of the last three decades.

At this point, we come to two conclusions - firstly, that social policy must be considered in terms of justice and responsibility and, secondly, that the demographic crisis currently affecting many countries is, to some extent, the result of long-term social injustice. The following paragraphs will describe this phenomenon in a more detailed way.

Going back to the turn of the nineteenth and twentieth centuries, when the so-called solidarity (*pay-as-you-go*) pension systems and social security institutions - which are part of social reality today - were established, one can say that the world presented itself and functioned differently in many respects. At this point, one important assumption should undoubtedly be noticed, which at the time seemed unquestionable and unchangeable, namely that people would always marry and enough children would be born to ensure the replacement of generations. Over time, it has become increasingly clear - as a result of a number of overlapping factors and processes - that it can no longer be assumed that this is the dominant way of life that future generations will surely be choosing. This issue has already been addressed and probably deserves further analysis in order to verify to what extent current attitudes towards marriage and parenthood have changed in recent decades under the influence of trends and phenomena

such as secularisation, individualisation, commercialisation, counterculture, or late postmodernism (see: Michalski, 2021).

Despite declining fertility rates, the designed social security systems continued unchanged, while the orientation of welfare states gradually modified, focusing increasingly on the absolutised expectations and demands of individuals. As a result, the family and community perspective was not given priority, resulting in its marginalisation in the social and economic policy dimension. At the same time, justice as an essential reference for the functioning of society gradually began to be replaced by equality, which over time led to - perhaps unintentional - injustices within, i.e., social policy.

As a result of these transformations, families began to recede into the background of the horizon taken up by politicians and other people designing social policies, and the primary place began to be taken by individuals, to whom it is easier to apply an equal - and not necessarily fair - measure. In this way, marital and parental relationships began to be increasingly treated as a private matter of the individual, who should not be privileged for this reason. As a consequence, for instance, for years pension systems made no difference between allowances, and treated equally parents and people without children. In consequence of such solutions, parents - the vast majority of them being women - who, as a result of the decision to bring up more children had been forced to limit or abandon their professional work, received a lower benefit or no benefit at all when entering the retirement age. In Polish family policy, an important feature that tries to address this problem was the launch on 1st March 2019 of the "Mama 4+" programme, which guarantees a minimum pension to those parents who have raised four or more children. Thus, it underlines the essential role of parenting and childcare, which are long-term investments that create the human capital that is so important for socio-economic development.

Reflecting further on the shape of pension arrangements, it can be seen that, by ignoring the link between bringing up children and future benefits, they have perpetuated injustice and fostered an individualistic perspective, thereby encouraging the abandonment of marriage and parenthood. In other words, the pension systems have been sterilising the soil on which they grew. It is therefore worth looking at them - and social policy more broadly - from the perspective of concepts familiar in economics, such as the *free-rider problem* and the *tragedy of the commons*.

In their optics, it is easier to analyse how social policy mechanisms, including pension systems, have rewarded those individuals who have treated life in society analogous to riding without a ticket. It is also worth pointing out that it is not possible to blame this only on individual citizens who have benefited - and are benefiting - from the opportunities created by the system. On the other hand, one should question those who can influence the modification of such a constructed reality, in which it is now possible with relatively smaller individual effort to receive greater benefits from others - thanks to future possibility of employment and taxes paid by other people's children.

In this way, it seems easier to see – i.e., in the perspective of the aforementioned concepts of the *tragedy of the commons* (Hardin 1968) and the *free-rider problem* (Grossman, Oliver, 1980) - how, for many decades, families with children, whose efforts and labour benefited society as a whole, were an unequivocally exploited asset. On this basis, it can be argued that it is primarily parents who are the victims not only of legally sanctioned and culturally perpetuated injustice, but also of institutionalised social injustice. An important, perhaps unintentional and not fully realised, consequence of this situation is that young people are now stepping into such a role less and less frequently - and less willingly.

Therefore, in the context of current efforts to reverse unfavourable demographic trends, family policy should also be regarded as an important and necessary tool for restoring and promoting social justice. At the same time, such a perspective may prove useful for evaluating individual social policy solutions in general, whether they exist already or are being planned.

4. Towards a fair and effective family policy

Family policy should be carefully distinguished from social assistance, with which it is often, and unjustifiably, identified. There is a kind of blurring of concepts in this regard, which makes discussions in this area all the more difficult (Fandrejewska-Tomczyk, 2019).

Therefore, at this point, it is worth recalling its definition. As we read in the work "Ekonomia polityki rodzinnej" [The Economics of Family Policy], 'family policy focuses on the nuclear family and its needs, especially those related to procreation and bringing up children, and in view of the persistence of low level of fertility that does not guarantee simple reproduction in developed countries, relatively much attention is paid primarily to solutions favouring procreative decisions' (Kotowska 2021, p. 18). It is worth emphasising at this point that it is still sometimes perceived not as an investment in socio-economic development, but as a cost burdening the budget of the state or local government authorities. Therefore, relating the functioning of families and family policies to the issue of creating human capital may make it easier to perceive their importance for the expansion of welfare and the sustainability of the social, cultural and economic order.

To this end, with regard to human capital as the final outcome of social policy, it is necessary to propose a way in which social assistance can be distinguished from family policy. While the former is oriented towards intervening in crisis situations and solving specific problems faced by individuals or social groups, the latter should be preventive in terms of actions that optimise the conditions for the functioning of existing families and the formation of new ones. Human capital proves to be a useful link between these two areas of social policy: in the case of social assistance, the aim is to provide help and support in those cases where the formation of human capital has stopped or is at risk, while in the case of family policy, the goal is to provide support aimed at guaranteeing continuity and efficiency and possibly strengthening the process of human capital formation. Analogously, these issues could also be described in relation to social capital (Michalski, 2014, pp. 72-5), the importance of which we do not deny here in any way, but that we leave - due to the limited size of the paper - outside the spectrum of the analyses undertaken here.

Another important benchmark that is worth taking into consideration when analysing the adequacy and effectiveness of family policies is to ask whether or not the benefits offered are conducive to taking responsibility for the activities that are appropriate to the subject being supported, and whether the level and quality of these activities increases as a result.

On the question of responsibility, it is worth recalling what emerges from the analyses undertaken by David Schmidtz. This author points out the significant impact of the so-called externalisation of responsibility - which is particularly evident in relation to the field of social assistance. He states that:

'many people from both sides of the political barricade note that when social assistance programmes were set up to provide support for the poor, the latter's overall quality of life began to decline, even though the quality of life for the rest of society was constantly increasing. Why? The decline in quality, if it ever occurred, coincided with the successes of these programmes in externalising responsibility for the welfare of the non-working poor' (Schmidtz, 2019, pp. 129-130).

In other words, if, as we have indicated, the objective of social policy can be defined as promoting the creation of human capital, this "resource" as an effect can constitute a tool for verifying and evaluating the functioning of family policy precisely in terms of its effectiveness and respect for social justice. In this way, the argument raised by critics of various family policy measures and solutions is also taken into account, namely that ineffectively spent resources, i.e. those that have not contributed to an increase in the quantity and quality of human capital, are resources that have been misspent - implicitly unjustly - because they have somehow been taken away from other entities that could have used them in a different manner.

A useful illustration of such a situation can be the 'Family 500+' programme, which can undoubtedly be seen as a breakthrough in the area of pro-family policies in Poland, as never before have such large financial resources been transferred from the state budget to families, not due to some difficult crisis situation, but due to the fact of raising children. While most of the critical voices on this topic point to the unsatisfactory pronatalist effects of this programme, its importance, in terms of investing in human capital, is almost completely overlooked (cf. Gromada, 2018; Brzezinski, Najsztub, 2017; Kucharska, 2020; Panek, 2020; Paradysz, 2021; Bartnicki, Alimowski, 2022). Therefore, in the context and on the example of this programme, it is worth looking at family policy precisely as compensation and investment in future human capital. By the way, it seems reasonable to state that it fulfils the aforementioned criterium of responsibility, in the sense that the supported activities are carried out by parents, i.e. the entities most appropriate for this purpose and most adequate to take responsibility for this process. It is worth adding that support in the area of child rearing, which is the main objective of this programme, does not fully compensate for the overall contribution of parents and families to prosperity and socio-economic development. In other areas, such as the labour market (Letablier et al., 2009) and the pension system already mentioned, there still seems to be much to be done to ensure that parenthood is not a factor that reduces the chances of fair pay and adequate social security.

5. Summary - conclusions and recommendations

Society is undoubtedly an extremely complex and dynamic entity, and the identification of its regularities constitutes an immensely important and necessary task, but also a very difficult and complicated one. Nevertheless, one cannot fail to attempt to understand and explain these phenomena and actions, which have a real impact on the lives of present and future generations on a daily basis. It seems that the current demographic crisis, which can be considered as a symptom of the most serious existential crisis that the Western world has been facing for decades, has still not been fully adequately diagnosed and described.

This paper attempts to highlight the perspective of social justice and responsibility as dimensions that may prove helpful in evaluating current family policy solutions and designing new ones. On this occasion, one important recommendation made here is to understand the difference between family policy and social assistance, and to skillfully separate and adequately apply each of them, bearing in mind their interdependence.

It would seem that, after Gary S. Becker, no one doubts any longer that the family should be taken very seriously in economics and social policy. Unfortunately, discussions on family policy repeatedly reveal an elementary lack of this knowledge, sometimes reducing the assessment of family policy to a question of inputs and costs, which are often considered in a short-term perspective. This makes it all the more necessary to clearly recall that 'the family supplies the market with people: it is the sole and most important producer of human capital' (Giza-Poleszczuk, 2005, p. 200), and that '(...) the economic role of the family in reproducing human capital has long been pointed out; not only in the sense of bringing to life and 'investing' in the education, skills or 'taste' (cultural capital) of children, but in the everyday sense of leisure, regenerating or even enhancing individual motivation in the external sphere (work, public activities, etc.)' (Giza-Poleszczuk, 2005, p. 18).

Since the relationship between the functioning of the family and the creation of human capital is so fundamental, family policy can be regarded as a special area of social policy. Its task is thus to protect and preserve the family as a source of this resource, which fundamental importance the economic sciences today have no doubt about (cf. Michalski, 2020).

Therefore, justice seems to be an indispensable criterium for assessing the effectiveness of family policies. Today, it clearly indicates that the effects of parental effort in the form of shaping and educating young generations are largely treated as a "common pasture", which turns out to be excessively and unequally exploited in the context of pension systems based on so-called intergenerational solidarity, among other things. An important hint in this context seems to be that of Rawls, who states that 'obviously, if all generations are to gain (except perhaps the earliest ones), the parties must agree to a principle of saving that ensures that each generation receives what is due from its predecessors and passes on its fair contribution to those who come later' (Rawls, 2009, p. 419).

Thus, it seems that social justice, implemented with respect for the requirements of internalized responsibility, should be regarded as the most appropriate perspective and at the same time as a benchmark for evaluating family policy in particular, and social policy in general (Schmidtz, 2019, p. 33).

At the same time, it seems much more likely that, under conditions of such a fairer socioeconomic order, younger generations of potential spouses and parents will want to start families and have children, making the coming demographic winter and the associated shortage of human capital temporary and relatively mild. However, if this does not happen, we will all face a future that still seems hard to imagine today.

References

- Bartnicki, S., Alimowski, M. (2022). W poszukiwaniu demograficznych efektów rządowego programu "Rodzina 500 Plus". *Studia Socjologiczne, 1(244)*, 193-219, DOI: 10.24425/sts.2022.140601.
- 2. Becker, G.S. (1993). *Human Capital. A Theoretical and Empirical Analysis with Special Reference to Education.* Chicago: The University of Chicago Press.
- 3. Brzeziński, M., Najsztub, M. (2017). The impact of "Family 500+" Programme on household incomes, poverty and inequality. *Social Policy*, *1*, 16-25.
- Fandrejewska-Tomczyk, A. (ed.) (2019). Polityka społeczna. Wspierajmy ludzi, nie kryzysy. Warszawa: Warsaw Enterprise Institute. https://zpp.net.pl/wp-content/uploads/2019/03/ Polityka-spo%C5%82eczna.-Wspierajmy-ludzi-nie-kryzysy.pdf.
- Giza-Poleszczuk, A. (2005). Rodzina a system społeczny. Reprodukcja i kooperacja w perspektywie interdyscyplinarnej. Warszawa: Wydawnictwa Uniwersytetu Warszawskiego.
- 6. Gromada, A. (2018). Czemu służy Program rodzina 500 plus? Analiza celów polityki publicznej i polityki partyjnej. *Ruch prawniczy, ekonomiczny i socjologiczny, Year LXXX, vol. 3,* 231-244.

- 7. Grossman, J., Oliver, D. Hart, O.D. (1980). Takeover Bids, The Free-Rider Problem, and the Theory of the Corporation. *The Bell Journal of Economics*, *Vol. 11, No. 1, Spring*, pp. 42-64.
- 8. Hardin, G. (1968). The Tragedy of the Commons. *Science, New Series, Vol. 162, No. 3859* (*Dec. 13, 1968*), pp. 1243-1248.
- Jakubiec, M. (2012). Państwo opiekuńcze czy minimalne? In: W. Zuciak, J. Mysona Byrska (Ed.), *Równość w życiu publicznym*. Kraków: Uniwersytet Papieski Jana Pawła II w Krakowie.
- Kotowska, I.E. (2021). Uwarunkowania polityki państwa wobec rodzin. In: J. Szczepaniak-Sienniak (Ed.), *Ekonomia polityki rodzinnej. Wybrane zagadnienia*. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- 11. Kucharska, P. (2020). Ocena skuteczności Programu "Rodzina 500+" w zakresie ograniczenia ubóstwa i zwiększenia dzietności w Polsce. *Zeszyty Naukowe UEK*, 5(989), 83-100.
- 12. Letablier, M.-T., Luci, A., Math, A., Thévenon, O. (2009). *The costs of raising children and the effectiveness of policies to support parenthood in European countries: a Literature Review*. European Commission.
- Michalski, M.A. (2021). What Happened to Our Will to Serve in the West? Secularization, Individualism, Family and the Decline of the Civilization. *The Person and the Challenges*. *The Journal of Theology, Education, Canon Law and Social Studies Inspired by Pope John Paul II, S.l., v. 11, n. 1, march,* pp. 89-102, doi:http://dx.doi.org/10.15633/pch.3886.
- 14. Michalski, M.A. (2014). Znaczenie rodziny dla międzypokoleniowej transmisji kultury gospodarczej. Poznań: Wydawnictwo Naukowe UAM.
- 15. Michalski, M.A. (2020). Ekologia źródeł "kapitału ludzkiego" i jego przyszłość wobec kondycji rodziny i materializacji kultury. In: M. Młokosiewicz, K. Włodarczyk (eds.), *Kształtowanie i rozwój kompetencji pracowników – problemy i wyzwania* (pp. 9-18). Warszawa: Akademicka Oficyna Wydawnicza EXIT.
- Miller, D. (1974). The ideological backgrounds to conceptions of social justice. *Political Studies*, 22(4), 387-399. https://doi.org/10.1111%2Fj.1467-9248.1974.tb00033.x.
- 17. Panek, T. (ed.) (2020). Statystyka społeczna. Procesy społeczne, źródła danych i metody analizy. Warszawa: PWE.
- Paradysz, J. (2021). Recenzja książki Statystyka społeczna. Procesy społeczne, źródła danych i metody analizy pod redakcją Tomasza Panka. *Wiadomości Statystyczne*, 66, 11, 64-68.
- Perelman, Ch. (1963). *The Idea of Justice and the Problem of Argument*. London: Routledge & Kegan Paul Limited.
- 20. Perlikowski, Ł. (2020). *Pluralizm i racjonalność w świetle idei demokracji deliberatywnej*. Płock: Wydawnictwo Naukowe Mazowieckiej Uczelni Publicznej w Płocku.

- 21. Pieńkowski, D. (2013). Sprawiedliwość dystrybutywna w świetle optimum Pareto i idei rozwoju zrównoważonego. Białystok: Wydawnictwo Uniwersytetu w Białymstoku.
- 22. Rawls, J. (2009). Teoria sprawiedliwości. Warszawa: PWN.
- 23. Ringen, S. (2009). *Citizens, Families & Reform*. New Brunswick-London: Transaction Publishers.
- 24. Schmidtz, D. (2019). *Dobrobyt społeczny a odpowiedzialność jednostki*. Wrocław: Fijorr Publishing.
- 25. Walzer, M. (2007). *Sfery sprawiedliwości. Obrona pluralizmu i równości*. Warszawa: Wydawnictwa Uniwersytetu Warszawskiego.
- 26. Wilkin, J. (1997). Efektywność a sprawiedliwość jako problem ekonomiczny. In: J. Wilkin (ed.), *Efektywność a sprawiedliwość*. Warszawa: Wydawnictwo Key Text.
- 27. Woźniak, M.G., Jabłoński, Ł. (2008). Nierówności społeczne i akumulacja kapitału ludzkiego a wzrost gospodarczy. Próba empirycznej weryfikacji współzależności na przykładzie Polski. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie, nr 786. Kraków.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

SUSTAINABLE CAREERS. IMPLICATIONS FOR HRM

Alicja MIŚ

Cracow University of Economics, College of Management and Quality Sciences, Human Capital Management Faculty, Kraków; alicja.mis@uek.krakow.pl, ORCID: 0000-0002-5264-0742

Purpose: This article aims to identify the relationship between a sustainable career pursued by individuals and human resource management as a structured set of functions and tasks that support organizations in achieving their goals. The considerations are theoretical and are assumed to be debatable.

Design/methodology/approach: The author analyses the subject literature and - in the next part – tries to point out the relationship between theory and practice (utilizing some empirical results). Finally – formulate some practical suggestions for HRM activities.

Findings: Success in creating sustainable careers of employees in an organization is only possible if there is two-way transmission of crucial information – closely characterized in article – as a basis for partnership in development.

Originality/value: The results of the review can be based on strategic decision made by HR-managers in the field of individual development influencing the retention index.

Keywords: sustainable careers, development, human resource management.

Category of the paper: General review and viewpoint.

1. Introduction

Career theory and career studies have evolved. B. Lawrence (2015) identifies three periods, specific enough to evidently show the trajectory of change. He distinguishes between the period 1950-1970, where the focus of career description was on an individual, on an organization, or on a profession, the years 1970-1989, where an individual's career was viewed through the lens of an organization or a profession, and finally, the 1990s to the present day where the career view focuses on an individual within an organization, outside an organization, and across organizations/professions. One can also encounter suggestions to distinguish the fourth phase pointing precisely to sustainable careers, where the emphasis is on "becoming oneself" in the developed career, achieving individuation in terms of Jungian terminology, realizing oneself, and using one's full potential in the social and organizational environment. Visible in this

periodization is the move towards individual career responsibility, decisions taken autonomously, development strategies chosen, and the effects of this development experienced. Organizations, social environments, and professions become a "bundle of opportunities", from which an individual autonomously chooses the appropriate opportunities at a particular moment in his or her life.

Defining sustainability in the context of an individual as "his or her ability to continuously self-realize - by creating or finding a job that allows the optimal use of one's own competences", one should emphasize the self-efficacy and initiative of individuals to develop, to self-determine (job crafting) (Van der Heijde, Van der Heijden, 2006, p. 403). A sustainable career in this context can be understood as "a sequence of career-related experiences of an individual, continuing over time with diverse patterns, covering different social spaces, with a significant subjective meaning for the individual" (de Vos, Gielens, 2014).

The aim of this article is to identify the relationship between a sustainable career pursued by individuals and human resource management as a structured set of functions and tasks that support organizations in achieving their goals. The considerations are theoretical and are intended to be debatable.

2. Sustainable career – from an individual perspective

When attempting to operationalize the definition of a sustainable career from an individual perspective, it should be emphasized that it is a dynamic construct. The individual design of a career is based on the characteristics of an individual and the factors of the environment in which the individual functions. What constitutes sustainability to varying degrees applies to both elements. The issues of career sustainability can already be interpreted from the boundaryless career concept whose authors consider a career to be a fact/phenomenon that transcends a single location (De Filippi, Arthur, 1994, p. 307). The configuration of these locations is a fluid consequence of the intertwining of individuals' subjective experiences and values. In the Protean career concept (Hall, 2002), the emphasis is on understanding and individual agency in a career. The two theories present the opposing understandings of a career in terms of balancing it: the first is dynamic, emphasizing independence from organizational structures. The other one sees its basis in an individual, his or her characteristics, and experiences.

Latzke describes a sustainable career in 3 categories: renewability, flexibility, and integrativeness, emphasizing its long-term perspective. He also draws attention to its fundamentals, giving them a holistic character, constrained by the behavior of other partners/organizations in an individual's environment. A sustainable career is sustainable over time and it is characterized by both the development, safeguarding, and renewal of an

individual's career-relevant resources (e.g., human and social capital) and certain individual characteristics (e.g., proactivity, resilience) that support the shaping of one's career (Parker et al., 2010). Career sustainability implies protecting and nurturing an individual's development with a focus on balance and renewal. Managing such a career requires an increase in the individual's awareness of career capital accumulation and mobilization of one's own resources leading to benefits obtained at work and in future careers.

The life-span/life-space concept by D. Super may also be helpful in explaining sustainable careers. Despite some problems raised in the realization of careers at specific stages of life, it is accepted that a sustainable career means a development path tailored to the changing needs of an individual in his or her life cycle, corresponding to his or her aspirations and at the same time discounting opportunities and taking into account social and organizational constraints (Gautun, Hagen, 2010). This trend also includes the proposal of Greenhaus and Kossek (2014) to define a sustainable career as "...a career in which employees remain healthy, productive, happy and useful over their life cycle and fit into the wider life context". Following this definition, they point out the key characteristics of a sustainable career:

- a. it is successfully integrated into personal and family life taking into account core and career-related life values,
- b. it provides security for employees in meeting economic needs and achieving well-being,
- c. it includes flexibility and adaptability to the changing needs of an individual and his or her interests,
- d. it is characterized by its capacity for renewal so that an individual has the opportunity to start again and be reborn.

Both the aforementioned ones and numerous other theoretical explanations of sustainable careers allow for some reflections. Clearly (and increasingly clearly), one can see the tendency to increase individualism and individual agency in the field of careers understood as sustainable. In addition, there is a growing awareness of organizational influences and contexts, namely the broader life context of an individual and the social context in achieving (and enhancing) career sustainability. Thus, despite the clear individual agency in constructing a sustainable career, the participation of other actors and their roles seem important. Hence the suggestion of an integrated approach, considering not only individuals/employees but also employers, organizations, and other stakeholders. An organization is therefore an accomplice in a sustainably shaped career of an individual.

3. Sustainable careers – in an organizational perspective

The labor market has been undergoing changes in recent decades, characterized by rapidity and unpredictability. This affects both employees and organizations. The latter are experiencing fluctuations and shortages of employees in certain qualification groups, resulting in employment contracts that are increasingly sensitive to the conditions of employees, but at the same time limited in time. On an individual scale, this leads to a lack of job security and a clear career path with an employer. This is because temporary employment lacks systematic development activities, career-oriented programmes, positions worth applying for, and a longterm perspective. Instead, there is an externalization of groups of workers to contractual labor agreements, which do not guarantee employment stability and social security; they secure the needs of financial security on an ad hoc basis.

The above observation quite clearly confirms what Cappelli and Keller (2014) note: organizations' chances of attracting valuable and talented employees are decreasing, as the latter in particular require support, investment, and employment prospects. Searching for talents outside an organization increases costs while reducing the chances of an accurate selection. Talent understood situationally is not only safer for organizations but also, in practice, it is understood as learned and developed in specific organizational contexts (Pocztowski, 2016).

The origins of the reciprocity between organizations and employees in career development can be found in E. Schein's (1978) proposal referred to as the "matching model" in careers. This is because Schein took the position of mutuality and equality of interest in meeting the needs of both organizations and individuals achieved by aligning development activities with the needs of organizations and the expectations of employees. From here, it is not difficult to take the next step, which requires the construction of appropriate diagnostic and implementation procedures. The sustainable career model from an organizational perspective has 4 pillars at its core.

Pillar one assumes maximum return on the value of human capital. This is achieved when organizational practices are focused on making full use of employee characteristics. Research shows that matching work to an individual's interests, values and strengths leads to a company gaining greater returns on its human capital (Rich et al., 2010). Gallup research has shown that employees who engage their strengths at work on a daily basis gain increases in productivity, are more loyal, and are less likely to have the intention to leave (Gallup, 2013).

Pillar two is the continuous updating of organizational and individual competences. The growth of an organization's core competences through the development of employees' knowledge, skills, and capabilities strengthens the organization's competitive potential and coping with market challenges. Pillar three implies achieving employment stability through adaptation processes, implemented on a continuous basis, making use as far as possible of the entire spectrum of employee qualifications being developed. Learning and acquiring new competences lead to the promotion of an individual's employability and, through transfer to everyday practice, they strengthen his or her individual effectiveness. Furthermore, they facilitate individual and organizational adaptation to change (Dyer, Schafer, 2003).

Pillar four assumes that employee engagement and retention are achieved through the flexibility of their career goals and objectives (Casper, Harris, 2008). A sustainable career is flexible, with changing dynamics. It allows an individual to continually adapt to changing needs outside of work and those associated with his or her career. The result is an increasing level of individual satisfaction and engagement as a result of minimizing the stress associated with the imbalance in meeting work and non-work needs. The above-mentioned Casper and Harris (2008) show empirically that work/career flexibility is associated with higher levels of organizational commitment and retention.

4. HRM and sustainable careers; implications for practice

The diversity of employees in an organization makes the key issues in building sustainable careers a real challenge. Sustainability means a partnership between the two entities by virtue of a common, shared interest. It is the existence on the market – in a competitive environment – giving employees a guarantee of the durability of employment, and an organization – a human resource leading to the said goal. Organizational actions towards staff, therefore, need to be flexible, individualized, and dynamic.

In practice, this means identifying the strengths, interests, and motives of employees in order to build/develop their resources with a view to utilizing them within an organization. This requires the creation of transmission channels and articulation of individual needs and career goals, as they have both individual significance and value for the company.

Thus, HR policies should be highly flexible in terms of management practices with the aim of maximizing the involvement of each employee. This leads to a shift in the importance of HR activity from being ancillary to actively supporting the implementation of the organization's strategy.

Individualization means moving away from a one-size-fits-all solution for the development/career of all workers and taking on a multidimensional solution, which is the consequence of an agreement between an organization and an employee. It will take into account the needs of the changing phases in the individual's life cycle, their individual drama (upward - downward) leading to individualized working time solutions, flexibility in the forms

of work provision, also changes in the scope and content of work, places of work, forms of employment and remuneration, or roles within an organization.

The role of an organization is to identify opportunities that, from its point of view, can be agreed upon, fitting in with its objectives and needs. Employees, on the other hand, will shape their careers by choosing from existing opportunities, trying to best align their current development goals with the organization's goal expressed in terms of opportunities.

The dynamics of solutions, on the other hand, stems from the perceived discontinuity of individual development, determined by changing needs over the life cycle. The role of organizations is to support employees in defining their personal needs and goals in order to decompose the existing state into the currently necessary one. The decomposition here is twofold: it concerns the individual development path of an employee and the structure of the human resources available to an organization. It, therefore, implies responding dynamically to the reported needs.

Cantrell and Smith (2010) propose four steps for implementing sustainable career strategies. The first one is when an organization forms development patterns/processes for certain groups of employees (segmentation) with similar characteristics or life cycle stages. The second step is when the organization constructs development opportunities for employees by encapsulating them into modules offered to employees, from which they choose the most suitable ones. The third step towards a sustainable career strategy is to offer individuals defined roles, within which they can act autonomously to achieve the organization's goals. The fourth step of this strategy boils down to supporting and accepting the development practices and objectives defined by employees.

What seems to be necessary to achieve success in shaping sustainable careers is clear information about the business goals of a company as well as about its current performance and practices. This provides an incentive for employees to continuously learn as a consequence of an increasing understanding of the organization and its needs/goals. Also important is the role and competence of managers in communicating with employees about changes and emerging development needs. It is also necessary to support work-life alignment by creating developmental scenarios in terms of job description and content, and building alternative career paths that consider changing time opportunities and the pace of ongoing developmental events that reconfigure chosen career trajectories and their advancement. What seems desirable is keeping in touch with employees who have left the organization and allowing them to return when if they were perceived as valuable.

5. Summary

Sustainable careers constitute a challenge for organizations. This is because their implementation requires significant consideration of the needs and capabilities of employees, as they are not just based on the suitability of their competences for an organization. Organizations form partnerships with employees, which requires flexibility, individualization, and dynamism in organizational activities. This equivalence of an individual and an organization is central and yet unique to explaining the concept of a sustainable career. On the organizational side, it is critical to define strategic goals and formulate them clearly and comprehensibly for employees so that they are able to perceive and identify ways of their own development that support their organization. It is also important for supervisors to know and be able to recognize (through interpersonal communication processes) and take into account the needs, capabilities, and interests of employees when shaping development paths in a dynamic way. On the employees' side, it is important for them to have insight into their own work and non-work needs in order to clearly verbalize changes, new opportunities, and emerging constraints. It is also necessary to know and understand the goals of an organization - allowing expectations to be formulated rationally.

Success in creating sustainable careers is only possible if there is a two-way transmission of the aforementioned information - as a basis for partnership in development.

References

- 1. Cantrell, S.M., Smith, D. (2010). *Workforce of One: Revolutionizing Talent Management Through Customization*. Boston, MA: Harvard Business Press.
- Cappelli, P., Keller, J.R. (2014). Talent management: Conceptual approaches and practical challenges. *Annual Review of Organizational Psychology and Organizational Behavior*, *Vol. 1, Iss. 1*, pp. 305-331, doi: 10.1146/annurev-orgpsych-031413-091314.
- 3. Casper, W.J., Harris, C.M. (2008). Work-life benefits and organizational attachment: Selfinterest utility and signaling theory models. *Journal of Vocational Behavior, Vol. 72, Iss. 1*, pp. 95-109.
- 4. De Filippi, R.J., Arthur, M. (1994). The boundaryless career: A competency-based perspective. *Journal of Organizational Behavior, Vol. 15, Iss.* 4, pp. 307-324.
- 5. De Vos, A., Gielens, T. (2014). *System level practices to facilitate sustainable careers*. White paper for the European Network on Careers and AGE (Age, Generations, Experience), Trento, 4-5 November.

- Dyer, L., Schafer, R.A. (2003). Dynamic organizations: Achieving marketplace and organizational agility with people. In: R.D. Day, R.S. Peterson, E.A. Mannix (Eds.), *Leading and Managing People in the Dynamic Organization* (pp. 7-38), Mahvah, NY: Lawrence Erlbaum Associates.
- 7. Gallup (2013). State of American Workplace: Employee engagement insights for US business leaders. Washington, DC: Gallup.
- Gautun, H., Hagen, K. (2010). How do middle-aged employees combine work with caring for elder parents? *Community, Work & Family, No. 4*, pp. 393-409, doi: 10.1080/ 13668800903360625.
- Greenhaus, J.H., Kossek, E.E. (2014). The contemporary career: A work-home perspective, *Annual Review of Organizational Psychology and Organizational Behavior, Vol. 1*, pp. 361-388, doi: 10.1146/annurev-orgpsych-031413-091324.
- 10. Hall, D.T. (2002). *Careers In and Out of Organizations*. Thousand Oaks, CA: Sage Publications.
- Latzke, M., Schneidhofer, T., Pernkopf, K., Rohr, C., Mayrhofer, W. (2015). Relational career capital: towards a sustainable perspective. In: A. DeVos, B. Van der Heijden (Eds.), *Handbook of Research on Sustainable Careers* (pp. 50-66). Cheltenham UK: E.Elgar.
- Lawrence, B.S., Hall, D.T., Arthur, M.B. (2015). Sustainable Careers Then and Now. In: A. De Vos, B. Van der Hejiden, B. (Eds.). *Handbook of Research on Sustainable Careers* (pp. 432-449). Cheltenham, UK: Edward Elgar.
- 13. Parker, S.K., Bindl, U.K., Strauss, K. (2010). Making things happen: A model of proactive motivation. *Journal of Management, Vol. 36, Iss.4*, pp.827-856.
- 14. Pocztowski, A. (Ed.) (2016). Zarządzanie talentami w organizacji. Warszawa: Wolters Kluwer.
- 15. Rich, B.L., Lepine, J.A., Crawford, E.R. (2010). Job engagement: Antecendents and effects on job performance. *Academy of Management Journal, Vol. 53, Iss. 3*, pp. 617-635.
- 16. Schein, E. (1978). *Career Dynamics. Matching Individual and Organizational Needs.* Reading, MA: Addison – Wesley.
- 17. Van der Heijde, C.M., Van der Heijden, B.I.J.M. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management, Vol. 45, Iss. 3,* pp. 449-476, doi: org/10.1002/hrm.20119.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

RECRUITMENT AND SELECTION OF ARTISTS IN THE MEDIA DISCOURSE

Patrycja MIZERA-PĘCZEK

University of Lodz, Department of Human Resources Management; patrycja.mizera@uni.lodz.pl, ORCID: 0000-0001-9637-3263

Purpose: The paper is devoted to an analysis of the Polish media discourse in terms of the recruitment and selection of artists. It indicates dominant phenomena in the perception of artist recruitment processes in cultural organizations, both positive and negative. The aim of the article is to present the approach to the recruitment and selection of artists in a discourse narrated by the artists themselves.

Design/methodology/approach: This article focuses on the discourse on recruitment and selection processes in cultural organizations. Literature research of the subject was carried out. Furthermore, the discourse of the media was analyzed.

Findings: Discourse research shows that the key attributes of the recruitment and selection processes are the determination to work in the expected profession by artists and the need for candidates to demonstrate that they are ready for uncomfortable working conditions. This qualitative study helps to understand HR practice in the field of performing arts.

Research limitations/implications: The limitations of the conducted research result from the adopted qualitative methodological orientation.

Originality/value: The presented analysis of the media discourse may be interesting for the management of artistic institutions and the artists themselves who take part in the castings. Reading the text can also be a source of tips and inspiration for designing recruitment and selection processes.

Keywords: recruitment, selection, artists' job market, media discourse, discourse analysis.

Category of the paper: Conceptual paper.

1. Introduction

Recruitment and selection are one of the basic subprocesses of human resource management, described in both scientific publications and in popular science texts. Recruitment is the main function of the Human Resources Department, and the recruitment process is the first step toward creating competitive quality and recruitment strategic advantage for the association (Pocztowski, 1998, p. 71; Hamza, Othman, Gardi, Sorguli, Aziz, Ahmed, Anwar,

2021). The recruitment aims primarily to increase the number of qualified applicants for the available positions and to select those candidates who should be offered positions (Noe, Hollenbeck, Gerhart, Wright, 1997, p. 53; French, Rumbles, 2010, p. 169; Løkke, 2021, p. 77). The importance of recruitment and selection should not be underestimated. All subsequent activities in the field of human resources management can only be done with the 'raw material' available through these processes (Brown, McManusb, Davisonc, Gilla, Lilford, 2019, p. 128). Researchers have stressed the importance of quality processes during selection, recruitment, and hiring, as it is difficult to find suitable candidates for the job (Dale, 2001, pp. 50-51). It stated that recruitment is the most important sector in attracting and maintaining experienced and qualified workers (Abbasi, Tahir, Abbas, Shabbir, 2020, p. 3). In other words, the hiring of competent persons is of utmost importance and depends on an effective recruitment and selection process aimed at selecting the right person and rejecting the wrong ones (Newell, 2005, p. 115).

The recruitment and selection process begins with very clear specifications. Roberts argues that selecting is like looking for the adverbial needle in the haystack. Specifications include the characteristics of the roles and the ideal people to fill the roles. Good recruiters understand that one of the best judges of the candidate's suitability for the role is the candidate, helping candidates to understand their roles will bring significant benefits (Makin, 1991, pp. 530-531; Roberts, 1997, p. 7). The process of selecting candidates for a job is particularly important in the field of performing arts (Ingram, 2016, p. 47), when the selector is looking for an artist to create an immaterial work of art (Mizera-Pęczek, 2020). Research on recruitment and selection processes shows that this is a problem full of contradictions and antinomies (Plebańczyk, 2020, p. 104). On the one hand, it is quite obvious that the condition for the success of an artistic undertaking is a reliably conducted casting (Gregorczyk, Kopeć, 2013, pp. 19-21), but on the other hand, there are many misconceptions about the professional situation of artists applying for a job (Mizera-Peczek, 2018, pp. 108). In more recent works, Opara and Stanton argue that HRM in the field of performing arts companies has a strong industry effect, focusing on the financial survival of precarious funding sources, short-term project-based work, and highly casualized workers (Opara, Stanton, 2021, p. 1). 'Unfortunately, this individual passion and commitment can also undermine their individual and collective bargaining power and contribute to poorer wages and conditions' (Opara, Stanton, Wahed, 2019). Although it is well established that artists are forced to do other jobs for various reasons, in particular the need to earn an adequate income, there is little reliable information about the nature of these works and the characteristics of the artists who take them out of choice or necessity (Throsby, Zednik 2011, pp. 20-21). It can be assumed that one of such reasons is the numerous failures in the casting process, and thus the inability to work in the expected profession. According to Wagner (2005), such an attitude toward performing work influences high commitment in professional activities and leads inevitably to the interpenetration of professional and private life (Wagner, 2005, p. 24). Moreover, this commitment is visible in the artists' struggle for the role of life".

Therefore, it is important to conduct research that will create an understanding of the dynamics of recruitment and selection processes from the point of view of artists. As a result, this paper focuses on this issue.

2. Analysis of media discourse - characteristics of the method and the concept of own research

Discourse research not only describes and explains selected fragments of reality, but also changes reality. This change is most often possible by demonstrating practices of dominance in discourse and formulating postulates and recommendations to avoid such practices in the future. The purpose of discourse analysis is to show the direct relations between discourse and organizational practices, and a thorough discourse analysis has the value of a value-based critique. In the field of management and quality research, learning about discourses is so important that it allows us to recognize how social expectations and perception of reality affect the practices of performing managerial functions. "Discourse analysis is an important qualitative research approach across social science disciplines for analyzing (and challenging) how reality in a variety of organizational and institutional arenas is constructed" (Greckhamer, Cilesiz, 2019, p. 422).

Media messages can attract the attention of the public, attenuate opinion and belief, define reality by assigning it a specific status, inform the society selectively or distribute information fussily. The media are an inseparable element of contemporary culture. By their nature, they are involved in the production and distribution of knowledge in the broadest sense of the word. This knowledge makes sense of experiencing the world social by people. The media is influencing what most people consider real. The mass media plays the role of a gatekeeper by selecting and disseminating information to raise public awareness of specific issues, and can thus shape opinions and understanding related to an artistic career. However, there is a risk that the media may shape false ideas about the professional life of artists, including beliefs about high earnings in the cultural sector, the ease of achieving success, and celebrity recognition profits.

There are different approaches to analyzing discourses. Descriptive approaches to discourse analysis used by linguists examine the use of language without examining its links with social structures. On the other hand, critical approaches to discourse analysis used by social scientists assume that ideologies shape the representation of information, knowledge, and facts about reality from the perspective of a specific interest to gain acceptance as nonideological and common sense, hiding them behind masks of naturalness or science. Building on this assumption, critical approaches aim to analyze discourse to show how taken for granted, naturalized ideas are unnatural and how they are related to social structures (Greckhamer, Cilesiz, 2019, p. 424). In other words, it can be said that discourse analysis serves to recognize the essence of a text from the perspective of the social context in which the text was created, because each author of a text, that is, the subject of discourse analysis, functions in certain social dimensions.

As part of my own research, I selected 13 interviews with artists published in magazines and on-line portals, targeted to large audiences. The texts for the study were randomly selected. They were highly available and easy to search on popular search engines. The study was conducted in April 2022 and covered texts published between 2014 and 2021. The results were presented as descriptions including quotes from the source publications. Originally, the source texts were published in Polish.

3. Media coverage of recruitment and selection processes in cultural organizations

In the media discourse, the terms applicable in the area of human resource management, such as recruitment, selection, hiring, or acquisition of candidates, are not used. However, artists define the recruitment and selection processes in their own language. The artists write about: "participating in castings", building casts for performances, and casting roles. It is worth noting that the media discourse mentions the search for talents or the search for pearls, but these phrases are not clearly understood in accordance with the concept of talent management. In the media discourse, the concept of talent is equated with having the artistic abilities necessary to create an artistic role. An employee-talent, on the other hand, is not equated with a person with above-average commitment to work, or having a high level of ideational fluency or the ability to generate original ideas.

Publications dealing with recruitment and selection procedures usually present the 'dark side' of the application process for a theater or film. The artists' statements presented in the media aimed at a wide audience are intended to amaze and shock the audience. Therefore, published interviews highlight these threads when artists confide in their failures in their professional lives.

I immediately felt like I had to play it. Casting started almost two months later. At first I thought I was ahead, because the director met me and introduced me to this project. And when I came to the casting, I was on the 81-strong list, and it turned out that the director had met all the candidates for this role over the past months. He also told them about the film, about the character [5]

After graduating from drama school, I had a soft landing, because I participated in several performances that allowed me to develop professionally and ensure my livelihood [12].

Discourses show messages that perform information functions. They contain data and tips on how to prepare for the audition, how to deal with stage fright, and how to behave during the audition.

Casting requires preparation and time, but not so much learning the text as showing that you understand the character. It happens that an actor does not have to play at the casting of the stage, a small acting task is enough that fits into the functioning of our hero. And at the very end, when we compare the candidates, we look for the nuance that makes up the assumptions previously made. It may seem surprising, but in auditions, actors rarely perform badly. However, they often do not fit into the hero [11].

There is one key point: we do not cast a person to see if he or she is a great actor in general but to see if he or she will be a great actor in that particular role. This difference is subtle, but crucial [7].

However, no logical recommendations can be made from these guidelines. In some cases, the main characters of the narrative speak of spontaneity and the display of a range of emotions necessary during the casting. At other times, it becomes crucial to thoroughly prepare the scenario by heart and to present the documented achievements so far.

I have been attending castings for some time, because I must admit that there came a moment in my life that I wanted to try something more. At one of these auditions, I did my best to express my emotions [2].

I did some online auditions, but it has nothing to do with live theater. Theater is communion! In the most sacred sense of the word. It is a community, a shared experience, a kind of alchemy [1].

No, because schools do not explain to their students how to prepare for castings or how to deal with them, and the choice of an agent or communication with the casting director is taboo. I am surprised because today, i.e., an actor's career depends on such skills [13].

In the media discourse on recruitment and selection processes, the issue of roles other than casting is also discussed.

This role was simply offered to me. It is actually a short episode, but I am glad I could play it, because it is a very juicy and grateful role. This is the only time I was offered the role without an audition, which is rare [3].

However, it is still the casting stories that dominate the message of the artists themselves. Interestingly, they assessed the changes that take place in the environment of artistic organizations in different ways. The most important changes that affect the recruitment and selection processes include analyzing the potential of artists through their social media profiles, and opening new art schools and artistic faculties for adepts of film and theater arts.

We are racing for the number of lures, the number of followers. This now translates into castings. (...) Recently, one of my actresses went to an audition. You went out, called up their name and said, "Ma'am, but you don't have followers at all!" She did not, so they thanked her. Casting is now not about looking for skills, but about likes [9].

Nowadays, more and more people think that being an actor is not particularly difficult. Private schools, which promise access to the profession for money, and the media, contributed to this. There are many programs that employ people from the streets to act, which greatly devalues this profession. People think it is very simple: just stand in front of the camera and smile nicely. Unfortunately, this can also be seen in the tests for the theater school. Many young people think that this is like appearing on a television show [9].

The common thread that connected all the texts analyzed was the determination needed to apply for a role. The determination attitude should manifest itself in consistent participation in the recruitment and selection processes despite failures. In texts devoted to professional artists, diligence, systematicity, and humility toward authorities in the art world are presented as the values and strengths of successful artists.

I waited in line for castings, I heard "no" a million times, but it drove me so much that I managed to take the third place in the program [6].

How did you manage to complete such a select cast? I think they appreciate my artistic achievements, despite financial limitations... [4].

It was quite interesting to include in the texts published from 2020 descriptions of the artists' approach to participation in casting in pandemic conditions. On the one hand, the advantages of virtual audition are presented, for example, the possibility of participating in castings without physical mobility. On the other hand, it was emphasized how important physical presence is for artists, especially those representing theatrical arts.

I went to the audition to express my willingness to participate in the performance. We are all hungry to play [after lockdown] [8].

Research shows that the socially constructed two dichotomous myths of the artist looking for a job, the dominant media discourse. These myths, socially constructed and perpetuated, are not verified, but contribute to the stereotyping of this activity. The first myth concerns the artist who, most often thanks to participation in a television program, achieves quick and easy recognition and benefits resulting from it. However, this myth does not demonstrate a determination to pursue a dream job or an analysis of the financial and emotional costs that an artist usually incurs in order to be ready to participate in a talent show. Those artists who achieved high recognition are assessed as less valuable despite the fact that they have a thorough artistic education and accumulate professional experience, often already in their childhood. The second myth concerns an artist who sacrificed his personal life for the sake of art and, in return, did not even receive basic compensation for his involvement. It is a myth of an unfulfilled and underestimated artist despite his predispositions. Stories of artists presented in the media in this way consolidate social beliefs about injustice and omnipresent dysfunctions in the processes of employing artists.

4. Discussion and Conclusions

Writing in the media has the potential to influence our position and thereby our actions. Research revealed several tendencies. First, the Polish media is generally not interested in providing reliable information on both the good and bad sides of artistic work. Most of the professional stories presented in the media are marked by negative emotions. Even when the texts refer to objectively achieved professional successes, the thread of recruitment and selection is presented as a limitation of artistic work. Discourse is dominated by the narrative of the difficult and exhausting path to artistic success. The artists' statements are set in the context of the need to be above average determined to work in the cultural sector. In addition, the discourse also includes criticism of taking shortcuts through the artistic path, for example by participating in a talent show.

Furthermore, the current literature and the results of the discourse analysis on the vocation to an artistic career, participation in castings, and the importance of participation in recruitment and selection processes for objectively and subjectively perceived professional success in the cultural sector are still unclear. It is still difficult to build a consensus between the visions of the artists themselves and the managers of cultural institutions. It turns out that the passion for practicing art can lead to professional success and meeting expectations regarding one's own professional fate, as well as to self-destructive behavior of the artists themselves.

Well-conducted recruitment and selection process is extremely important not only for the organization, but also for workers. Discourse analysis has shown that artists shape and disseminate their opinions on recruitment and selection processes in the context of their own, often unpleasant, experiences. Their statements are negative. One may be tempted to say that the media discourse on recruitment and selection in culture is a consequence of artists' prejudices against the directors and producers responsible for the cast and the result of justifying their own failures in casting. At the other end of the continuum are the so-called success stories of the few artists who get coveted roles in performances.

Interestlingly, the presented media discourse does not mention trends in recruitment and selection processes, which are widely described in the context of business organizations. Although researchers have been writing about the importance of modern technologies for years and the fact is that modern technology in recruitment and selection is not only another trend in the changing environment, but will continue to exist in the human resources sector (Sołek-Borowska, Wilczewska, 2018, p. 32) the artists did not comment on this. Therefore, it seems that the opinions of researchers confirm that research conducted among artists and based on the analysis of artists' narratives focuses on the sphere of emotions, feelings, experiences, premonitions and intuition. The media discourse presented in this article includes these elements.

Discourse analysis has significant limitations. The most important of them is the random selection of texts for analysis and the fact that the analysis does not take into account the discourse conducted in the media, in which two-way communication is possible, e.g., in social media associating fandoms. Thus, this research should continue in the future.

References

- 1. Abbasi, S.G., Tahir, M.S., Abbas, M., Shabbir, M.S. (2020). Examining the relationship between recruitment & selection practices and business growth: An exploratory study. *Journal of Public Affairs*,1-5.
- 2. Bollin, P. (2020). Jacek Poniedziałek: pomoc państwa dla artystów jest groteskowa, wywiad. Onet Kultura.
- 3. Brown, C., McManus, C., Davison, I., Gill, P., Lilford, R. (2019). Using recruitment and selection to build a primary care workforce for the future. *Education for Primary Care*, *30*(*3*), pp. 128-132.
- 4. Bruszewski, M. (2019). Kamil Nożyński: Bycie raperem pomogło mi w roli, wywiad. Culture.pl.
- 5. Cichoński, M (2019). Patrycja Volny: Artyści służą sztuce, nie polityce, rozmowa. Dziennik.pl.
- 6. Dale, M. (2001). *Skuteczna rekrutacja i selekcja pracowników*. Kraków: Oficyna Ekonomiczna.
- 7. Dobrowolski, A. (2017). Lech Majewski: Jestem zapatrzony w artystów Renesansu, wywiad. WP Film.
- 8. French, R., Rumbles, S. (2010). *Recruitment and selection. In leading, managing and developing people.* London: CIPD Publications.
- 9. Góra, A. (2021). Michał Sikorski nie tylko o filmie "Sonata": Stając się artystą. Interia Film.
- Greckhamer, T., Cilesiz, S. (2014). Rigor, Transparency, Evidence, and Representation in Discourse Analysis: Challenges and Recommendations. *International Journal of Qualitative Methods*.
- 11. Grzech, N. (2021). Moja twórczość jest dla ludzi. Poprzez nią się wyrażam wywiad z Arkiem Kłusowskim, wokalistą i autorem tekstów. Elle.pl.
- 12. Grzegorczyk, A., Kopeć, T. (2013). Z talentem do gwiazd. Jak robić karierę w showbiznesie. Gliwice: Helion.
- Hamza, P.A., Othman, B.J., Gardi, B., Sorguli, S., Aziz, H.M., Ahmed, S.A., Anwar, G. (2021). Recruitment and Selection: The Relationship between Recruitment and Selection with Organizational Performance. *International Journal of Engineering, Business and Management*, 5(3).

- 14. Ingram, T. (2016). Zarządzanie talentami w kulturze i sztuce. *Studia Ekonomiczne. Zeszyty* Naukowe Uniwersytetu Ekonomicznego w Katowicach, 256.
- 15. Jośko, M. (2018). W tym świecie seks jest walutą. Reżyser castingu zdradza wstydliwe sekrety branży filmowej, wywiad. Natemat.pl.
- 16. Kaczyński, Ł. (2020). Wydłużyć teraźniejszość, wywiad. Kalejdoskop.
- 17. Kowalczyk, J.R. (2022). Jan Englert: Nie ulegam euforiom, nie poddaję się frustracjom, wywiad. Culture.pl.
- 18. Kowalska, J. (2014). Nie bawi mnie aktor, który ma do pokazania wszystko. Teatralny.pl.
- 19. Kuźma, D. (2020). *Casting tajemnica spotkania z bohaterem. Rozmawiamy z Nadią Lebik.* Papaya.Rocks.
- 20. Løkke, A.K. (2021). Recruitment and selection: still a model employer? In B. Steijn, E. Knies (eds.), *The Research Handbook on HRM in the Public Sector*. Edward Elgar Publishing.
- 21. Łukomski, M. (nd). Sebastian Cybulski: Można być na etacie w teatrze i niewiele grać. Lifestyle.pl.
- 22. Makin, P.J.(1991). Selection of Professional Groups. In: P. Herrior (ed.), Assessment and Selection in Organizations, Methods and Practice for Recruitment and Appraisal. John Wiley&Sons.
- 23. Mizera-Pęczek, P. (2018). Specyfika organizowania castingu w procesie selekcji artystów. *Studia i Prace WNEiZ US*, *52/3*.
- 24. Mizera-Pęczek, P. (2020). *Rekrutacja i selekcja artystów w kontekście twórczości organizacyjnej.* Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 25. Newell, S. (2005). Recruitment and selection. *Managing human resources: Personnel management in transition*. S. Bach (ed.). Blackwell Publishing.
- 26. Noe, R.A., Hollenbeck, J.R., Gerhart, B., Wright, P.M. (1997). *Human Resources Management. Gaining a Competitive Advantage*. IRWIN.
- 27. Nyc, I. (2021). Marta Kownacka: Aktorzy codziennie zasypują mnie mailami. Twój Styl.
- 28. Opara, S.C., Stanton, P., Wahed, W. (2019). For love or money: human resource management in the performing arts. *Employee Relations: The International Journal*.
- 29. Opara, S., Stanton, P. (2021). Doing the right thing: HRM in the performing arts. Asia Pacific Journal of Human Resources, 1-19.
- 30. Plebańczyk, K. (2020). Zarządzanie karierą artystyczną: kilka punktów widzenia. In: A. Pluszyńska, A. Konior, Ł. Gaweł (eds.), *Zarządzanie w kulturze : teoria i praktyka*. Warszawa. PWN.
- 31. Pocztowski, A. (1998). Zarządzanie zasobami ludzkimi. Kraków: Antykwa.
- 32. Roberts, G. (1997). Recruitment and selection. London: CIPD publishing.
- 33. Sołek-Borowska, C., Wilczewska, M. (2018). New technologies in the recruitment process. *Economics and Culture*, *15*(2), 25-33.

- 34. Throsby, D., Zednik, A. (2011). Multiple job-holding and artistic careers: some empirical evidence. *Cultural Trends*, *20*, *1*, 9-24.
- 35. Wagner, I. (2005). Sprzężenie karier. Konstrukcja karier w środowiskach artystycznych i intelektualnych. *Przegląd Socjologii Jakościowej, 1(1),* 20-41.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

DEVELOPMENT OF WORKPLACE SAFETY CULTURE – IMPLICATIONS FOR MANAGEMENT PRACTICE

Marta MŁOKOSIEWICZ

University of Szczecin, Institute of Management; marta.mlokosiewicz@usz.edu.pl, ORCID: 0000-0003-3041-9219

Purpose: The objective of the paper was to identify significant contemporary challenges to development of the safety culture in Polish organisations.

Design/methodology/approach: To accomplish this aim, analysis of the literature on the subject and available secondary data on circumstances of accidents at work was undertaken.

Findings: The analysis resulted in determination of areas showing deficiencies regarding the safety culture in Polish organisations and identification of directions for necessary actions related to its development.

Research limitations/implications: The reasoning process performed has certain limitations. Included in the study, Statistics Poland's (GUS) data only enabled a general outline of the current challenges to development of the safety culture in organisations in Poland. More detailed guidance for these activities would be obtained from an in-depth study of employees in relation to the organisational culture (including the safety culture) of the organisations in which they are employed.

Practical implications: Conclusions from the analysis undertaken can be used by managers of various types of organisations in Poland to create a safe working environment.

Originality/value: The paper analyses the causes of accidents at work in the context of identifying areas of deficiencies in the safety culture of Polish organisations. The study is addressed to researchers and practitioners involved in the study and development of the safety culture in different types of organisations.

Keywords: safety culture, management, employee behaviour.

Category of the paper: research paper.

1. Introduction

Safety culture as a certain social, organisational or individual reality is related to human mentality, beliefs, preferred values and norms – both individual and collective – relating to risk and safety issues. Within an organisation (company, institution), it should also be seen through the perspective of organisational solutions, procedures and rules aimed at shaping the desired

patterns of safe behaviour at work. The solutions to be implemented should, above all, play a preventive role so that accidents do not occur. The effectiveness of these solutions is fostered by accurate identification of accident causes. In addressing the issue of the workplace safety culture in this study, a reference was made to the situation in Poland, and the objective of the paper was to identify significant contemporary challenges to development of the safety culture in organisations in Poland from the perspective of circumstances of accidents at work. The paper is theoretical and empirical in nature – it includes a review of the literature on the subject and an analysis of available secondary data on the causes of accidents at work.

2. Workplace safety culture – essence and development

The point of reference for emergence and development of the concept of organisational safety culture was the research into corporate organisational culture, which was initiated in the 1980s (Milczarek, 2000). The concept first appeared in 1987, in the OECD Nuclear Agency's report on the 1986 Chernobyl disaster (Cox, Flin, 1998), which identified poor workplace safety culture as a significant cause of the disaster. Pioneers of research into the theoretical concept of safety culture include N. Pidgeon (1998), F.W. Guldenmund (2000) and D. Cooper (2000, 2002).

Workplace safety culture is defined as a component of organisational and social culture (Mearns and Flin, 1999). Three levels thereof may be distinguished (Studenski, 2000):

- society safety culture expressing the attitude of a particular social group or society as a whole towards risk, defining accepted norms of behaviour in a hazard situation and the way in which individuals takin risks are assessed and, at the same time, the value attributed to life and health,
- company safety culture defined as the state of risk awareness characteristic of majority of the workforce, formal and informal norms of behaviour in the event of hazard, as well as technical and organisational achievements that affect integration of safety and health issues into the company's management, organisation of tasks, supervision and evaluation of employees, as well as into explaining the causes of accidents and disasters,
- **individual safety culture** encompassing the individual's attitudes and beliefs about safety, reflecting individual attitudes towards risk, accepted patterns of behaviour and conduct in situations of hazard and risk.

A concept similar to *safety culture* is that of *safety climate*, encompassing a set of values and beliefs within an organisation, creating specific patterns of behaviour in the field of occupational health and safety. A pioneering study of safety climate, understood as the atmosphere perceived by employees around occupational safety issues, was undertaken by D. Zohar (1980). Monitoring of the safety climate promotes a high safety culture (Mearns, Flin, Gordon, Fleming, 1998).

In his *reciprocal safety culture model*, D. Cooper (2002, 2016) pointed to 3 essential – psychological, situational and behavioural – interacting elements influencing the workplace safety culture:

- Safety Climate: shaped by intrinsic psychological factors characterising employees their preferred values, individual and group attitudes at the workplace, recognised norms and perceptions of safety issues determining the extent to which they underestimate hazards and risks, the scope in which they control their own (and their colleagues') safety at work, and influencing their beliefs concerning the causality of accidents.
- Safety System characterising the organisation: diagnosable by external observable factors situational, systemic factors related to the organisation's safety management system (such as safety communication, accessibility of safety instructions, means of personal and collective protective equipment, status of persons in charge of safety within the organisation) and to risk control and assessment, competence, organisational policies, procedures and rules, work pressure (affected by the status of safety goals among the company's business objectives, required work pace, work-related stress, employee conflicts).
- **Safety Behaviour**: defined as external observable factors related to behavioural safety: actions and behaviours, including management practices and involvement understood as safety leadership.

In the presented model, *safety culture* is treated as a subculture of the overall culture of the organisation and should be seen as the product of a number of goal-oriented interactions between internal psychological factors, explicit behaviours and situational aspects of the workplace. The organisation's prevailing safety culture is, thus, the result of the dynamic relationship between members' perceptions of safety goals and attitudes towards them, everyday safety behaviours directed towards these goals, as well as the presence and quality of the organisation's safety systems and subsystems that support behaviours oriented on safety goals (Cooper, 2016). Also among Polish researchers, the predominant opinion is that when shaping the safety culture model, it is important to ensure creating solutions that are flexible, can be modified, improved, adapted to the needs of the organisation's stakeholders (Bartosz et al., 2017; Jamroch, 2018) and to continuously changing technical, organisational and social conditions (Gembalska-Kwiecień, 2019).

3. Reasons of accidents at work and areas of deficiencies in the area of workplace safety culture in Poland

In order to accomplish the objective of the paper and identify challenges to the safety culture in organisations in Poland, the study involved analysis of the causes of accidents at work. The research covered the period of 2011-2020. Data from Statistics Poland (GUS) were used – data on accidents at work are obtained annually by GUS from the Statistical Card of Accidents (Z-KW) and refer to individuals working in the national economy, excluding those working on individual agricultural farms and budgetary units carrying out activities in the field of national defence and public security, where the information refers only to civilian employees (Accidents at Work, 2020). Table 1 shows the number of victims of accidents at work in absolute numbers and the accident rate (per 1000 persons employed), as well as structural indicators on the causes of accidents in breakdown into particular years.

Reason2011201220132014201520162017201820192020Total: - no. of people97.22291.00088.26788.64287.62287.88688.33084.30483.20662.740- accident rate8.347.787.787.557.537.247.076.806.306.064.54Improper condition of a material factor: - $\%$ 9.08.88.58.68.68.68.48.48.58.48.3Improper organisation of material reg5.15.04.75.24.64.44.34.14.2slight deterioration 4.5Improper organisation of the worklace: - $\%$ 5.55.55.34.65.35.35.45.45.55.4Sobsence or improper handling of a material factor: - $\%$ 7.47.46.97.57.57.47.37.27.2slight improvement 4.5Failure to use protective equipment: - $\%$ 1.61.51.51.51.51.51.51.51.61.61.61.7Improper organisation of the workplace: - $\%$ 1.61.51.51.51.51.51.51.51.51.61.61.6Material factor: - $\%$ 6.96.86.66.76.76.76.76.86.66.76.76.86.8 <th></th> <th colspan="7">Years</th>		Years									
- no. of people - accident rate 97,222 8.34 91,000 7.78 88,627 7.58 87,622 7.24 87,886 7.07 88,330 6.80 64,304 6.30 83,205 6.00 62,740 4.54 - matrix 8.34 7.78 7.55 7.33 7.24 7.07 6.80 6.30 6.00 6.30	Reason	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
- accident rate 8.34 7.78 7.55 7.53 7.24 7.07 6.80 6.30 6.06 4.54 Improper condition of a material factor: -% 9.0 8.8 8.5 8.6 8.6 8.6 8.4 8.4 8.5 8.4 8.5 8.6 8.6 8.4 8.4 8.5 8.4 8.3 Improper organisation of work: -% 5.1 5.0 4.7 5.2 4.6 4.4 4.3 4.1 4.2 slight deterioration 4.5 Improper organisation of the workplace: -% 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.5 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.5 6.9 7.5 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement -% - - - - - - - - - - - - - </td <td>Total:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>improvement</td>	Total:										improvement
Causes attributable to the organisation (company/institution): Improper condition of a material factor: -% 9.0 8.8 8.5 8.6 8.6 8.4 8.4 8.5 8.4 8.3 Improper organisation of work: -% 5.1 5.0 4.7 5.2 4.6 4.4 4.3 4.1 4.2 slight deterioration 4.5 Improper organisation of work: -% 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 const. 5.4 Improper organisation of the workplace: -% 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Absence or improper handling of a material factor: -% 1.6 1.5 1.5 1.5 1.5 1.5 1.6 1.6 repeated growth 1.7 Failure to use protective equipment: -% 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.8 Improper, unauthorised behaviour of the employee: 6.8 6.6 6.7 6.	- no. of people	97,222	91,000	88,267	88,642	87,622	87,886	88,330	84,304	83,205	62,740
Improper condition of a material factor: -% 9.0 8.8 8.5 8.6 8.6 8.4 8.4 8.5 8.4 improvement 8.3 Improper organisation of work: -% 5.1 5.0 4.7 5.2 4.6 4.4 4.3 4.1 4.2 slight deterioration 4.5 Improper organisation of work: -% 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 const. 5.4 Improper organisation of the workplace: -% 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Absence or improper handling of a material factor: -% 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Failure to use protective equipment: -% 1.6 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 </td <td>- accident rate</td> <td>8.34</td> <td>7.78</td> <td>7.55</td> <td>7.53</td> <td>7.24</td> <td>7.07</td> <td>6.80</td> <td>6.30</td> <td>6.06</td> <td>4.54</td>	- accident rate	8.34	7.78	7.55	7.53	7.24	7.07	6.80	6.30	6.06	4.54
condition of a material factor: - $\%$ 9.0 8.8 8.5 8.6 8.6 8.4 8.4 8.5 8.6 8.4 8.4 8.5 8.4 improvement 8.3 Improper organisation of work: - $\%$ 5.1 5.0 4.7 5.2 4.6 4.4 4.3 4.1 4.2 slight deterioration 4.5 Improper organisation of the workplace: - $\%$ 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.5 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.5 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.5 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.4 5.4 5.4 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.4 5.4 5.4 Failure to use protective equipment: - $\%$ 1.6 1.5			Causes at	ttributabl	le to the o	rganisatio	on (compa	ny/institu	ition):		
material factor: - $%$ 9.08.88.58.68.68.68.48.48.48.58.48.3Improper organisation of work: - $%$ 5.15.04.75.24.64.44.34.14.2slight deterioration 4.5Improper organisation of the workplace: - $%$ 5.55.55.34.65.35.35.45.45.45.5Improper organisation of the workplace: - $%$ 7.57.57.57.47.37.27.2slight organisation (more) 4.5Improper organisation of the workplace: - $%$ 7.47.46.97.57.57.47.37.27.2slight organisation (more) (more)Improper organisation of the workplace: - $%$ 7.47.57.57.47.37.27.2slight organisation (more)Improper organisation of the workplace: - $%$ 7.47.57.57.47.37.27.2slight organisation (more)Improper organisation of the and ling of a material factor: - $%$ 7.47.57.57.47.37.27.2Slight organisation (more)Improper organisation of the and ling of a material factor: - $%$ 8.66.66.76.86.86.66.76.86.86.66.76.86.86.86.66.76.86.86.86.86.86.8<	Improper										
factor: - %III<	condition of a										improvement
-%Improper organisation of work: $-%$ 5.15.04.75.24.64.44.34.14.2slight deterioration 4.5Improper organisation of the workplace: $-%$ 5.55.55.34.65.35.35.45.45.45.55.5Masence or improper handling of a material factor: $-%$ 7.47.46.97.57.57.47.37.27.27.2slight deterioration 4.5Failure to use protective equipment: $-%$ 1.61.51.51.51.51.51.51.51.51.55.45.45.45.55.4Improper, unauthorised behaviour of the employee:6.86.66.76.96.86.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.76.76.76.76.8	material	9.0	8.8	8.5	8.6	8.6	8.4	8.4	8.5	8.4	8.3
Improper organisation of work: - %5.15.04.75.24.64.44.34.14.2slight deterioration 4.5Causes attributable to the organisation and the employee:Improper organisation of the workplace: - %5.55.55.34.65.35.35.45.45.55.5const. 5.4Mathematical - %7.47.46.97.57.57.47.37.27.2slight improvement 7.1Material factor: - %1.61.51.51.51.51.51.51.51.61.6repeated growth 1.7Improper, unauthorised behaviour of the employee:6.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.76.76.76.8											
organisation of work: -% 5.1 5.0 4.7 5.2 4.6 4.4 4.3 4.1 4.2 deterioration 4.5 -% Causes attributable to the organisation organisation of the workplace: -% 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.5 5.5 Mbsence or improper handling of a material factor: -% 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 Slight improvement 7.1 Failure to use protective equipment: -% 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 6.7 6.9 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.7 6.7 6.7 6.8	- %										
work: $-\%$ iii											
-%11111111Causes attributable to the organisation of organisation of the workplace: $-%$ 5.55.55.34.65.35.35.35.45.45.45.55.55.3Solution of the workplace: $-%$ 5.55.55.34.65.35.35.35.45.45.45.55.45.4Absence or improper handling of a material factor: $-%$ 7.47.46.97.57.57.47.37.27.27.2slight improvement 7.1Failure to use protective equipment: $-%$ 1.51.51.51.51.51.61.6repeated growth 1.7Improper, unauthorised behaviour of the employee:6.86.66.76.96.86.66.76.96.86.6		5.1	5.0	4.7	5.2	4.6	4.4	4.3	4.1	4.2	
Causes attributable to the organisation and the employee:Improper organisation of the workplace: $-\%$ 5.55.55.34.65.35.35.45.45.5const. 5.4Absence or improper handling of a material factor: $-\%$ 7.47.46.97.57.57.47.37.27.2slight improvement 7.1Failure to use equipment: $-\%$ 1.61.51.51.51.51.51.51.51.61.6growth action 1.7Improper, unauthorised behaviour of the employee:6.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.96.86.66.76.76.76.86.8											4.5
Improper organisation of the workplace: -% 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 const. 5.4 -% Causes attributable to the employee: Causes attributable to the employee: slight improper handling of a material factor: -% 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Failure to use protective equipment: -% 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 const. 5.4 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.7 6.8	- %										
organisation of the workplace: - $\%$ 5.55.55.34.65.35.35.35.45.45.4const. 5.4Absence or improper handling of a material factor: - $\%$ 7.47.46.97.57.57.47.37.27.27.2const. 5.4Failure to use protective equipment: - $\%$ 1.61.51.51.51.51.51.51.51.51.61.6repeated growth 1.7Improper, unauthorised behaviour of the employee:6.96.86.66.76.96.86.66.76.96.86.66.76.86.66.76.7const. 6.8		1	Causes	attributa	ble to the	organisa	tion and t	the emplo	yee:	1	
the workplace: 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.4 -% 5.5 5.5 5.3 4.6 5.3 5.3 5.4 5.4 5.5 5.4 Absence or improper handling of a material factor: 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Failure to use protective equipment: 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.7 repeated growth 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6											
-% Improve 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement slight improvement 7.1 Absence or improper handling of a material factor: -% 7.4 7.4 7.4 7.5 7.5 7.4 7.3 7.2 7.2 slight slight improvement 7.1 Failure to use protective equipment: -% 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 slight improvement 7.1 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.7 6.8											
Causes attributable to the employee: Absence or improper handling of a material factor: -% 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Failure to use protective equipment: -% 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 repeated growth 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.8 6.8 6.6 6.7 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.6 6.7 6.8 6.8 6.6 6.7 6.8 6.8 6.8 6.8 6.6 6.7 6.7 6.8		5.5	5.5	5.3	4.6	5.3	5.3	5.4	5.4	5.5	5.4
Absence or improper handling of a material factor: - % 7.4 7.4 7.4 7.4 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Failure to use protective equipment: - % 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 repeated growth 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.7 6.7 6.8	- %			~							
improper handling of a material factor: - % 7.4 7.4 7.4 6.9 7.5 7.5 7.4 7.3 7.2 7.2 slight improvement 7.1 Failure to use protective equipment: - % 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 repeated growth 1.7 Improper, unauthorised 		1	1	Cause	es attribut	table to th	e employ	ee:		1	
handling of a material factor: 7.4 7.4 7.4 7.5 7.5 7.4 7.3 7.2 7.2 7.2 improvement 7.1 Failure to use protective equipment: 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 growth 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.8 6.8 6.7 6.8 6.8 6.8 6.7 6.8 6.8 6.8 6.7 6.7 6.7 6.8 6.8											1. 1.
material factor: -% Improper Improper <td></td> <td>7.4</td> <td>7.4</td> <td>()</td> <td>7.5</td> <td>7.5</td> <td>7.4</td> <td>7.2</td> <td>7.0</td> <td>7.0</td> <td></td>		7.4	7.4	()	7.5	7.5	7.4	7.2	7.0	7.0	
factor: -% -% -% -% -% -% -% -% -% -% 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 repeated growth 1.7 Failure to use protective equipment: 1.6 1.5 1.5 1.5 1.5 1.5 1.6 1.6 growth 1.7 -% -% 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.8 6.6 6.7 6.8 6.8 6.7 6.8 6.8 6.8 6.7 6.7 6.8 6.8 Improper, 0 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.7 6.7 6.8		7.4	7.4	6.9	7.5	7.5	7.4	1.3	1.2	1.2	
-% $-%$ $-%$ $-%$ $-%$ 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.7 6.7 6.8											/.1
Failure to use protective equipment: - % 1.6 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.6 repeated growth 1.7 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.8 6.7 6.8 6.7 6.8 6.7 6.7 6.8 6.7 6.7 6.7 6.8											
protective equipment: 1.6 1.5 1.5 1.5 1.5 1.5 1.6 1.6 growth -% .% 1.5 1.5 1.5 1.6 1.6 growth Improper, 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.6 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.7 6.7 6.8 6.8 6.8 6.7 6.7 6.8 6.8 6.8 6.7 6.8 6.8 6.8 6.7 6.7 6.8 6.8 6.8 6.7 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8	, -										rapatad
equipment: $-\%$ 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.7 6.7 6.7 6.8 Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.8 6.6 6.7 6.7 6.7 6.8		16	1.5	15	1.5	1.5	15	1.5	1.6	1.6	
Improper, unauthorised behaviour of the employee: 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.7 6.8		1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.0	1.0	
Improper, unauthorised6.96.86.66.76.96.86.66.76.76.7const. 6.8behaviour of the employee:6.86.66.76.76.76.76.8											1./
unauthorised 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 behaviour of the employee: 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.8	- 70										
unauthorised 6.9 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.8 behaviour of the employee: 6.8 6.6 6.7 6.9 6.8 6.6 6.7 6.7 6.8	Improper										const
behaviour of the employee:		69	6.8	6.6	67	69	68	6.6	67	67	
the employee:		0.9	0.0	0.0	0.7	0.9	0.0	0.0	0.7	0.7	0.0
- 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- %										

Table 1.	
Injured persons and causes of accidents at work, at workplaces in Poland in 2011-2020	

Improper psychophysical condition of the employee: - %	1.9	1.8	1.6	1.6	1.6	1.5	1.4	1.4	1.8	repeated growth after decrease 1.7
Incorrect behaviour of the employee: - %	54.2	54.0	55.5	59.0	59.2	60.1	60.5	60.8	60.8	growth 60.8
Other reasons: - %	8.5	9.1	9.3	5.3	4.8	4.6	4.7	4.3	3.8	decrease 3.7

Cont. table 1.

Source: own compilation based on Statistics Poland (GUS) data: Accidents at work in 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020.

As shown in Table 1, between 2011 and 2020, the number of accidents at work decreased (by about 34,500 per year) and the associated accident rate fell as well. Over the analysed period, the most important cause of accidents at work invariably remained "incorrect behaviour of the employee"; the importance of this factor has been increasing in recent years, reaching around 61% in 2020.

The second most common cause of accidents at work was "improper condition of a material factor" (8.3% in 2020) – an area that has improved slightly in the last 10 years. Another cause of accidents at work (more than 7% in the years studied, although there has been a slight decrease in the share of this cause among all causes since 2016) was "absence or improper handling of a material factor". The fourth place (almost 7% of accident causes) was occupied throughout the study period by "improper, unauthorised behaviour of the employee". "Improper organisation of the workplace" has invariably (with the exception of 2014) accounted for around 5.5% of the causes of accidents at work in the last 10 years. As far as the factor "improper work organisation" is concerned, there was a slight deterioration (4.5% of the causes of accidents in 2020) after a continued downward trend between 2011 and 2018. The occurrence of "other causes" of accidents more than doubled during the period under review – they accounted for around 3.7% of accident causes in 2020. "Improper psychophysical condition of the employee" became the cause of 1.7% of occupational accidents in 2020, with the importance of this factor – after declining between 2011 and 2018 – increasing again between 2019 and 2020. "Failure to use protective equipment" caused 1.7% of accidents at work in 2020 – after a slight decrease between 2011 and 2017, there has been a slight increase again in the share of this factor among the causes of accidents at work since 2018.

The analysis made it possible to conclude that the main group of causes behind accidents at work were the conditions attributable to employees. In the case of organisational causes of accidents, the predominant factor was improper condition of the material factor.

Taking into account the causes of accidents at work presented above, further considerations focused on identification of the main areas of deficiencies in the safety culture of organisations in Poland, "liable" for the occurrence of such incidents. To do this, the *reciprocal safety culture model* of D. Cooper was used, as well as more precise explanations of the reasons for employee behaviours leading to accidents at work, which were taken from the Statistical Accident Card.

Due to the limited scope of the study, the analysis took into account the four most important (according to magnitude of occurrence) causes of accidents at work: three attributable to employees (incorrect behaviour of the employee, absence or improper handling of a material factor by the employee, and improper, unauthorised behaviour of the employee) and one attributable to the organisation (improper condition of a material factor).

Table 2.

Identification of areas of deficiencies in the area of workplace culture safety in Polish organisations

Causes of accidents at work	Reasons for employee behaviours leading to accidents at work ¹	Areas of safety culture where deficiencies occur				
	ignorance of hazards	employee knowledge and competence				
	ignorance of health and safety rules and regulations	employee knowledge and competence				
Incorrect behaviour of	negligence of hazard (bravado, excessive risk taking)	attitudes, values				
the employee	negligence of superiors' instructions	attitudes, values				
(60.8% of accident	insufficient focus on the immediate activity	attitudes, values, employee knowledge and competence				
causes)	surprise by an unexpected event	random factor, employee knowledge and competence				
	improper pace of work	employee knowledge and competence				
	lack of experience	employee knowledge and competence				
	defects in the design and materials of the material factor that cause the hazard	causes attributable to the manufacturer				
Improper condition of a material factor (8.3% of	improper technical and ergonomic solutions of the material factor (including absence or inadequacy of safety devices, absence or inadequacy of collective protection equipment)	causes attributable to the manufacturer, safety management system, procedures and policies, status of safety targets in the organisation, risk control and assessment, knowledge, competence of managers				
accident causes)	improper handling of a material factor (e.g. overuse, insufficient maintenance, improper repair and renovation)	safety management system, procedures and policies, status of safety targets in the organisation, risk control and assessment, knowledge, competence of managers				
	using a material factor not suitable for the work in question	employee knowledge and competence				
Absence or	carrying out the work manually instead of using a material factor	employee knowledge and competence				
improper handling of a	use of a material factor while persons are in the hazard zone	employee knowledge and competence				
material factor by the employee (7.1% of accident causes)	improper protection of the material factor (e.g. failure to apply the brake when stationary)	employee knowledge and competence				
	access to the material factor granted by the employee to an unauthorised person	knowledge, competence, attitudes, values				
	use of a material factor against its purpose	employee knowledge and competence				
	improper grip and holding of a material factor	employee knowledge and competence				
	faulty installation, attachment, suspension of the material factor by the employee	employee knowledge and competence				

Cont. table 2.					
	performing work which is not within the	attitudes, values, employee knowledge and			
	employee's job description	competence			
	crossing, passing or being present in	attitudes, values, employee knowledge and			
T	prohibited areas	competence			
Improper, unauthorised	entering, driving into a hazardous area	attitudes, values, employee knowledge and			
behaviour of	without making sure that there is no hazard	competence			
the employee (6,8% of accident	carrying out activities without eliminating the hazard (e.g. failure to switch off the machine, failure to switch off power supply)	attitudes, values, employee knowledge and competence			
causes)	driving too fast	attitudes, values, employee knowledge and competence			
	incorrect use of limbs in the hazard zone	attitudes, values, employee knowledge and			
	incorrect use of minds in the nazard zone	competence			
	pranks, fighting	attitudes, values			

Cont. table 2.

¹see: Statistical Accident Card (Z-KW).

Source: own compilation using the Statistical Accident Card.

The analysis performed leads to the conclusion that the predominant areas of deficiencies in the area of safety culture in Polish organisations concern the knowledge and competence of employees, their attitudes and values (see Table 2). Meanwhile, more than 8% of accident incidents connected with improper condition of a material factor (which has for years held the second place among causes of accidents at work) referred to the state of knowledge and competence of managers, quality of the safety management system, procedures and rules in force in the organisation, status of safety targets in the organisation and related risk control and assessment in the work processes.

4. Discussion of results

The completed analysis of causes underlying accidents at work showed that the human factor played a key role in the occurrence of accident incidents in Polish organisations. This is supported by other research findings, which indicate that the root cause of 80% of process safety disasters is not equipment failures, but lack of appropriate safety-related managerial behaviours (Wood, 2015). One must agree with this statement, as it seems obvious that the behaviours of employees in relation to safety are the result of the management's supervision (or lack thereof) over working conditions. Indeed, these behaviours to some extent result from the attitudes and values preferred by employees, from intrinsic psychological conditions that characterise employees – identified as one of the main deficiencies of the current safety culture in organisations in Poland but, on the other hand, employees also pay attention to such aspects of workplace safety as the importance attributed to OSH training, level of risk at work, status of OSH employees, management takes care of general working conditions. In turn, these conditions are determined primarily by the condition of the material factor,

level of knowledge and competence of employees and the level of commitment of the entire workforce (above all, of the management) to safety.

The culture of an organisation is mainly shaped by the leadership style and values preferred by the leaders. If the organisation is profit-driven, its functioning is subject to a dynamic tension between four fundamental business drivers: productivity, quality, cost and safety. It is up to the management team to determine the value assigned to safety (Ryan). Therefore, the safety culture is fostered by the implementation of a safety management system. As Abad (Abad et al., 2013) points out, when companies are certified according to international standards (e.g. OSHAS 18001), that contributes to improved safety conditions at the workplace and allows for significant improvements in safety performance and productivity. Through audit and review processes, the safety management system codifies and streamlines employee behaviours, which promotes a reduction in accident occurrences (Cooper, 2016).

Summary

The analysis undertaken enabled areas of deficiencies in the safety culture in Polish organisations to be identified. These include issues related to:

- attitudes and values preferred by employees in relation to the issue of safety and willingness to take risks in their work,
- knowledge and competence of rank and file employees and managers,
- functioning of safety management systems, work safety procedures and rules, risk control and assessment in the workplace,
- status of safety targets in the organisation.

The current deficiencies of the workplace safety culture in organisations in Poland, as indicated above, were used as a means of specifying important challenges for its development. The areas of safety culture where action should be intensified are shown below, which would have direct impact on the causes of accidents at work, resulting in a reduction in the number of accident occurrences:

 BUILDING THE COMMUNITY: emphasising the value of the health and life of all employees – integrating occupational safety objectives into the company's mission and core objectives, involving employees in decisions related to building a safety culture, taking into account employees' opinions on safety issues, without ignoring their ideas, initiatives, reports on safety issues (fostering a sense of responsibility and mutual trust); promoting safe and responsible attitudes through the example of managers, servant leadership (building a positive authority of managers), promoting mutual support in carrying out work so as to create safe working conditions (building a sense of shared responsibility - not only for oneself, but also for colleagues).

- EDUCATION: placing greater emphasis on good quality, up-to-date training related to OSH, building employees' knowledge and skills, and their relevance to organisational practice; periodic and ongoing verification of employees' skills and knowledge necessary for safe work; consolidating values such as thoughtfulness, defined as the ability to analyse and anticipate the consequences of ignoring rules, principles and norms, learning from past accident experience, not disregarding one's own experience and drawing on the experience of other people, organisations (considering positive and negative examples).
- COMMUNICATION: creating awareness in the workforce of the risks and consequences of unauthorised risks: meetings, briefings, continuous dialogue with employees (informing them of the implementation of safety plans, taking into account their ideas, initiatives), efficient processing of safety related information coming from various sources.
- REVIEWS, AUDITS: ongoing and periodic monitoring of technical condition of the material factor, status of compliance with OSH rules and regulations, applied solutions related to work organisation as well as technical and ergonomic solutions; improvement and periodic verification of management skills in the area of occupational safety management; implementation and improvement as well as reviews and audits of occupational safety management systems.

When analysing the issue of developing the workplace safety culture, it is important to bear in mind a kind of feedback loop between employee behaviours and safety culture: as Ejdys (2010) puts it – human behaviours, on the one hand, depend on the organisation's safety culture, while, on the other hand, it is human behaviours that shape this culture by reinforcing certain beliefs and attitudes. It is, therefore, important what kind of risk and safety beliefs become "vocal" in the organisation. The behavioural safety targets of rank and file employees and those of managers will be different (Cooper, 2016), but it is necessary to make – and the role of managers should be emphasised here – everyone "speak in one voice" on the subject of workplace safety. Although work on the psychosocial aspects of safety is a long-term process (Gabryelewicz, Krupa, 2015), it needs to be undertaken, and this is an important task for managers, because the nature of human potential requires moulding, guiding and setting an example for it, while full potential that does not require such interference emerges rarely (Ryan).

References

- Abad, J., Lafuente, E., Vilajosana, J. (2013). An assessment of the OHSAS 18001 certification process: Objective drivers and consequences on safety performance and labour productivity. *Safety Science*, *No.* 60, pp. 47-56. Retrieved from https://www.researchgate.net/publication/252323018_An_assessment_of_the_OHSAS_18 001_certification_process_Objective_drivers_and_consequences_on_safety_performance _and_labour_productivity, 13.07.2022.
- Bartosz, N., Kanafa-Chmielewska, D., Marek-Hipner, A., Teodorski, D. (2017). Kultura bezpieczeństwa pracy w przedsiębiorstwie wielobranżowym – model oraz kluczowe czynniki skutecznej implementacji. *CUPRUM – Czasopismo Naukowo-Techniczne Górnictwa Rud, No. 4(85)*, pp. 5-15.
- 3. Cooper, D. (2016). *Navigating the Safety Culture Construct: A Review of the Evidence*. Retrieved from https://www.researchgate.net/publication/305636897_Navigating_the_safety_culture_construct_a_review_of_the_evidence_July_2016, 10.06.2022.
- 4. Cooper, D. (2000). Towards a model of safety culture. *Safety Science*, *No. 36*, pp. 11-136. Retrieved from https://www.behavioural-safety.com, 13.07.2022.
- 5. Cooper, D. (2002). Safety Culture. A model for understanding & quantifying a difficult concept. *Professional Safety*, *Vol.* 47, *No.* 6, p. 30-36. Retrieved from https://www.behavioural-safety.com, 13.07.2022.
- Cox, S., Flin, R. (1998). Safety culture: philosopher's stone or man of straw? Work & Stress, Vol. 12, No. 3, pp. 189-201, Retrieved from https://www.researchgate.net/publication/ 247510886_Safety_culture_Philospher%27s_stone_or_man_of_straw, 10.06.2022.
- Ejdys, J. (2010). Kształtowanie kultury bezpieczeństwa i higieny pracy w organizacji. Białystok: Oficyna Wydawnicza Politechniki Białostockiej.
- 8. Gabryelewicz, I., Krupa, P. (2015). Poziom klimatu bezpieczeństwa jako element zarządzania bezpieczeństwem w przedsiębiorstwie. *Zeszyty Naukowe Politechniki Częstochowskiej. Zarządzanie, No. 19*, pp. 183-192.
- 9. Gembalska-Kwiecień, A. (2019). Shaping the safe behavior of employees in the enterprise. *Scientific Papers of Silesian University of Technology. Organization and Management series, No. 135*, pp. 75-85.
- Guldenmund, F.W. (2000). The nature of safety culture: a review of theory and research. Safety Science, No. 34, Iss. 1, pp. 215-257. Retrieved from https://www.researchgate.net/ publication/248774283_The_Nature_of_Safety_Culture_A_Review_of_Theory_and_Res earch, 23.07.2022.
- 11. Jamroch, E. (2018). Diagnozowanie i doskonalenie kultury bezpieczeństwa społecznego. *Kultura Bezpieczeństwa*, *No.* 9, pp. 11-24.

- 12. Mearns, K., Flin, R. (1999). Assessing the state of organizational safety—culture or climate? *Current Psychology, Vol. 18*, pp. 5-17.
- 13. Mearns, K., Flin, R., Gordon, R., Fleming, M. (1998). Maesuring safety climate on offshore installations. *Work & Stress, Vol. 12, No. 3*, pp. 238-254.
- Milczarek, M. (2000). Kultura bezpieczeństwa w przedsiębiorstwie. *Bezpieczeństwo Pracy*, *No. 9*, pp. 17-20.
- 15. Pidgeon, N. (1998). Safety culture: Key theoretical isues. Work & Stress: An International Journal of Work, Health & Organisations, Vol. 12, Iss. 3, pp. 202-216.
- 16. Rakowska, A.J. (2013). Kultura bezpieczeństwa w przedsiębiorstwie. Modele, diagnoza, kształtowanie. Warszawa: CeDeWu.pl.
- 17. Ryan, A., Shaping a safety culture. *Safety & Training Superintendent*. Retrieved from https://citeseerx.ist.psu.edu > viewdoc > download, 10.09.2022
- 18. *Statystyczna karta wypadku*. GUS. Retrieved from https://gdansk.stat.gov.pl/osrodki/osrodek-statystyki-warunkow-pracy-1445/formularze-1254/, 10.09.2022.
- 19. Studenski, R. (2000). Kultura bezpieczeństwa pracy w przedsiębiorstwie nowe spojrzenie na zagadnienia bezpieczeństwa pracy. *Bezpieczeństwo Pracy, No. 10*, pp. 17-20.
- 20. Wood, M.H., Gyenes, Z. (2015). Lessons learned from corrosion-related accidents in petroleum refineries. Loss Prevention Bulletin, Vol. 246, pp. 12-15. Retrieved from https://minerva.jrc.ec.europa.eu > minerva > lpb2..., 10.09.2022.
- 21. Wypadki przy pracy w 2011 r., GUS. Warszawa, Gdańsk 2012.
- 22. Wypadki przy pracy w 2012 r., GUS. Warszawa, Gdańsk 2013.
- 23. Wypadki przy pracy w 2013 r., GUS. Warszawa, Gdańsk 2014.
- 24. Wypadki przy pracy w 2014 r., GUS. Warszawa, Gdańsk 2015.
- 25. Wypadki przy pracy w 2015 r., GUS. Warszawa, Gdańsk 2016.
- 26. Wypadki przy pracy w 2016 r., GUS. Warszawa, Gdańsk 2017.
- 27. Wypadki przy pracy w 2017 r., GUS. Warszawa, Gdańsk 2018.
- 28. Wypadki przy pracy w 2018 r., GUS. Warszawa, Gdańsk 2019.
- 29. Wypadki przy pracy w 2019 r., GUS. Warszawa, Gdańsk 2020.
- 30. Wypadki przy pracy w 2020 r., GUS. Warszawa, Gdańsk 2021.
- 31. Zohar, D. (1980). Safety climate in industrial organizations: theoretical and applied implications. *Journal of Applied Psychology*, Vol. 65, No. 1, pp. 96-102. Retrieved from https://doi.org/10.1037/0021-9010.65.1.96, 10.09.2022.
- 32. Żurakowski, Z. (2015). Kultura bezpieczeństwa w przedsiębiorstwie. Zeszyty Naukowe Politechniki Śląskiej. Seria: Organizacja i Zarządzanie, Vol. 77, pp. 323-330.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

THE TEACHER IN THE AGE OF PANDEMIC

Alicja NERĆ-PEŁKA

University of Szczecin, Institute of Management; alicja.nerc-pelka@usz.edu.pl, ORCID: 0000-0002-1293-9731

Purpose: The aim of the article is to propose a teacher's professional model adapted to the changing conditions of students' education due to the pandemic.

Design/methodology/approach: The author conducted a pilot study using the survey method with a partially structured author's questionnaire (the survey also included open-ended questions) on a sample of 95 students from extended physics and mathematic classes in general secondary school. The questionnaire examined the problem and needs of students (in this part there open-ended questions) and students' expectations towards the teacher (structured questions) during remote education, which allowed for the preparation of a professional teacher model.

Findings: The author drew attention to the impact of external factors, including legal regulations and the created image of the teacher, on his daily work, especially during the pandemic.

Research limitations/implications: Due to the pandemic author could carry out the research only in extended physics and mathematics classes in general secondary school, where she works. In the future, research may be extended to other schools teaching students extended physics.

Practical implications: The author proposes a physics teacher model that reflects students' expectations of a teacher during a pandemic, which can also be applied at higher educational stages.

Social implications: The new model of teacher can raise awareness of the needs of young people in times of crisis and help teachers adapt to students' expectations, which would have a positive impact on the educational process and well-being of students during and after the pandemic.

Originality/value: The author proposes the teachers' professional model which meets changes in the environment such as online work and the pandemic. The model is aimed at secondary school teachers, but it can also be used by academic teachers.

Keywords: the teachers' professional model, teacher's professional role.

Category of the paper: research paper.

1. Introduction

The article presents the issues of the changing role of teachers during the Covid-19 pandemic. E-learning has changed the approach to the teaching process, both from the students' and teachers' point of view. The author proposes a physics teacher model that reflects students' expectations of a teacher during a pandemic, which can also be applied at higher educational stages. Currently, in the era of a pandemic, the need for teachers to have the ability to communicate with students through modern technologies has emerged. The lack of direct contacts with students made the work of teachers and students much more difficult and weakened interpersonal relations. Lack of contact with peers, a sudden change in lifestyle, often a student's illness or illness in the student's family, and long-term isolation resulted in many unfavorable phenomena, such as: depression among students of discouragement to learn. So what role should the teacher assume in such a difficult situation?

2. The role of the teacher

The teacher is "a person imparting knowledge to others, endowed with authority and being a role model; a properly prepared specialist to conduct didactic and educational work in educational institutions (kindergartens, schools of various types, out-of-school institutions" (Encyklopedia PWN). Article 6 of the Teachers's Charter indicates not only the tasks related to teaching, but also educational and care activities for children and young people, especially ensuring their safety during their stay at school. The teacher is to support the development of the student, educate young people in the light of patriotism, freedom of conscience and respect for every human being, as well as care for the moral and civic attitudes of students in the conditions of democracy, an atmosphere of tolerance, peace and friendship. At the same time, the teacher is obliged to independently develop and improve professionally (Ustawa z dnia 26 stycznia 1982 r. Karta Nauczyciela).

The 21st century has given people new challenges, we live in a time of political and socioeconomic changes, the growing share of international trade, geographical and professional mobility, in the process of globalization, changes in techniques and technologies, changes in organizations and at the same time in the expectations of employers regarding the skills of employees. These factors oblige the school to change its approach to the education of students. The activity of students should prevail at school, learning new skills, not only knowledge, the comprehensive development of the student is important, as well as developing the ability to use technology. The teacher becomes the initiator of the students' independent cognitive content. Therefore, the task of a modern school is to support the development of students, in accordance with the didactic and educational objectives of the European Qualifications Framework relating to the gaining of knowledge, skills and shaping social attitudes. The teacher should undertakes innovative undertakings, independently design, verify and introduce specific novelties to the education process. Its task is to stimulate, provide help, advise in solving tasks and striving to achieve the set goals by students. By organizing the educational environment, the teacher becomes a diagnostician, tutor, facilitator, expert, mediator and responsible professional, and he is also to act as an adviser, guide, self-education instructor (Famula-Jurczak, 2013, pp. 42-52), and more often Internet psychologist (Serafin, 2009, pp. 107-108). A modern teacher should have appropriate competences: substantive, psychological and pedagogical, diagnostic, planning and design, didactic and methodological, communication, media, control and evaluation of school curricula and textbooks, self-educational to fulfill his role in the profession (Strykowski, 2008, pp. 18-27). In exact sciences, the use of methods based on the development of scientific reasoning skills and supporting the independence of students by noticing important questions and looking for answers to them, changes the traditional role of the teacher and the student. In such classes, the teacher should uses activating methods, shifting the focus from the teacher to the student. The recommended teaching model for science teachers is the 5E model - a five-stage learning cycle described in the IBSE methodology, based on the teacher's and student's tasks related to: involvement, searching, explaining, developing (refining) and assessing (Odroważ, Maciejowska, Kędzierska, Ellermeijer, 2013, pp. 48-56).

The teacher should have specific values, extensive knowledge, high qualifications for the profession and broad interests. He is also expected to work well planned his own and team work, activating students and applying individualization in teaching and getting to know students, noticing and emphasizing students' achievements, rewarding and distinguishing, creatin a sense of security (Kutrowska, 2017, pp. 39-40). Summarizing the role of the teacher, we can quote the sentence of B. Conklin: "a teacher is someone very special, who can use his ingenuity, kindness and inquisitive mind to develop the rare ability to encourage others to think, dream, learn, try, act" (Sana, 2010, p. 434).

3. Problems in remote education of students

The author, based on her own life and professional experiences, noticed many problems related, in particular, to the transition to distance education of high school students. In the first phase of the research, the author made the observation of the four first grades with which she carried out basic physics. In the initial period of the pandemic, remote work was difficult. The teacher himself chose various means of communication with students who did not always connect to the lessons. They were lost due to the lack of a uniform educational platform, there were cases of students who did not have access to a computer, or students who, despite

their technical capabilities, "disappeared" from the educational system. Students left their textbooks in school lockers, which they picked up in sanitary conditions within a month in classes according to the school's schedule. In such a situation, the author decided to switch to e-textbooks in physics lessons in order to avoid classroom backlogs and be able to implement the core curriculum, and at the same time enable students to access educational materials. Students had to switch to computer work, implementation of on-line tests, and watched educational films related to the subject matter. During the lessons, at the beginning, the students could not adapt to working with the cameras turned on, they showed up in funny situations, "fooled around", took pictures, chatted, played computer games. After some time, the students adapter to the new situation. Most of the students were satisfied with the regular lessons, tasks carried out on the electronic board and work with the e-textbook, but there were also negative comments, especially from weaker students or students with various problems in family homes, who either did not want to or could not participate in the lessons and unfortunately they had to catch up with compensatory classes in the afternoons after school, or on their own to pass the school year. The author of the thesis, based on the observation of students' work, believes that the change of education to remote education was a great difficulty for many students. Despite having computer skills, students initially struggled to log into the educational platform and e-textbooks, and in many cases students had to be assisted individually through telephone counseling. Telephone contacts in the afternoon were also necessary to encourage and motivate students to work remotely and carry out various activities. The isolation in the homes of young people was also a great difficulty.

The needs of high school students in the second phase of the research were analyzed on the basis of a questionnaire that was carried out on a group of students from three classes with a mathematical and physical profile (the author concluded that when choosing this type of class, students were more interested in physics, which they carried out in the form of an extension). In the studied school, during the pandemic, teachers of this subject frequently changed in these classes. The students had high expectations regarding the subject matter and the form of conducting classes, they tried their best in the lessons, asked many questions beyond the curriculum, On the other hand, many students had problems with finding their place in remote education, despite the fact that they were ambitious students with a high level of intelligence. From the questionnaire, it can be concluded that most students are genuinely interested in physics according to the class profile they have chosen. They do not want to be limited only to the knowledge from the textbook, they are curious about the world and technical innovations, they want to better understand the laws of physics by learning about the application of these laws in nature and in life. It is also important for these students to link physics with other subjects at school. Many questions were directed to the teacher, going beyond the curriculum, practically on every topic discussed in the classroom. Several students also asked the teacher to organize a physics additional lessons where they could carry out more difficult tasks and issues, and they were indeed actively participating in extra-curricular activities. Approximately 55%

of students did not have problems with understanding the lessons conducted on-line, the remaining students would definitely prefer stationary education, for various reasons, especially related to technical problems related to Internet connections, or the need to establish a live relationship with the teacher. In the study, the students assessed the on-line communication with the teacher as very good and good, they especially appreciated the possibility of: asking questions and talking, keeping electronic notes from lessons, obtaining grades for tasks or tests during the lessons on-line. It is important for the students that the teacher addresses them culturally, without disrespect, with respect, nice and loudly and clearly, so that the lessons are enjoyable and the students can get involved in the educational process. Students expect the teacher to be understanding, friendly, polite, patient and kind towards them. Among the students' statements there were also indications regarding: encouraging them to their subject, not exerting too much pressure on the students, the teacher should maintain a safe and peaceful atmosphere, and at the same time control the confusion in the class, he should see another person in the student, he should not exalt himself, but approach with distance, flexibility, with a sense of humor, should listen to the student, but without establishing major relationships or interactions. When describing the teacher, students indicated such features as a positive attitude, normality, smile, no hatred, wisdom, peace, sympathy, good contact with students. It is also important for students to acquire practical knowledge useful in life, teach in various ways, accurately translate all information and answer all asked questions, encourage learning, and have an interesting story. Students do not want to be stressed, but the teacher should be educative, not too gentle, but not allowed to raise his voice, but calmly explain students' mistakes. Students would also like to be appreciated and positively assessed for the tasks performed. Most of the students agree that it is better for them to study stationary at school rather than on-line, because it is easier for them to focus on the lesson, prefer face-to-face contracts, get more out of the lesson, learn more, understand more, ask everything during the lesson, discuss with the whole class they can go to the blackboard to understand the task better, there is no disruption in communication, there is better contact with the teacher, communication is faster than on-line and without disruptions, they have a better motivation to learn, easier for them solve problems while physically at school. Students want to see the people they are talking to, but they themselves do not want to turn on the cameras in on-line lessons. Some students preferred remote lessons, saying that: I was well rested, I could concentrate better, I was less stresses when doing tasks, school and leaving home stresses me, it is more convenient, it is easier to ask a question than in the classroom, no need to travel to school. In one of the surveys, there was also a note about a hybrid solution, which, according to one of the students, would be less stressful. Analyzing the students' answers, it can be seen that direct contract is the most important for young people. Most of the students have high expectations towards the teacher – the teacher should create the teaching process, take the initiative in various tasks, participate in activities undertaken by students, while the students are not very interested, apart from a few people, in taking responsibility for their own educational process.

4. Students' expectations towards a physics teacher in selected general secondary schools

From the teacher, students expect support in every field. The teacher should emphasize the development of self-improvement skills, watch over the proper development of the student, not exalt himself and not exercise power in the educational process, but offer help when it is needed, and fulfill his role in a reliable and conscientious manner. He should not be critical of the students and of himself. The teacher should learn from his mistakes and improve his work thanks to the acquired experience in the profession. The author suggests the new roles of the teacher in the 21st century indicated in the literature (Nauczyciel pedagog...) asked respondents in the survey what the teacher should be like, with the most votes towards the role of a helper (about 45% of responses), while the guide (about 30%) and the authority and leader (about 25%) obtained more or less the same result (fig. 1).

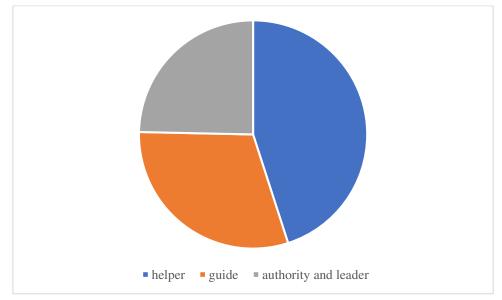
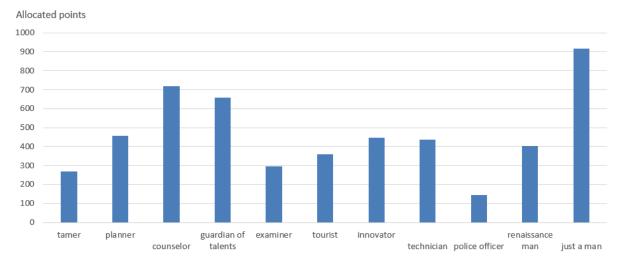


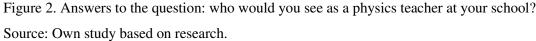
Figure 1. Answers to the question: who should a teacher be for you? Source: Own study based on research.

Students allocated 100 points among all responses for researches presented in figure 1 and also in figure 2. The roles of the teacher (fig. 2) were adopted from the study according to E. Superczyńska (Superczyńska, 2005, p. 5).

In the eyes of students a teacher should simply be a person who works for the good of another person, is altruistic, places the good of others over his own. Students also highly appreciate the advisor teacher (his task is to observe the progress of students in various fields, he should be vigilant and perceptive, he should be able to discover the students' abilities and properly direct them in activities towards development) and the talent tutor (a teacher who properly cooperates with talented students, submits them to competitions and Olympiads, is able to adequately support a gifted student, but also a student with learning difficulties). Most high school students understand that they learn for themselves so that they can achieve

their goals in the future, but it can be concluded from the research that they approach life a bit childish, want to be protected by the teacher all the time and taken care of in many things. The person of the teacher is very important to them, so the teacher is an example for them. Learning should be fun, broaden your interests, encourage you to explore it, but in addition, according to the author, the role of the teacher is also to educate students, learn responsibility and prepare them for adult life.





The author of the article, based on her own experiences as a high school teacher and several years of work as an academic lecturer, proposes her own teacher model (fig. 3). In the light of the current pandemic situation, which has highlighted many problems of students, according to the author, teaching should be approached in an interdisciplinary way, using a variety of skills. Reaching students, getting them interested in their activities and encouraging them to learn requires a lot of effort from a modern teacher.

Nowadays, a physics teacher should be, above all, an "expert", should have extensive knowledge in the field of physics and related fields, so that he can conduct lessons beyond the textbook content, explain difficult content to students, or answer any questions related to the topic of the lesson. The teacher must update his knowledge by participating in scientific conferences in a given field, following interesting facts and news published in specialized journals or thematic research portals.

As an "engineer", the teacher should be able to explain various types of laws, formulas, principles, methods of operation of various devices, discuss the use of the principles of physics in practice, conduct a series of experiments with students using specialized instruments in the school laboratory, propose the implementation of various thematic projects, explain complex tasks and make calculations. The engineer's task is to study various problems in detail and find a number of solutions or improvements in this teaching process.



Figure 3. Physics teacher model

Source: Own study.

The "process designer" teacher also optimizes processes. He has to plan the lessons for each class himself, following the curriculum and guidelines indicated in the school documentation, as well as the amount of knowledge transferred. Lessons should be diversified by introducing various forms and didactic methods, so that students would not get bored, feel interested in the subject and motivated themselves to expand their knowledge on their own. Even the best lesson scenario can be further improved to enable better development of the student.

Remote teaching required teachers to have the ability to operate various types of IT programs, applications, the ability to work with the Internet or with various devices, such as an electronic board, camera, microphone, so the author used the concept of "IT specialist" in the model.

Collecting various information, interesting news, collecting links to websites and films in a wide range, associates the author with the profession of "information broker", where in education the clients for whom we collect selected and properly developed knowledge will be our students.

The teacher, and especially the supervising teacher, performs a number of duties, both related to teaching, educating and caring for students, as well as administrative and organizational duties, tasks related to planning, coordinating or integrating class activities, as well as diagnosing students or organizing the educational environment. The educator leads the class team, carrying out the tasks of the "manager of the educational process".

Work carried out at school is subject to legal provisions, norms, regulations and standards set out on laws or regulations. The teacher is responsible for the implementation of the teaching process and in periodic reports describes his work and the work of students, gives opinions about students, their behavior and skills, exercises supervision over students in the classroom, and performs advisory functions in various aspects. The supervising teacher controls the class money, which is accounted for to parents at meetings, and supervises the work of the Class Three. The author of the work associates it with the work of an "auditor" in quality management processes.

An "animator" is a person who inspires, arouses interest in something, stimulates, encourages, enlivens, is an inspirer and initiator of activities, stimulated activity, creates circles of interest, organizes events or celebrations.

The teacher must have basic knowledge in the field of psychology, should have a good sense of observation of students, making diagnoses, giving opinions on their behavior, as well as conducting educational interviews with students and conversations about students with parents. An advertisement regarding the need to employ a psychologist teacher appeared in job offers, where this position is referred to as a new profession (www.zawodowe.com/...).

A coach is a professional who specializes in helping people achieve specific goals and overcome obstacles to personal development. Such people must enjoy working with people and helping them solve problems, have excellent communication skills, be good listeners, have a positive and optimistic attitude, want to positively influence the lives of their clients, be interested in their own development and the development of others (www.intensive-group.pl/...). A school teacher also deals with the development of students in a similar way, for example through activities for career counseling at school.

The model proposed by the author was developed in a pandemic, when contacts with students were difficult and the work was carried out online. However, new experiences and skills gained by the teacher, and thus a new approach to the student, should also be used in the period of stationary work.

Summary

The pandemic disrupted the work of teachers and students, introduced many changes for which no one was fully prepared. Many teachers left their jobs during the pandemic, they were unable to switch to their new roles. It is a significant effort to learn how to use new technologies, no meetings with students "face to face" during lessons, a sudden change in the way of conducting classes. Not only did the students have many problems during the pandemic, so did the teachers, although they should support the students and help in a difficult situation. According to the author, the model could be applied in practice, provided that teachers are properly prepared for new roles through interviews, appropriate training and workshops, and analyzing good practices. Both teachers and students must learn to function in the new reality so that the educational process is effective and allows young people to pass their high school diploma, get into University and find their dream job, despite the emergency situation around the world. According to the author, the school should provide students with stability, gives a sense of security and support, because students, despite their young age, also face a crisis and often the tragic consequences of a pandemic, such as depression or suicide attempts.

References

- Famuła-Jurczak, A., (2013). O potrzebie nowego spojrzenia na rolę zawodową nauczyciela. In: B. Akimjaková, A. Famuła-Jurczak, P. Mazur, O. Račková (eds.), *Nauczyciel kreatorem zmiany*. Ružomberok: Verbum.
- 2. https://encyklopedia.pwn.pl/haslo/nauczyciel;4009280.html.
- 3. https://www.intensive-group.pl/blog/zawod-coach-na-czym-polega-taka-praca.
- 4. https://www.zawodowe.com/kategorie/edukacja/nauczyciel_psycholog/.
- 5. Kutrowska, B. (2017). Nauczyciel w zmieniającej się rzeczywistości edukacyjnej. Zeszyty Naukowe Uniwersytetu Kazimierza Wielkiego w Bydgoszczy, Szkoła Zawód Praca, no. 14.
- 6. Nauczyciel pedagog role i zadania, https://edukuj.pl/nauczyciel-pedagog.html.
- 7. Odrowąż, E., Maciejowska, I., Kędzierska, E., Ellermeijer, T. (2013). Konsorcjum ESTABLISH. Rola nauczyciela w szkole XXI wieku. In: *Nauczanie przedmiotów przyrodniczych kształtujące postawy i umiejętności badawcze uczniów*. Kraków: Uniwersytet Jagielloński, Wydział Chemii.
- 8. Sana, E.A. (2010). *Teaching and Learning in the Health Science*. Quezon City: The Uniwersity of the Philippines Press.
- 9. Serafin, J. (2009). Potrzeba modyfikacji roli nauczyciela w obliczu zastosowań technologii informacyjno-komunikacyjnych w edukacji. Zeszyty Naukowe Instytutu Spraw Publicznych Uniwersytetu Jagiellońskiego, Zarządzanie Publiczne, 2(6).
- Strykowski, W. (2008). Kompetencje współczesnego nauczyciela. *Neodidagmata*, 27/28. Poznań: Wydawnictwo Naukowe UAM.
- 11. Superczyńska, E. (2005). Nauczycielem być.... Uczyć lepiej, no. 5.
- 12. Ustawa z dnia 26 stycznia 1982 r. Karta Nauczyciela, Rozdział 2, Obowiązki nauczycieli, Art. 6, (Dz. U. z 2019 r. poz. 2215 oraz z 2021 r. poz. 4).

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

IRRESPONSIBLE ACTIONS OF SOCIALLY RESPONSIBLE COMPANIES TOWARDS THE POLITICAL SITUATION IN UKRAINE

Agata OPOLSKA-BIELAŃSKA

University of Warsaw; ak.opolska2@uw.edu.pl, ORCID: 0000-0001-8760-8788

Purpose: Analyzing current trends in corporate management, one can see the dominance of corporate social responsibility activities. This is probably due to the major changes taking place in the surrounding reality. However, in the face of territorial expansion in Ukraine, the slogans preached by socially responsible companies have begun to undergo a thorough revision. Therefore, it seems important to analyze the decisions that companies respecting the CSR strategy have made in their relations with Russia.

Design/methodology/approach: The purpose of this analysis is to verify the assumption that companies presenting themselves in the business market as socially responsible, respecting the idea of CSR in the face of the crisis in Ukraine, will withdraw from cooperation with Russia. Verification of the assumption will be made on the basis of a review and analysis of available press sources and information provided by companies. The conclusions obtained in this study provide important insights for companies implementing a corporate social responsibility strategy in the face of sudden difficulties they may face.

Findings: A review of the topic showed that many companies, despite their socially responsible objectives, have not backed down from cooperating with Russia. Therefore, it is important to analyze companies in terms of the CSR slogans they proclaim. The environment, both external and internal to the company, is becoming increasingly discerning about the socially responsible actions taken by companies. It therefore seems important to report CSR activities reliably and to manage the company ethically and in accordance with stakeholder expectations. Otherwise, companies risk losing prestige and dominance in the market. Corporate social responsibility is, after all, responsibility for the content that is proclaimed and the decisions and behaviors that correspond to it.

Research limitations/implications: When reviewing and analyzing press sources of companies, information contained on their websites, and examining non-financial reports of these companies, one should be wary of the emotionality of the message contained in these sources and the persuasion that comes from them.

Practical implications: The analysis of the companies carried out proved the tenuous link, in some cases of the companies, between the proclaimed socially responsible actions and the decisions of the companies in the business market. Inconsistency between assumptions and actions affects a company's reputation. Difficult situations are a test for the credibility of a company's assumptions, so it is important that the actions described in non-financial reports are backed by provisions.

Social implications: The conclusions obtained will make those interested in the topic of CSR aware of how the theory of socially responsible business preached by companies translates into business decisions taken by companies.

Originality/value: The essence of the article is to look at the socially responsible actions taken by companies in the face of the crisis in which they find themselves, and to try to answer how companies should act in crisis situations. This information is important for anyone interested in CSR issues.

Keywords: ESG, CSR, irresponsible business, Ukraine, war

Category of the paper: conceptual paper, case study.

1. Introduction

In order to gain and maintain a dominant market position, modern companies follow current business and consumer trends. The research and development field evolving in this direction is giving rise to potential strategies and concepts that can be used in various spheres of business activity.

This is where the concept of Corporate Social Responsibility (CSR) is embedded. It overcomes the common tendency to treat business as a socially isolated enterprise. Technological, economic and social progress has prompted companies to opt for sustainable operations and the implementation of CSR practices. Nowadays, in business practice, this concept can also be referred to as ESG (ESG Investing...) - environmental, social and corporate governance, which will be demonstrated in the practical part. The public has also become aware of the changes taking place. The introduction of the social responsibility concept based on ethical and ecological values has resulted in the creation of a good company image. Thanks to the skilful and credible communication about pro-social and pro-environmental actions taken by a business entity, it is more favoured by its contractors, consumers or stakeholders. A company that aims to build a lasting relationship with its external environment and to create a recognisable product takes decisions that are well-considered, prudent and consistent with generally accepted social norms and top-down legislation. Such an attitude can be called responsible and socially sensitive. There is nothing challenging about implementing and spreading responsible practices in good times. What seems important is to verify such actions in difficult and conflict-ridden situations.

The purpose of this analysis is to verify the assumption that companies which present themselves on the business market as socially responsible ones are respecting the idea of CSR in view of the crisis in Ukraine. Such an assessment will be made on the basis of a review of available press sources which provide information on the companies' stances towards the territorial expansion in Ukraine.

2. The importance of socially responsible actions for the company's environment

The world is evolving dynamically. What seems to remain unchanged is that the essence and the overriding goal of businesses have always been to gain as much profit and competitive advantage as possible. This thinking has contributed to the emergence of many social and environmental problems, including unemployment, inequality, deterioration of the planet, the threat of nuclear contamination, monopolisation, and increased consumption or unfair competition. These factors fuelled the need for change in the way business was done. This resulted in the development of the Corporate Social Responsibility (CSR) concept in the United Kingdom and the United States at the end of the 19th century. The main assumptions concerned the obligations that a company had towards its environment (Visser, 2010, p. 1). Methods of achieving success have changed. As time has passed, people have realised that work is not only about earning money anymore. Among the youngest generations of employees (Opolska-Bielańska, 2018, pp. 348-350), a belief has emerged that work should be a place for development and that the personal goals of the company should be the same as its activities. This symbiosis means that the work performed would satisfy the employees' need for selffulfilment and thus contribute to the development of the company's capital. Failure to identify these factors leads to insufficient results for the company and its environment (Sznajder, 2013, p. 200). All companies that use this management model willingly adopt an attitude that favours balance on economic, environmental and ethical grounds. An ethical approach to business management mainly involves understanding the consequences of decisions taken and bearing the consequences for them (Wykowski, 2013, pp. 288-291).

Implementing responsible thinking through the actions of companies is crucial. The scale of such practices is sometimes greater than that of individual countries. Eric C. Chaffee (Chaffee, 2017, p. 350) describes the theory according to which corporations bring together state authorities and people. This is important because corporations are able to achieve more than individuals or even the state. This explains the essence of a 'corporation' and allows one to understand the point of conducting socially responsible practices. This concept can be interpreted as the entrepreneur's duty to make decisions or choose a course of action that is desirable by and for society. The reason behind the promotion of this concept was the belief that several hundred major companies have a significant impact on the lives of people worldwide.

In the 1960s, there was an effort to formalise the meaning of CSR in a more detailed manner. Keith Davis (Garriga, Mele, 2004, pp. 55-56) analysed the power that business holds in society and the social impact it has. In those days, business was defined as a social institution that must use its energy and resources responsibly. Furthermore, it was noticed that the factors influencing the growth of a company's social power came not only from the inside but also from

the outside of the organisation. The more powerful a company was perceived to be, the more it should contribute to society. According to Davis, companies that do not use their position in the way in which society views as responsible will lose that position. As a result, other companies will step in to take over these responsibilities, as well as the customers.

What is related to this is that large corporations should not merely pursue their own interests, but they should also take into account their presence in a given society and environment; they should consider and then offset the negative effects that their activities entail. The principle of social justice implies that an individual who functions within a society voluntarily engages in improving the quality of the surrounding reality. Thus, the credibility of a given company and trust in it are essential. The importance of trust in management strategies is fundamental due to the fact that it creates relationships and maintains long-term ties between the company and its environment.

According to A. Carroll (Carroll, 1991, pp. 39-48), the essence of a company is to meet the current expectations arising in society. This idea led to a division of social responsibility activities into the following components resulting from societal expectations:

- economic (focused on cost optimisation),
- legal (including measures to improve the state of the natural environment or to take care of the consumers and workers),
- ethical (expressed, for example, through fully legal initiatives that comply with the law),
- philanthropic (focused on educational or volunteer programmes etc.).

As the needs and relevance of CSR activities became apparent, the concept of Corporate Social Responsibility, which is difficult to explain clearly, gradually began to be defined (Looser, 2020). One of the organisations involved in its creation was the European Commission (https://ec.europa.eu/info/...). According to the definition that has emerged, companies applying Corporate Social Responsibility are expected to act responsibly towards their environment and respect nature. Based on this view, Stoian and Gilman (Stoian, Gilman, 2017, pp. 5-31) define CSR as the companies' responsibility for their impact on society. They point out that social, environmental, and ethical human rights, as well as consumer issues, can be integrated into a company's core strategies. In later years, this idea changed and was expanded to include the mechanisms that a business should have in order to function according to the CSR concept. In the definition from 2011 the focus is primarily on a positive impact on social groups, and then on the environment (Gaweł, 2016, pp. 31-33).

Thus, a company can be regarded as a CSR-implementing enterprise if it aims to act consciously and sustainably, targeting not only financial profit and economic aspects, but also taking into account social and environmental needs and interests. Actions based on this concept are those that go beyond the economic objectives of the company while being conscious and planned (Klimczok, Tomczyk, 2013, p. 178).

- 1. promoting responsibility as the foundation for the company's activities,
- 2. contributing to strengthening the principles of social responsibility and improving the way results are presented to all stakeholders,
- 3. supporting the process of ethical, environmental and economic improvement of the company.

It should be noted that socially responsible activities contribute to the company's image. The pro-social nature of the company's activity is one of the most stable forms in which the company can become distinguished on the market. The image created by the company thus becomes permanent, and appeals to the emotional spheres of business partners, either bonding them to the company or discouraging them from it (Gołaszewska-Kaczan, 2009, p. 127). Another benefit is that the company is able to function smoothly in emergency situations thanks to the support of the local community in which the company has invested socially. Companies that have gained customers' trust and loyalty to their brands through social engagement are more likely to regain favour in times of trouble than those companies that are perceived to be purely profit-driven.

By adopting such an approach, the company builds an appropriate image strategy and competitiveness in the market. It is important for a company to be able to build the right external communication between the company, the public and NGOs, whatever conditions it may find itself in.

3. Controversial practices of socially responsible companies during the territorial expansion in Ukraine

Nowadays, companies wishing to succeed are placing increasing importance on maintaining their image. There is also a growing awareness among companies regarding corporate social responsibility, which has an impact on the relationship between the company and society. Responsible business is becoming a common feature of enterprises flourishing around the world. The direction of socially responsible activities is based on the belief that organisations, apart from the economic aspect, engage in social, ethical or environmental issues and voluntarily take into account the principles of sustainable development. This is becoming an asset for brands when creating their image. As we witness the development of the CSR strategies, we can also become observers of the real respect for the company's proclaimed principles. It is assumed that the good practices implemented by the company will be verified in difficult times such as the current military crisis in Ukraine. The first and perhaps the most important symptom of the reliability of the ideas proclaimed by companies is the withdrawal of

businesses with social ideals from the territory of Russia. It is expected behaviour to sever connections and financial dependencies, halt supplies, lose influence and withdraw from the Russian market.

A number of foreign companies have met the above objectives. These include, for example, Ikea, BP, Shell, BMW, Nissan and Intel. However, there are also those who, despite responsible principles, have not stopped cooperating with Russia. They continue to do business despite preaching about CSR, ESG or sustainability. The good practices they promote in the context of political difficulties are therefore questionable. It seems easier to implement the provisions of the Charter for Sustainable Development than to terminate relations with a warlord.

The Yale School of Management compiled a list of companies that were present in the Russian market and attempted to review their decisions regarding further cooperation or lack thereof following the military expansion in Ukraine (Mokrzycka). The list includes 500 foreign companies that were present in Russia at the time of the attack on Ukraine. The market has been polarised. Some companies have drastically cut themselves off from Russia and some have remained unchanged in their business relations. This list is being successively updated due to the dynamically changing decisions of the managements of these companies in the face of the growing military crisis and the pressure from consumers or investors.

Companies that have become controversial are Nestlé, Renault, Leroy Merlin, Auchan, Decathlon, SAP - the German IT giant which continues to provide technical support to its Russian clients, including Gazprom, Sberbank, Rosatom and others, or Belgian large companies such as the brewing concern Anheuser-Busch InBev (Rudke, 2022). Apart from these recently famous examples of foreign companies, there are also two Polish ones: **Cersanit** - a manufacturer of bathroom ceramics, and **Polpharma** - a producer of medicines. While the pharmaceutical company argues its decision is based on the need to support people who are ill (the supply of medicines to the Russian market is to be limited to children's products and to those used in emergencies or for the treatment of chronic diseases), Cersanit's products are not essential goods. The company has declared its withdrawal, but from Ukraine, not from Russia. It is not easy to close a ceramic tile factory near Moscow, which was opened eight years ago. As for Polpharma, the company demonstrates support for Ukrainian citizens by helping them to relocate to Poland and providing them with support in the country.

The companies' failure to behave as expected was met with a backlash from the Ukrainian authorities, calling on them to abandon cooperation with Russia. It is surprising to see the behaviour of these companies, since they have slogans about social responsibility embedded in their actions. In its principles, Nestlé points out that business benefits and positive social impact should be mutually reinforcing (https://www.nestle.com/...). It also addresses issues such as respecting human rights and developing them in the value chain to build a foundation that contributes sustainable future to а for our planet and its people (https://pl.factory.nestle.com/...). It is difficult to believe the company's aforementioned principles given the initial reluctance to withdraw from the Russian market. According to the latest information, Nestlé has withdrawn from the Russian market, limiting itself to trading essential foods for babies and hospitals (https://wiadomosci.radiozet.pl/...).

The **Renault** Group is also an example of how the presented strategy on socially responsible actions is incompatible with the political situation in Ukraine. Its statements say: "The Renaulution is well and truly in motion. It paves the way for new prospects, like that of a better protected environment, greater safety, and more inclusion!" (https://www.renaultgroup.com/...).

The next example is **Leroy Merlin**, presenting slogans which sound inadequate to its stance on the conflict in Ukraine (https://cfi.co/...). The company declares that it is "committed to maintaining the highest ethical standards in all areas of its business. Ethical conduct is a cornerstone of Leroy Merlin's corporate culture and is expected from every employee of the company" (https://www.leroymerlin.pl/...).

In its principles, **Decathlon** refers to human rights, diversity and preventing exclusion. Among other things, it communicates its core human values: "I make no concessions when it comes to people's safety, inside and outside the company" (https://sustainability. decathlon.com/...). It is difficult to find these words believable in the context of the behaviour displayed.

It is also surprising to see **Auchan**'s decisions given its joining the Global Compact, a responsible business initiative set up by the United Nations. By entering the agreement, the company made a commitment to respect the 10 principles of the Global Compact in the areas of human rights protection, quality of workplaces, environmental protection and anti-corruption (https://www.auchan.pl/...); however, the current decisions of the company do not quite confirm these lofty ideas.

The German IT giant **SAP** is still providing technical support to its Russian customers, including Gazprom, Sberbank, Rosatom and others. It has announced that it will not sign any new contracts with Russian companies, yet the expectations are higher - to completely stop Russian companies from accessing systems purchased from SAP. The German company declares that ESG goals are part of its strategy. The words posted on its website page on sustainability activities state: "Connect your environmental, social, and financial data holistically to steer your business toward better decisions" (https://www.sap.com/...). These "better decisions" leave a lot to think about in the context of the company's current actions.

The Belgian brewing company **Anheuser-Busch InBev** wants to stop selling Budweiser in Russia "in protest against the war in Ukraine". However, it does not intend to stop selling the well-known Belgian brands Stella Artois, Leffe and Hoegaarden. InBev. The brand refers to its implementation of a number of internal procedures, standards and global policies for a range of ethical issues, including anti-corruption, digital ethics, human rights and anti-discrimination, all of which do not seem to be reflected in responsible behaviour in the context of the war in Ukraine (https://www.ab-inbev.com/...).

The annual ranking of the World's Most Ethical Companies by the US-based Ethisphere Institute has revealed that the 136 organisations honoured with the title of World's Most Ethical Companies in 2022 have not withdrawn from the Russian market. And yet, entrepreneurs wishing to be included in the Ethisphere Institute's list must ensure internal standards, innovative management, and ethical operations.

There are many examples like these, as almost every major Western company that has not withdrawn from business in Russia has CSR, ESG or sustainability objectives included in its strategy.

4. Summary

In the above reflections on the social responsibility of companies whose actions were considered irresponsible when confronted with a situation that verified their declared values, attention was paid to stakeholder awareness. The values they hold are the result of recognised and interiorised beliefs. The decisions of companies maintaining business relations with Russia are driven by profit. Milton Friedman (Friedman, 1970) said that the hope for companies to focus on something other than profit should be rejected. His words again proved to be relevant. When criticising the concept of corporate social responsibility, he argued that it not only lacked logical justification but it was also dangerous to the freedom of business decisions. This opinion becomes fuel for critics of the Corporate Social Responsibility concept and any activities in the face of ESG.

Many companies which remain in the Russian market justify their decisions by saying that they are afraid to lose the income they earn from this market and that it will be difficult to return at an unchanged level. This may indicate that, for some companies, CSR-related activities are an image-enhancing feature to create a good reputation for the company. Economic analyses show that if a company or its products pull out of a given market, it may suffer a noticeable financial loss, whereas staying in the market when others pull out increases profits and market dominance. It might seem easier for companies which only distribute their products to respond to the situation, although brands such as Oriflame, Kimberly-Clark or Ecco have not done so. Yet another case is that of hotel chains (e.g. Accor, Intercontinental), which are still coming back to life after the COVID-19 crisis.

The decision regarding the relationship with the Russian market is certainly a very complicated one and often determines the future of these companies. On the one hand, they should consider the credibility of the socially responsible principles they proclaim; on the other hand, they have to handle an outflow of investors, a drop in share value, as well as global customer boycotts of their brands. The inconsistent attitude of companies will have serious consequences for their image. In the future, a poor reputation can affect financial performance,

company growth and increasing staff shortages. This is because we live in times in which not only investors and stakeholders, but also employees place more trust in companies whose strategy and vision are based on ethical objectives. After all, a company is an integral part of society rather than an isolated island (https://wiadomosci.radiozet.pl/...).

Declarations and objectives of Corporate Social Responsibility, ESG or sustainable development cannot be unequivocally criticised as being worthless. However, they are certainly being updated in view of the situation in Ukraine. The cases presented illustrate that, for some companies, lofty slogans undergo changes when it comes to monetisation. The current situation has become a test of social maturity for business. Decisions taken today will permanently become part of the company's DNA.

It is therefore important to reflect on the purpose of the Corporate Social Responsibility measures implemented in well-known companies. There is no doubt that these are worthwhile ideas which should be pursued. However, examples of companies reluctant to abandon the Russian market show that these ideas may be perceived as nothing but declarations. Meanwhile, conducting business in a humane, ethical and transparent manner (Garry, Harwood, 2017, pp. 258-275) is extremely important for the future of the world. A company's lack of credibility can prove to be disastrous not in the present moment of profit, but at a later stage. The dynamic global situation does not provide a clear answer to the question of the superiority of quick, unethical economic profit over the social sensitivity of the company, reflected in actions for the benefit of the society they influence and depend on (Rangan, Chase, Karim, 2015).

References

- 1. 2021 Environmental, Social & Governance Report. Retrieved from https://www.abinbev.com/assets/pdfs/ABINBEV_ESG_2021_Final.pdf, 11.04.2022.
- 2. Carroll, A.B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons, No.* 34(4), pp. 39-48, doi:10.1016/0007-6813(91)90005-G.
- 3. Chaffee, E.C. (2017). The origins of corporate social responsibility (Początki społecznej odpowiedzialności biznesu). *University of Cincinnati Law Review, Vol. 85.* Toledo.
- 4. *Corporate social responsibility (CSR) European Commission*. Retrieved from https://ec.europa.eu/info/business-economy-euro/doing-business-eu/corporate-social-responsibility-csr, 11.04.2022.
- 5. *Creating Shared Value and Sustainability Report* 2021 *Nestle.* Retrieved from https://www.nestle.com/sites/default/files/2022-03/creating-shared-value-sustainability-report-2021-en.pdf, 11.04.2022.

- 6. *Decathlon Sustainability*. Retrieved from https://sustainability.decathlon.com/about-decathlon, 12.04.2022.
- 7. *ESG Investing: Practices, Progress and Challenges.* Retrieved from https://www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf, 11.04.2022.
- 8. Friedman, M. (1979). *The Social Responsibility of Business is to increase its profits*. The New York Times.
- 9. Garriga, E., Mele, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics, No. 53*, pp. 51-71.
- Garry, T., Harwood, T. (2017). Exploring consumer associations between corporate reputation, corporate sustainability, and product attributes within utilitarian market contexts. *International Studies of Management & Organization, No. 47*(3), pp. 258-275. https://doi.org/10.1080/00208825.2017.1318021.
- Gaweł, W., Golba, D. (2016). Źródła i droga ewolucji koncepcji społecznej odpowiedzialności biznesu. In: R. Dziuba, M. Szewczyk, E. Okraszewska, (Eds.), *Ekonomia zrównoważonego rozwoju. Społeczeństwo, Środowisko, Innowacje w gospodarce.* Łódź: Wydawnictwo Uniwersytetu Łódzkiego. doi: 10.18778/8088-490-8.04.
- 12. Gołaszewska-Kaczan, U. (2009). *Zaangażowanie Społeczne Przedsiębiorstwa*. Białystok: Wydawnictwo Uniwersytetu w Białymstoku.
- 13. Klimczok, M., Tomczyk, A. (2013). CSR–Koncepcja odpowiedzialnego biznesu w świetle zarządzania wiedzą w przedsiębiorstwie. *Zeszyty Naukowe Wyższej Szkoły Humanitas*. *Zarządzanie, No.* 2, pp. 177-182.
- 14. *Kodeks Postępowania Etycznego Leroy Merlin Polska*. Retrieved from https://www.leroymerlin.pl/zrownowazony-rozwoj-kodeks-etyki.html, 11.04.2022.
- Leroy Merlin Hiszpania: Najlepsza strategia handlu detalicznego ESG Hiszpania 2021. Retrieved from https://cfi.co/awards/best-practice/2021/leroy-merlin-spain-best-esg-retailstrategy-spain-2021/, 11.04.2022.
- Looser, S. (2020). Overview: Formal management systems, intrinsic CSR, and the role of culture in management. In: W. Wehrmeyer, S. Looser, M. Del Baldo (Eds.), *Intrinsic CSR and competition*. Palgrave Macmillan.
- 17. Mokrzycka, K., Jak Yale stworzył listę firm, które nie wycofały się z Rosji. Wywiad ze współtwórcą zestawienia. Retrieved from https://300gospodarka.pl/wywiady/lista-firm-ktore-nie-wyszly-z-rosji-yale, 11.04.2022.
- 18. *Nestlé Responsible Sourcing Standard*. Retrieved from https://pl.factory.nestle.com/sites/g/files/pydnoa386/files/2020-03/nestle-responsible-sourcing-standard-english.pdf, 11.04.2022.
- Opolska-Bielańska, A. (2018). CSR w oczach Milenialsów. Marketing i Rynek, Vol. 25, No. 11, pp. 348-356.

- 20. *Our sustainable development strategy*. Retrieved from https://www.renaultgroup.com/en/ our-commitments/our-environmental-and-societal-strategy/, 4.05.2022.
- 21. Rangan, V.K., Chase, L., Karim, S. (2015). *The truth about CSR. Harvard Business Review*, *1-2*. Retrieved from https://hbr.org/2015/01/the-truth-about-csr, 11.04.2022.
- 22. *Rozwiązania dotyczące zrównoważonego rozwoju i raportowania ESG*. Retrieved from https://www.sap.com/products/sustainability/steering-reporting.html, 11.04.2022.
- 23. Rudke, M., *Wielka hipokryzja biznesu. Nie wycofują się z Rosji mimo górnolotnych deklaracji.* Business Insider Gospodarka. Retrieved from https://businessinsider.com.pl/gospodarka/wielka-hipokryzja-biznesu-nie-wycofuja-sie-z-rosji-mimo-gornolotnych-deklaracji/3c490jr, 22.03.2022.
- 24. Serafin, K. (2015). Społeczna odpowiedzialność warunkiem sukcesu współczesnej organizacji. Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego w Katowicach, Vol. 229, pp. 169-179.
- 25. *Sponsorzy wojny? Firmy trzymające z Rosją mogą zapłacić podwójnie*. Retrieved from https://wiadomosci.radiozet.pl/Biznes/Firmy-ktore-zostaly-w-Rosji-zaplaca-podwojnie.-Sponsorzy-wojny, 11.04.2022.
- 26. Stoian, C., Gilman, M. (2017). Corporate social responsibility that "pays": A strategic approach to CSR for SMEs. *Journal of Small Business Management*, 55(1). https://doi.org/10.1111/jsbm.12224.
- 27. Sznajder, M. (2013). Korzyści z wdrożenia koncepcji społecznej odpowiedzialności biznesu. *Ekonomia i Zarządzanie, Vol. 5, No. 2,* pp. 194-211.
- 28. Visser, W. (2010). The Evolution and Revolution of Corporate Social Responsibility. Wiley.
- 29. Wykowski, A. (2013). Społeczna odpowiedzialność biznesu gwarancją sukcesu przedsiębiorstwa. Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach, Series: Administracja i Zarządzanie, No. 98, pp. 287-295.
- 30. *Zrównoważony rozwój raporty Auchan*. Retrieved from https://www.auchan.pl/pl/dla-klienta/nasze-wartosci/zrownowazony-rozwoj-raporty, 12.04.2022.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

TURNOVER OF EMPLOYEES WITH EMPLOYABILITY MARKET ORIENTATION VERSUS AFFECTIVE COMMITMENT IN THE CONTEXT OF SUPERIOR SUPPORT, ROLE AND INTRA-ORGANISATIONAL EMPLOYABILITY

Anna PAWŁOWSKA

Warsaw University, Management Department; annap@wz.uw.edu.pl, ORCID: 0000-0001-8534-3317

Purpose: The objective of this article is to show that superior support, a clear role and intraorganisational employability are intangible ways to build affective commitment, thus reducing expensive turnover of employees who display Employability Market Orientation (EMO) and might intend to quit their jobs. The research was partially financed by the IDUB micro-grant of the University of Warsaw.

Design/methodology/approach: The research was conducted using the CAWI method on a representative sample of adult Poles (N = 1712) in 2019 and 2021. Nine hypotheses have been verified based on the Pearson's r coefficient and a multiple regression analysis.

Findings: Seven established hypotheses assuming the existence of mutual relationships between employment duration, EMO, affective commitment, intra-organisational employability, superior support, and role have been confirmed. A direct relationship between employment duration and intra-organisational employability as well as affective commitment and role has not been confirmed. There was no evidence of a relationship between the studied phenomena and gender and age.

Research limitations/implications: The prediction that employees with the Employability Market Orientation are one of the sources of employee turnover has been confirmed. It has been shown that with a high level of this attitude, longer employment duration is possible if the human resources management process leads to employees' affective commitment and the possibility of their building intra-organisational employability. The condition for this is that superiors provide support and ensure that the employee's role is clear.

Practical implications: Thanks to the research results, practitioners obtained tips on how to retain employees and reduce employee turnover.

Originality/value: This research expands the knowledge about employees adapted to the shortterm employment rules and about the development of a transactional psychological contract. The importance of Employability Market Orientation and intangible motivators has been confirmed as regards turnover reduction. **Keywords:** affective commitment, employee turnover, Employability Market Orientation, intra-organisational employability, superior, role.

Category of the paper: research paper.

1. Introduction

Today, one of dominant problems identified by human resource managers is high employee turnover and low employee loyalty, often associated with a lack of engagement and commitment to the organisation (PARP, 2020; 2022). The reasons for this situation include the employee market and the need to compete and "fight for talents" (Deloitte, 2016). This is reflected in actions aimed at attracting employees such as poaching (Wechta, 2015; Stankiewicz et al., 2018), which was indicated by 64.8% of respondents already in 2015 (Hajec, 2016).

This article focuses on the causes of turnover ensuing from emoplyees' individual decisions to quit their jobs and their possible susceptibility to such influences. One particular reason is the emerging para-trade employer-employee relationship based on a transactional psychological contract in parallel to the formal and legal one, which results in the end of lifetime employment with one employer (Pawłowska et al., 2014).

Only every fourth employee in the general group of respondents does not expect a change of employer, as compared to 76% of those willing to do so (Hays, 2021). Research and practice show that even the conclusion of a long-term contract with appropriate clauses is not a sufficient safeguard against this (Feng et al., 2017). This is due to the situation of employees on today's labour market. They function as the employed, while also being entities with their professional portfolio to offer to another employer. The temptation to change the employer is strong in view of the demand-supply structure of the labour market where the employee is in a privileged position. This situation becomes very serious from the point of view of the profitability of enterprises and their competitive advantage built on the basis of their competence portfolio (Boudreau et al., 2013). Its shape is determined, among others, by efficient human resource management processes aimed at attracting, retaining and optimising the number of employees in order to maximise the efficiency of the organisation's operations (Dessler, 2016; Armstrong, 2017). Undoubtedly, the methods of retaining employees used in accordance with the strategy of achieving the goals of the organisation determine the organisation's financial condition and competitiveness (Ulrich et al., 2010). Meanwhile, some market data indicate that the dominant approach to retaining employees involves higher wages (cf. Łukaszewicz, 2022) or a number of tangible bonuses. It is probably an important motivational aspect, yet it causes an increase in the organisation's operating costs and reduces its profitability and resilience to competition. Hence, it seems important that reliable research offers pro-efficient solutions by identifying other, intangible aspects of management that will help retain employees and reduce their costly turnover.

This issue is particularly complex in relation to employees who have adapted to the rules of short-term employment and are not afraid of losing their jobs. People with this attitude can be identified by measuring their Employability Market Orientation (EMO).

According to previous studies, these are people who are characterised by a low level of job insecurity and high employability, which guarantees that they will find another employer quickly. The question is whether there are aspects of human resource management that can be explored to keep people who are inherently open to quitting their jobs and therefore difficult to retain. All the more so as previous studies indicate that their willingness to change the employer does not depend on the type of employment contract or wages, i.e. the traditionally used methods of influence (Pawłowska, 2020).

The results of research on a representative sample of adult Poles presented in this article are a search for an answer to the question of whether there are intangible, available and employer-controllable methods that can be followed to retain such employees¹.

First, the research established the number of people with the Employability Market Orientation in the sample in order to estimate the scale of the phenomenon and potential problems for employers. Subsequently, such employees were tested for their ability to display affective commitment as a significant determinant of the employee staying with a given employer for longer. Finally, a link was identified between these variables and the potential to build intra-organisational employability provided that support is ensured by the employer and the role in the organisation is clearly defined. The rationale for such a research approach is outlined further in this study.

2. An employee with the Employability Market Orientation versus affective commitment and employment duration

Employability Market Orientation (EMO) is an adaptive pattern of employee behaviours in response to flexible human resource management resulting in a change of the psychological contract from relational to transactional. It comprises five types of behaviours, identified by extrapolation of the marketing approach to the level of an individual: Career Exploration, Future Time Perspective, Vocational Self-Concept Crystallisation, Career Planning, and Career Strategy Implementation.

¹ Research in 2021 financed by a micro-grant of the Excellence Initiative – Research University (Polish acronym: IDUB) of the University of Warsaw.

EMO serves to build employability and marketability of the employee, ultimately leading to the reduction of job insecurity (Pawłowska, 2017). It is the result of employees fulfilling the role of workpreneurs on the labour market (Frey et al., 2015). Such people are more inclined to change employers than others because, although working for a given employer, they also contact competing employers.

It should be clearly noted that turnover is a term referring to the general organisational processes related to the departure of employees. Meanwhile, in this article, the problem is analysed from the perspective of an employee's individual decision that, however, leads to problems throughout the entire organisation. Of note is that the employer can exert much less influence on such employees to retain them. Therefore, one of specific objectives of the presented research was to check the distribution of the EMO variable in a representative sample of Poles. In this way, the level of this phenomenon and possible challenges for employers resulting from the need to retain employees with EMO was estimated.

Simultaneously, it was assumed a certain range of possibilities exists to exert influence by developing an adequate human resource management process. Hence, it was checked whether the adoption of the Employability Market Orientation could be associated with the manifestation of affective commitment to the organisation at the same time. According to the definition that is in line with the concept by Meyer and Allen (1991), commitment is a mental state that binds an individual to the workplace and determines his or her willingness to stay with the organisation or leave it.

This concept assumes three types of people's commitment to the organisation: affective, continuance, and normative (Bańka et al., 2002). To achieve the set research goals, affective commitment was chosen. It means the employee's emotional commitment to and identification with the organisation for which he or she works. This follows from studies that indicate that such commitment involves a job-related positive feeling (Wołowska, 2013) and a state of mind that results in employees who feel it being less prone to quit their jobs (Spik et al., 2012).

In addition, studies have confirmed the relationship between affective commitment and employee absenteeism (Mathieu et al., 1990).

For clarity of the adopted terminology, it should be noted here that scientific publications frequently use the concepts of organisational commitment and engagement interchangeably, while they refer to different aspects of the employee's functioning in the work environment (Juchnowicz, 2012). In these dimensions, Armstrong (2010) describes four types of employees who may be strongly or weakly committed while being strongly or weakly engaged. An employee who is committed to the organisation does not have to be engaged at the same time. Hence the need to distinguish between these two concepts.

Summing up, it should be presumed that there is a strong case for seeking connections between EMO and affective commitment in the context of employees' individual decisions to quit their jobs. In order to verify these assumptions, the following hypotheses were put forward:

Hypothesis 1: There is a relationship between employment duration and EMO.Hypothesis 2: There is a relationship between EMO and affective commitment.Hypothesis 3: There is a relationship between employment duration and affective commitment.

3. The employer's impact on employee turnover – intra-organisational employability with superior support and a clear role

The specificity of EMO ensues from the fact that employees build such a position on the labour market that offers employment opportunities in the event of job loss and results in their sensing a low level of job insecurity (Pawłowska, 2017). Therefore, it can be assumed that if employees feel that their employment situation allows for building their position and role – i.e. intra-organisational employability – in the longer term, they will be less likely to leave (Sanchez-Manjavacas et al., 2020).

A. De Vos, S. De Hauw, and B.I.J.M. Van der Heijden (2011) demonstrated a relationship between employability and job satisfaction. This is confirmed by the outcomes of a Randstad survey (Randstad...) which show that employees appreciate development opportunities. Therefore, the presented research adopts a definition of employability as self-perceived and self-assessed possibility to maintain the job so that employees are convinced that their competences are used and needed by the current employer (Kampkötter et al., 2018). This is confirmed by studies that have identified a strong relationship between EMO and employability (Pawłowska, 2017; 2020).

Subsequently, it can be presupposed that in such a situation, employee affective commitment will develop. This is confirmed by Meyer and Allen (1997), who see affective commitment as developing with job satisfaction that can ensue from the sense of importance at the workplace, one's own contribution to the functioning of the organisation, and received support. In research conducted by the British government agency Health and Safety Executive (HSE) (Kwestionariusz Źródeł Stresu...), a lack of such a sense and support is a potential source of organisational stress that reduces the efficiency of employees. This concerns the availability of superior support such as constructive feedback or assistance while performing emotionally difficult work. It should be clearly emphasised that this measurement refers directly to one's ability to perform professional duties efficiently. It does not cover such issues as the atmosphere and quality of interpersonal relations or the occurrence of mobbing. In the context of the perception of intra-organisational employability, it was considered important to verify the meaning of the "role" dimension from among the aforementioned sources of organisational stress. The role is highlighted, for example, by Oleksyn (2006) in the context of competence management. Under the adopted approach, it is related to the assessment of whether the

employee understands his or her role in the organisation and whether the work organisation can lead to, for instance, a role conflict.

In connection with such understanding, it can be predicted that the support and role may be crucial from the point of view of building intra-organisational employability of employee displaying EMO and affective commitment. Thus, the following hypotheses were formulated:

Hypothesis 4: There is a relationship between intra-organisational employability and affective commitment.

Hypothesis 5: There is a relationship between intra-organisational employability and support.

Hypothesis 6: There is a relationship between intra-organisational employability and role.

Hypothesis 7: There is a relationship between intra-organisational employability and employment duration.

Hypothesis 8: There is a relationship between affective commitment and support.

Hypothesis 9: There is a relationship between affective commitment and role.

In the presented research, a relationship between EMO and employability was examined as it was confirmed by several other studies. The same applies to wages, which are related neither to EMO nor to the type of sector (public or private) (Pawłowska, 2017, 2020).

4. Research schema and applied diagnostic tools

The research was carried out through the CAWI method by a specialised research agency on a representative sample of working and non-working Poles aged 18-65. The structure of the nationwide sample reflects the gender and size of the place of residence in the population.

The study took place in two stages:

- stage I in December 2019 823 respondents,
- stage II in December 2021 (during the pandemic) 889 respondents.

A total of 1712 respondents were surveyed. EMO and intra-organisational employability were checked at both stages. On the other hand, the variables of employment duration, affective commitment, superior support and role were diagnosed in the second measurement.

The **Employability Market Orientation** (**EMO**) variable was diagnosed by means of a questionnaire developed by A. Pawłowska (2017). It consists of 28 items and a high value of Cronbach's alpha of 0.89 allows this tool to be considered a reliable diagnostic instrument. Each respondent's result was calculated as the sum of responses for all subscales, divided by five, i.e. the number of scales.

To measure **employability**, four questions from the General Employability (MAE) indicator as developed by A. Pawłowska (2017) were asked, for example: "There are numerous development opportunities for me in my workplace." "I am perceived as a valuable employee

by my company." It includes two components: employability and marketability of the employee.

Affective commitment was diagnosed with the use of six questions from Allen and Meyer's Organisational Commitment Scale (1997). Its Polish adaptation was translated by A. Bańka, A. Wołoska, R. Bazińska (2002).

The **role and superior support** were diagnosed by means of appropriate scales from the Organisational Stress Sources Questionnaire developed by the Health and Safety Executive (HSE). "Superior support" was diagnosed with five questions, for example: "I receive constructive comments and feedback on my work"; "I am supported in emotionally difficult work." In turn, "role" was diagnosed with five questions, for example: "I know how to carry out the tasks entrusted to me"; "I know how my role fits in with the overall goals of the organisation."

Employment duration is an indicator that was constructed as a relation of how long the employee had been working for the current employer to his or her age. This is due to the fact that in the studied group, a strong correlation (Pearson's r 0.49, p < 0.05) was identified between the duration of employment with the current employer and age. This approach replaced the measurement of the propensity to change employers as a declarative variable which had already been used in other studies (see Pawłowska, 2020). Hence, this variable is called **Relative Employment Duration**.

For all variables, the respondents answered the questions on the basis of a five-point Likert scale (1: I strongly disagree - 5: I strongly agree). The exceptions are two (out of five) EMO subscales, where the respondents provided answers on a four-point scale (1: very rarely - 4: very often).

The hypotheses were verified with the use of the Pearson's r coefficient and a multiple regression analysis.

5. Research results and their analysis

5.1. Distribution of EMO in the studied sample and sociodemographic characteristics of respondents with Employability Market Orientation

As can be seen in the figure, the frequency distribution of the EMO variable in both 2019 and 2021, when the measurement was performed, has a similar shape resembling normal distribution. At the same time, the differences between the average levels of Employability Market Orientation (EMO) in 2019 and 2021 were not statistically significant.

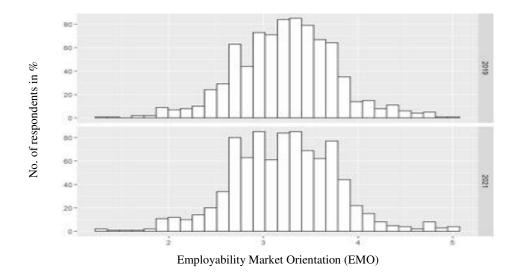


Figure 1. The frequency distribution of Employability Market Orientation (EMO) in 2019 and 2021. Source: own elaboration based on the research results.

The multiple regression analysis (Table 1) revealed that respondents with EMO can perform managerial functions and are less likely to be younger, yet the % of the explained variance is very low. No relationship was found with education, gender and type of employment contract (Pawłowska, 2017, 2020). This result undermines the belief that the employer can retain employees by offering a particular type of employment contract.

Table 1.

Multiple regression results – Employability Market Orientation (EMO) as a variable dependent on sociodemographic variables

Predictor/dependent variable	Employability Market Orientation (EMO) * * $R^2 = 0.5252$	
Managerial/non-managerial job	0.182***	
Age	-0.005***	

The sign next to the dependent variable refers to the significance level of the regression model. The adjusted R-squared value is given below. Education, type of employment contract and gender – insignificant.

* * * p < .001.

Source: own elaboration based on the research results.

The number of respondents with a low, medium and high EMO level in both measurements is similar. This variable remains at the medium level for most respondents. It is therefore confirmed that EMO can be a source of problems for employers.

5.2. Means, standard deviations and Pearson's r correlation coefficients for the diagnosed variables

Table 2 below contains a summary of means and standard deviations for all diagnosed variables for the entire study sample (N = 1712).

	Mean	Standard deviation
EMO	3.18	0.55
MAEW	3.4	0.64
AC	3.12	0.76
SS	3.27	0.79
RL	3.77	0.67
RED	0.2	0.17
Age	42.87	13.33

Means and standard deviations for the diagnosed variables in 2019 and 2021

Designations: Intra-organisational employability (MAEW); Employability Market Orientation (EMO); Affective commitment (AC); Relative employment duration (RED); Superior support (SS); Role (RL).

Source: own elaboration based on the conducted research.

Table 3 below shows Pearson's r correlation coefficients displaying the relationships between the diagnosed variables.

Table 3.

Table 2.

Cross table of statistically significant Pearson's r correlation coefficients of the diagnosed variables

	EMO	MAEW	AC	SS	RL	RED	Age	Gender
EMO		0.67	0.41	0.38	0.32	-0.1	insign.	insign.
MAEW	0.67		0.44	0.47	0.43	insign.	insign.	insign.
AC	0.41	0.44		0.63	0.36	insign.	insign.	insign.
SS	0.38	0.47	0.63		0.51	insign.	insign.	insign.
RL	0.32	0.43	0.36	0.51		insign.	0.15	insign.
RED	-0.1	insign.	insign.	insign.	insign.		-	insign.
Age	insign.	insign.	insign.	insign.	0.15	-		insign.
Gender	insign.							

All Pearson's r correlation coefficients are statistically significant at the level of p < 0.05; insign. – insignificant. Designations: MAEW – Intra-organisational employability; EMO– Employability Market Orientation; AC– Affective commitment; RED – Relative employment duration; SS – Superior support; RL – Role.

Source: own elaboration based on the conducted research.

As can be seen, the age and gender of the respondents do not matter for the analysed variables. Relative employment duration does not reveal a statistically significant correlation with any of the variables taken into account, which is inconsistent with theoretical predictions in this respect and requires more in-depth analyses. The more so because statistically significant relationships between the other variables were identified. Therefore, the hypotheses were verified on the basis of a multiple regression analysis as described in the next chapter.

5.3. Verification of the hypotheses based on a multiple regression analysis

In the multiple regression analysis for relative employment duration (Table 4), it turned out that while EMO, affective commitment and support are significant, the percentage of the explained variance is low.

Table 4.

Multiple regression results for the dependent variable of relative employment duration (RED)

Predictor/dependent variable	Relative employment duration (RED) * * *	
-	$R^2 = 0.1702$	
EMO	-0.057***	
MAEW	insign.	
AC	0.032**	
SS	-0.029*	
RL	insign.	
Gender	insign.	

The sign next to the dependent variable refers to the significance level of the regression model. The adjusted R-squared value is given below. Designations: MAEW – Intra-organisational employability; EMO – Employability Market Orientation; AC – Affective commitment; RED – Relative employment duration; SS – Superior support; RL – Role.

insign. – insignificant *p < .05.

**p < .05.

* * * p < .001.

Source: own elaboration based on the research results.

It is worth emphasising that, as expected, there is a negative correlation between EMO and the relative duration of employment with a given employer. This means that the higher the EMO level, the more likely the employee will be to resign (shorter employment duration). It is thus one of the sources of employee turnover and a justification for research into how to retain such employees.

Simultaneously, based on the Person's r correlation coefficient, a relationship was found between EMO and affective commitment. An in-depth analysis (Tables 5 and 6) shows that self-perceived intra-organisational employability (more than 40 per cent of the explained variance) is of particular importance for EMO, which brings about affective commitment but may co-occur with shorter employment duration. Thus, hypotheses 1 and 2 are confirmed.

Table 5.

Multiple regression results for the dependent variable of Employability Market Orientation (EMO)

Predictor/dependent variable	Employability Market Orientation (EMO) * * * $R^2 = 0.3927$
MAEW	0.543***
AC	0.103***
RED	-0.203*
SS	insign.
RL	insign.
Age	-0.006***
Gender	insign.

The sign next to the dependent variable refers to the significance level of the regression model. The adjusted R-squared value is given below. Designations: MAEW – Intra-organisational employability; EMO – Employability Market Orientation; AC – Affective commitment; RED – Relative employment duration; SS – Superior support; RL – Role.

insign. - insignificant

*p < .05.

**p < .01.

* * * p < .001.

Source: own elaboration based on the research results.

Interesting results were obtained for the multiple regression analysis for affective commitment as the dependent variable (Table 6). Over 50 per cent of the variance is explained by superior support and – importantly – in connection with EMO and relative employment duration. Affectively committed respondent may have a high level of EMO and will work longer if they receive support from their superiors. The role and intra-organisational employability do not matter.

Thus, the supposition was confirmed that this may be one of intangible motivators for employees to stay. Therefore, there are no grounds to reject hypotheses 2, 3 and 8. However, hypotheses 4 and 9 were not confirmed.

Table 6.

Multiple regression results for affective commitment (AC) as the dependent variable

Predictor/dependent variable	Affective commitment (AC) * * *		
	$R^2 = 0.577$		
EMO	0.216***		
MAEW	insign.		
RED	0.292 *		
SS	0.519***		
RL	insign.		
Age	insign.		
Gender	insign.		

The sign next to the dependent variable refers to the significance level of the regression model. The adjusted R-squared value is given below. Designations: MAEW – Intra-organisational employability; EMO – Employability Market Orientation; AC – Affective commitment; RED – Relative employment duration; SS – Superior support; RL – Role.

insign. – insignificant *p < .05. **p < .01.

* * * p < .001.

Source: own elaboration based on the research results.

Finally, hypotheses 5 and 6 about the significance of the perceived intra-organisational employability were verified. They were confirmed because this variable was positively correlated with support and role, as was the relationship with affective commitment discussed above. The multiple regression model (Table 7) revealed that respondent displaying it show, above all, a high level of EMO (over 60% of the explained variance). The role and superior support also turned out to be of minor importance. Data were identified to reject hypothesis 7.

Table 7.

Multiple regression results for the dependent variable of intra-organisational employability (*MAEW*)

Predictor/dependent variable	Intra-organisational employability (MAEW) * * * $R^2 = 0.428$
ЕМО	0.628***
AC	insign.
RED	insign.
SS	0.095**
RL	0.168***
Age	0.004**
Gender	0.071*

The sign next to the dependent variable refers to the significance level of the regression model. The adjusted R-squared value is given below. Designations: MAEW – Intra-organisational employability; EMO – Employability Market Orientation; AC – Affective commitment; RED – Relative employment duration; SS – Superior support; RL – Role.

insign.-insignificant

*p < .05.

**p < .01.

* * * p < .001.

Source: own elaboration based on the research results.

5.4. Conclusion and practical implications

Out of nine hypotheses put forward, two were not confirmed. The first one concerns a relationship between intra-organisational employability and employment duration. The second one relates to a relationship between affective commitment and role. No grounds have been found for rejecting the remaining hypotheses.

It follows that employees with affective commitment can display EMO and work longer at a given workplace if they receive employer support at the same time. Intra-organisational employability is much less important, though it cannot be said to be insignificant. In this case, the significance of the role is also manifested.

A solution that can reduce employee turnover resulting from individual decisions of employees with EMO is to develop affective commitment through superior support and a clear role so that employees can build intra-organisational employability.

5.5. Limitations and further research studies

A major limitation of inference based on the obtained data results from the COVID-19 pandemic in 2021. Nonetheless, it should be noted that no differences have been established between the average levels of EMO in the years before and during the pandemic. Yet, it is worth repeating these studies in more stable circumstances and by means of qualitative research. In addition, it is worth analysing the data by testing the model through a confirmatory path analysis.

The analysis of the results presented in this article has confirmed the prediction that employees with EMO are one of the sources of employee turnover, which justifies further research on how to retain them until business goals are achieved. Undoubtedly, however, a certain fact should be accepted, namely that there are individuals with EMO on the labour market who are adapted to short-term employment and have a low sense of job insecurity. That is why efficient cooperation with them should be sought.

References

- 1. Armstrong, M. (2017). Handbook of Human Resource Management Practice. Kogan Page.
- 2. Armstrong, M., (2010). Strategic Human Resource Management: A Guide To Action. Wolters Kluwer.
- 3. Bańka, A., Bazińska, R., Wołoska, A. (2002). Polska wersja Meyera i Allen Skali Przywiązania do Organizacji. *Czasopismo Psychologiczne*, *Tom 8*, *Nr 1*, 65-74.
- 4. Boudreau, J., Cascio, W. (2013). Inwestowanie w ludzi. Wolters Kluwer. Warszawa.
- 5. De Vos, A., De Hauw, S., Van der Heijden, B. (2011). Competency development and career success: The mediating role of employability. *Journal of Vocational Behavior*, 79, 438-447.
- Deloitte (2016). *The new organization: Different by design. Global Human Capital Trends* 2016. Retrieved from: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/ HumanCapital/gx-dup-global-human-capital-trends-2016.pdf, 10.03.2017.
- 7. Dessler, G. 2016), *Fundamentals of Human Resource Management*. Global Edition. Pearson.
- 8. Feng, S., Tan, Y., Gong, L. (2017). Dynamics of occupational mobility: an empirical analysis based on headhunting data. *Economic and Political Studies*, 5(2), 215-232. https://doi.org/10.1080/20954816.2017.1310795.
- 9. Frey, A., Grill, J. (2015). *Pracoprzedsiębiorca: model pracownika przyszłości*. Kraków: Narodowe Forum Doradztwa Kariery.
- 10. Hajec, M. (2016). *Raport "Rynek pracy IT 2015" podsumowanie*. Retrieved from https://wynagrodzenia.pl/artykul/raport-rynek-pracy-it-2015-podsumowanie.
- 11. Hays Poland (2021). *Raport płacowy 2021. Trendy na rynku pracy*. Retrieved from https://www.hays.pl/en/raport-placowy.
- 12. Juchnowicz, M. (2012). Zaangażowanie pracowników. Sposoby oceny i motywowania. Warszawa: PWE.
- Kampkötter, P., Harbring, K., Sliwka, D. (2018), Job rotation and employee performance evidence from a longitudinal study in the financial services industry. *The International Journal of Human Resource Management, vol. 29, no. 10,* 1709-1735.
- 14. Kwestionariusz Źródeł Stresu Organizacyjnego (HSE) Retrieved from https://www.hse.gov.uk/languages/polish.htm, 5.01.2020.
- 15. Łukaszewicz, A. (2022). Firmy odczuwają presję na wzrost wynagrodzeń. Puls Biznesu, February16th.

- 16. Mathieu, J.E., Zajac, D. (1990), A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, *108*, pp. 171-194.
- 17. Meyer, J.P., Allen. N.J. (1991). Tree-component conceptualization of organizational commitment, *Human Resource Management Review*, *nr 1*, 61-89.
- 18. *Największa rotacja pracowników w IT i telekomunikacji* (2021). Retrieved from https://srit.radasektorowa.pl/396-najwieksza-rotacja-pracownikow-w-it-i-telekomunikacji-2, 23.09.2021.
- 19. Olesyn, T. (2006). Zarządzanie kompetencjami. Kraków: Oficyna ekonomiczna.
- 20. PARP (2020). *Rynek pracy, edukacja, kompetencje. Aktualne trendy i wyniki badań.* Warszawa. Retrieved from https://www.parp.gov.pl/storage/publications/pdf/Raport_ rynek_pracy_grudzien_2020_ost.pdf, 23.09.2021.
- 21. PARP (2022). *Rynek pracy, edukacja, kompetencje. Aktualne trendy i wyniki badań.* Styczeń 2022. Warszawa. Retrieved from https://www.parp.gov.pl/component/ publications/publication/rynek-pracy-edukacja-kompetencje-aktualne-trendy-i-wynikibadan-styczen-2022, 20.03.2022.
- 22. Pawłowska, A. (2019). Employability Market Orientation of Employee on Gig Economy Labour Market. *Managerial Issues, vol. 6.* Warszawa.
- 23. Pawłowska, A. (2020). Pracoprzedsiębiorca w relacji z pracodawcą. Znaczenie zatrudnieniowej orientacji rynkowej. In: J. Cewińska, A. Krejner-Nowecka, S. Winch, *Zarządzanie kapitałem ludzkim wyzwania*. Warszawa: Szkoła Główna Handlowa.
- 24. Pawłowska, A., Postuła, A. (2014). Pracownik i pracodawca wykorzystywanie technik projekcyjnych w badaniu postrzegania wzajemnych relacji. *Problemy Zarządzania, t. 12, z. 1.* Warszawa.
- 25. Pawłowska, A. (2017). Zatrudnialność pracobiorcy w elastycznym zarządzaniu ludźmi. Warszawa: PWE.
- 26. Randstad. Employer brand research. Raport krajowy. Polska 2019. Retrieved from https://www.randstad.pl/dla-pracodawcy/rebr-2019-raport-krajowy_pl.pdf? hsCtaTracking=88e77ea4-5039-4c4e-b94a-123d13ee1b6b%7C626c7308-f047-4a27b1b9-b360fb726b17.
- 27. Sanchez-Manjavacas, A.M., Taboada, L.R., Iborra M.del, C. (2020). Perceived Internal Employability as a Strategy to Reduce Employee Intention to Quit. *Revista Perspectiva Empresarial, Vol. 7, No. 1, enero-junio de 2020, 7-23, ISSN 2389-8186, E-ISSN 2389-8194.*
- 28. Spik, Klincewicz, K. (2012). *Nowe kierunki w zarządzaniu ludźmi zaangażowanie organizacyjne*. Warszawa: Oficyna a Wolters Kluwer.
- 29. Stankiewicz, J., Bortnowska, H., Barańczak, A. (2018). Pożądane kompetencje dotyczące etyki zawodowej w profesjach zaufania publicznego (w świetle wyników badań). *General and Professional Education, 4*, 35-42. https://doi.org/10.26325/genpr.2018.4.6.

- 30. Ulrich, D., Brockbank, W., Allen, J., Younger, J., Nyman, M. (2010). *Nowoczesne zarządzanie zasobami ludzkimi. Transformacja zgodna z oczekiwaniami klientów i inwestorów.* Warszawa: Wolters Kluwer.
- 31. Wechta, P. (2015). Płaca zasadnicza jako narzędzie ZZL. Zarządzanie Zasobami Ludzkimi, 1(102), 41-53.
- 32. Wołowska, A. (2013). *Przywiązanie do organizacji a kontrakt psychologiczny*. Toruń: Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

RECRUITMENT LYING AND TRUST IN AN ORGANIZATION

Wojciech PAWNIK

AGH University of Science and Technology, Faculty of Management; wpawnik@zarz.agh.edu.pl, ORCID: 0000-0001-5048-5438

Purpose: The presented article raises the importance of recruitment lie for the functioning of the organization as a whole. According to the author, the presented issue should fill the theoretical gap that has arisen as a result of the interest of theoreticians and practitioners of organizational life in the concept of trust management.

Design/methodology/approach: The article will present interdisciplinary perspectives on the study of lying and its rationalizations from the worker's point of view. The author conducted a secondary analysis of the quantitative and qualitative research found.

Findings: The author's thesis is that the recruitment lie is the result of the progressive phenomenon of relativism, anomie and the process of changing the meaning of culturally defined concepts.

Research limitations/implications: The cited research requires a broader empirical context and consideration of cultural changes occurring in the organization's environment.

Practical implications: The so-called social trust capital is of vital importance. It is an element of the organization's environment. Therefore, organizational procedures alone cannot generate the right level of trust in an organization.

Social implications: According to the author, in Polish conditions, the importance of the concept of trust management is overestimated while the recruitment lie is an effect of the progressive phenomenon of relativization of phenomena - including social norms, which corresponds to the phenomenon of chaos of the axionormative order. The connotation of concepts related to the concept of truth is also changing.

Originality/value: The article challenges the concept of trust management by pointing out its epistemological limitations in management science. It emphasizes the importance of the social context of organizational functioning.

Keywords: organization, social capability management, trust management, lie, recruitment.

Category of the paper: Research paper.

1. Introduction

The conviction of the prevalence of lying in human relations can be found in philosophical, sociological, anthropological or historical literature. It can be assumed that lying has accompanied us since the beginning of human history, although it itself undergoes various transformations (Campbell, 2002). In philosophical terms, we encounter the issue of interest already in the classics: by Plato (Dambska, 1979, p. 121 et seq.), or Socrates (Witwicki, 1958, p. 17). "The most worthy and capable of knowing the truth according to Plato are the philosophers. The wisest should rule in the state - people who are capable of knowing the truth about reality. The persons who are closest to the truth in Plato's projected community are philosophers. Thus, according to the accepted findings, they are better persons (instrumentally) than non-philosophers. Thus, they are also better (more efficient and more effective) liars and it is to them that Plato gives the privilege of lying in the state, a kind of "right to deceive others" (Kucharski, 2014, p. 34). According to St. Augustine, a lie is a statement promulgated with the intention to mislead. A statement is a lie when it is false and has been formulated with the intention of deceiving the recipient (Piechowicz, 2009, p. 32). The sociological perspective has pointed to its importance for interpersonal relations, or social relations more broadly (Goffman, 2008; Tönnies, 2008). Cultural or social anthropologists have also hinted at - albeit in a sort of collateral way - the problem of interest (Malinowski, 2002; Metcalf, 2002). Interestingly, the field of psychology is dominated by a quantitative approach in the study of the phenomenon of interest (DePaulo, 2008; Vrij, 2009). This is an analysis that includes the motives, manifestations and frequency of lying, taking into account the dependence of demographic or personality traits. The psychological perspective abstracts from the cultural context, which, in my opinion, narrows the cognitive perspective especially in the context of organizational life. I assume that organizational culture is derived from "attitudes and commonly accepted values, norms and ways of doing things, embedded in the broad tradition and culture of a given society" (Hampden-Turner, Trompenaars, 1998, pp. 115-25). Susan Blum's observation (Blum, 2007, p. 14) that "(...) people in many societies lie, but they lie under different circumstances and have different opinions about this lying and deception" is confirmed by the research of many other authors (e.g. Robbins, 1998; Gesteland, 2005; Hall, 2009; Hofstede, Minkov, 2011, emphasizing the importance of cultural conditions for organizational life processes. It is difficult not to agree with the statement that lying occurs in the relationship between people, and is therefore socially and culturally conditioned and subject to various transformations in time and space (Surmiak, 2014, p. 204). As such, it occurs in the process of communication while this process can be understood as transmission, understanding, interaction, linking, interaction, exchange and a component of the social process. The main differences in its perception concern its scope, effectiveness and direction of transmission. For the purposes of this analysis, I assume that lying is an intentional communicative action aimed at inducing in

the recipient of a message, a judgment that is inconsistent with the judgment held by the sender (Kucharski, 2014, p. 117). In the context of the concept of trust management in an organization, the recruitment lie acquires special significance not only for theorists but also for practitioners. In the literature, trust has been given the status of "technical" reality. It is assumed that trust can be managed in the same way as all other resources of the organization are managed: human, financial, physical, material, etc. In this way, we make its unjustified reification. What follows is the conversion of an abstract concept into a tool that can be used to maximize profits using certain management procedures. I therefore do not share the belief that trust can be managed (Bugdol, 2010, pp. 11-25). My views are closer to the institutional economics analyses (Wilkin, 2016). Trust is an expression of subjective judgment, a kind of derivative thought process based on the information, knowledge and experience possessed. It is based on the assumption that the person we trust will behave in a manner consistent with our expectations. Trust is a certainty, hope, belief (set of beliefs), predisposition, situational, structural, interpersonal or fiduciary relationship variable (Lewicka-Strzałecka, 2003, pp. 195-207). Like lying, the concept of trust is a relationship characterized by relativism and ambiguity. The question of whether trust can be managed is also a question about the cognitive limits of managing the social potential of organizations and management science (Pawnik, 2016, pp. 291-305). Of course, it is important to keep in mind the socio-cultural context of the phenomenon analyzed here. Francis Fukuyama argues that a country's prosperity and ability to compete economically depend on the level of trust in the society under study (Fukuyama, 1997). It has an instrumental value - by acting as an informal norm it reduces the cost of economic transactions (control, contracting, dispute settlement or enforcement of formal agreements (Inglehart, 1997). In this case-in my opinionthe institutions of public life (including the economic sector) are rather dominant. The literature on managing the social potential of organizations indicates that a new paradigm called trust management in the modern enterprise is emerging. Trust is seen as one of the most important resources of an organization. Shapes the awareness of objective and critical self-examination of the actions taken by the organization's actors. The results of the research contained in the report "Global Generation 3.0: A study of trust in the workplace" conducted on the basis of declarations from three generations: "baby boomers" (51-68 years old), generation X (35-50 years old), generation Y (19-34 years old) and generation Z (16-18 years old) indicate that the "baby boomers" generation declares the highest level of trust in the employer (51%), supervisor (52%) and team (53%). In contrast, the lowest level of trust is represented by Generation X (41%). According to 53% of respondents, the main reason for distrust in the employer is unfair pay. 48% emphasize unequal treatment, both in terms of pay and promotion. For 46%, the problem is lack of leadership. Subordinates do not trust their superiors because they are not open and in communication, do not appreciate the work they do, and rarely communicate with their subordinates. Lack of qualification, willingness to cooperate and open communication are the most frequently cited reasons for lack of trust in co-workers (EY Report "Global Generation 3.0: A survey of trust in the workplace", https://www.prawo.pl/kadry/ey-zbadal-poziomzaufania-w-miejscu-pracy-wsrod-przedstawicieli-roznych-pokolen,286528.html (15.04.2022). The presented report is based on the belief that generation is primarily an age category. However, from a sociological perspective, a generation is a collection of individuals singled out due to a specific type of social ties linking people of roughly the same age, (having similar life experience). Belonging to a generation is formed on the basis of generational experience (a kind of rite de passage), which determines the subsequent perception of reality. The so-called theory of generations by William Strauss and Neil Howe (1992) described the cultural and social reality of the US. Therefore, it is difficult to find a rational justification for the tacitly accepted thesis of its universal nature.

It is necessary to ask a question about the real meaning of the trust management paradigm attributing an important role in the HRM management processes in Poland. In 2013, the report "Trust in the company" (https://www.procontent.pl/2013/01/polacy-nie-ufaja-szefom/, 16.04.2022) showed that in the group of professionally active Poles, almost half suspected their superiors of manipulating information and concealing the truth. Second among the reasons for distrust in employers was the lack of or too infrequent communication between management and employees. 14% of respondents had no formed opinion on the issue of trust in the employer. 24% of respondents did not trust their supervisor The least trust in their workplace was shown by people over 35, and the most by young people starting their first job. The message of the supervisor was mostly believed by those aged 19-24 and 24-34. Trust towards employers decreased with age (life experience). Subordinates with higher education constituted the largest group that believed in the honesty of the message conveyed (34%). Of those expressing a negative attitude toward the reliability of the information provided, almost 1/3 were people with primary, junior high or vocational education. Nearly half of white-collar workers trusted their superiors. More than 20% of blue-collar workers were convinced that their own company had cheated them in past cooperation. The results of the survey on workplace satisfaction seem interesting (Hays Poland Survey, Real Aspects of the Workplace 2019, https://hrnews.pl/ satysfakcja-ktora-zatrzymuje-pracownikow, 20.04.2022):

- 1. Work atmosphere, organisational culture 72%.
- 2. Level of remuneration 58%.
- 3. Relationship with the superior 54%.
- 4. Relations with colleagues 50%.
- 5. Professional development 44%.
- 6. Work life balance 42%.
- 7. Location of work (distance from home, travel time) 40%.
- 8. Degree of independence in performing duties 38%.
- 9. Stability of employment 34%.
- 10. Flexible working 36%.
- 11. Challenges at work 30%.
- 12. The level of position held 28%.

- 13. The scope of responsibilities 26%.
- 14. Recognition of superiors or colleagues 25%.
- 15. Work environment (office standard etc.) 24%.
- 16. Trust in the company and management 22%.
- 17. Cooperation at all levels of the company 20%.
- 18. Good image of the employer 18%.
- 19. High quality of services and products offered by the company 16%.
- 20. Additional benefits offer 15%.
- 21. Free days/vacation 10%.
- 22. Other 2%.

Trust ranks 16th among the 22 indicated by respondents. It is likely that the attitude of employees is a result of the formalization and omnipotence of organizational procedures (the system "thinks for the man") and the overall level of trust that co-creates the organization's environment. The so-called synthetic trust index in Poland, which expresses generalized attitudes in social relations (containing appropriately recoded and aggregated declarations of shared beliefs on the issue of adopting a trusting or distrustful attitude in social relations) indicates that 64% of respondents express an attitude of distrust towards others while openness in relations with others is declared by 25% of respondents (CBOS, 37/2022). The results presented above suggest quite unambiguously the phenomenon of transferring the orientation towards trust from the organization's environment to the logic of its functioning. Actors of organizational life in Poland emphasize its importance to a far lesser extent than the number of publications devoted to the issue of trust management would suggest. In September 2002, the complexity of the issue was evidenced by representative - in the author's opinion - statements (Tumiłowicz, "Why doesn't the Polish capitalist trust his employees and they trust him?", https://www.tygodnikprzeglad.pl/dlaczego-polski-kapitalista-nie-ufa-swoim-pracownikomjemu/, 17.04.2022).

Prof. Antoni Rajkiewicz, states that "(...) some are trusted and others are not. It depends on the pedigree of the capitalist and the representatives of the workers. In general, those who gained wealth through honest work, in my opinion, trust their employees more, and more easily establish a dialogue with representatives of the workforce. Those, on the other hand, who came to wealth not very legally, not infrequently come into contact with bribed union representatives, who also participated in the looting of the social good. Knowing the path to property helps explain the reasons for distrust. An owner who is loyal to the treasury is better able to influence the atmosphere in the plant, to counter the lack of trust, because he also knows how to respect the laborer's toil, which also makes the employee respect the employee. Prof. Andrzej Blikle is of the opinion that many employers "(...) certainly do not trust their employees. I do, but in my company I try to implement a system of global quality management, in which human relations and mutual trust are the basis. In order to gain trust, far-reaching reevaluations related to our ideas about human beings are necessary. For the time being, the prevailing quite common belief

is that a person is fundamentally lazy and dishonest, so he should be watched, looked at, or he will stop working. This is, unfortunately, a self-fulfilling prophecy, because when an employee is treated in this way, it does not build in him a relationship of loyalty to the company, but precisely a lack of trust. This leads to the phenomenon that the imposed work is unpleasant, and such a person adopts defensive behavior perceived as laziness. These are typical management mistakes brought up from old ideas of what capitalism is like". President of the Polish Employers Federation Andrzej Malinowski is convinced that "(...) we do not trust employees only when they act against the interests of the employer, build structures in their companies based on mistrust. This is what happens when post-communist views prevail, and employees consider themselves owners to whom everything is due from the company. Unfortunately, there has not been a change in consciousness, we still have a socialist labor code that is not adapted to the conditions of economic transformation and market economy. This is the reason for much controversy. And it is necessary to ask the employees if they do not trust their employers". Dariusz Adamski, chairman of the Inter-company "Solidarity" Committee of Stocznia Gdynia SA, expresses his belief that the view that in general "(...) there is no trust between the owner and the crew, is wrong. Not all employers act equally. Applying this to the shipyard, the issue of distrust on the union side seems quite natural. However, we need to cooperate with each other, even though we can't fully trust, in order not to be led astray. The modern capitalist in Poland operates according to complicated rules of the game. Various decisions made under the banner of restructuring hit the worker, so also the reactions of workers and trade unions stem from incomplete trust in the pure intentions of the parties. However, one cannot understand only one's intentions, because this leads to a full fracture. We trade unionists are only seemingly on the opposite side of the barricade from the company's management, because at the end of the process it may turn out that the barricade is shared. If there is no company, there will be no employees, no unions, neither them nor us". According to Ryszard Bugaj, the problem exists, and its "(...) sources are complex. The first are of a historical nature - too many observe how the owners came to their money under circumstances that are either ambiguous or unambiguous, but reprehensible. The second is that, contrary to perceptions, asset managers do it incompetently. They manage poorly, and their employees - relegated to the status of labor force - are resented by employers who do not countenance control and accountability at all. Owners are also often convinced of the very low quality of the Polish workforce, in which there is also a grain of truth. The positive image of Polish managers and owners has been seriously exaggerated by the dominant media, which has created the employer as the demiurge of our times, independently producing wealth, giving jobs and so on. Many have come to believe this and reject partnerships. Thus, both sides are very resentful of each other, which has a bad effect on workplace relations. All this together creates additional costs for employers and generally worsens the competitiveness of the Polish economy". Prof. Juliusz Gardawski, a sociologist, points out that employees trust and distrust. "In a large part of enterprises there are unwritten agreements in operation between the employer and the

employee, who agrees to bypass the labor code in order to receive more money without "usurpation". There is no strong antagonism on this issue, rather paternalistic relations prevail. However, studies show that tension is created in the relationship between employer and employee. The employer is aware that employees are calculating him every penny - what he took for himself, what he spent on wages, what he spent on investments, and so on. Many owners even try not to disclose their place of residence. Nonetheless, there seems to be a complex intertwining of relationships of limited trust in smaller and medium-sized companies, a peculiar combination of paternalism and common overreach, and a lack of employee representation. These are not pure and clear-cut situations, but they may change over time. If an employer wants valuable employees with specialized skills, he can't despise them, he must take care of them, not just grimly exploit them". As you can see, not much has changed in this area after two decades.

2. Recruitment lying in Poland, or why do people lie during a job interview?

I assume that a recruitment lie is a deliberate, intentional and intentional communication action aimed at causing the recipient to make a judgment inconsistent with the judgment held by the potential employee. A 2020 study conducted by LiveCareer (How and why we lie at job interviews, https://mlodziwlodzi.pl/blisko-polowa-polakow-klamie-na-rozmowie-o-pracewyniki-badania-livecareer/, 20.04.2022) found that more than 42% of Poles openly admitted to lying during job interviews. Employees in the food service (63%), government (53%) and business and finance (51%) are the most likely to lie. Most often, they related to high interest in the job offer (41.94%), less often - motivating factors for the job (34.13%) and the relationship with the previous supervisor (31.38%). More than 31% of respondents admitted to giving a false reason for leaving their previous job. One in three cited a desire for professional development as the reason for changing jobs, while one in six cited low chances for promotion. More than 15% of people in this group gave false information about a layoff by reporting a massive downsizing at their previous job. Nearly 29% overestimated the level of skills they possessed. Nearly 27% of respondents admitted to having higher knowledge of a foreign language than they actually did. 18% of respondents lied about their education, while 17% signed off on the professional achievements of others (or the entire team). The most frequently cited reasons for lying were: long periods of unemployment (more than 24% of respondents. This claim was most often accepted by food service workers (over 40%) and government employees (36%). Nearly 18% of respondents (aged 18-39) indicated that they did not meet all the requirements stated in the job offer. 17% of respondents cited the stress of a job interview as the main reason for lying. More than 1 in 10 respondents would be capable of lying to get a higher salary than offered. More than 7% of respondents would be able to do so in order to

boost their self-esteem while for 5% of respondents having the belief that they would not be caught lying. The results presented for employees of the state administration (53%) and the sphere of business and finance (51%) undermine the myth of intellectual formation inherent in higher education and allow us to pass the question of its shape and quality due to the functioning of institutions of public trust. As the above analysis shows, the phenomenon of recruitment lies correlates with indicators of the level of public trust co-creating the environment of the organization. Therefore, the answer to why we so easily decide to recruit lies should be sought in the cultural and social context of its functioning. In my opinion, it is formed by:

- 1. The phenomenon of relativism.
- 2. Social anomie.
- 3. The process of changing the meaning of concepts.

I find the beginning of the social reception of relativism in Albert Einstein's theory, which took a different shape than its creator himself would have expected: the concepts of time and absolute length lost their original meaning. The motions of the spheres were no longer certain. In the early 1920s, the belief spread that any absolutes of time, space, good and evil, knowledge and value ceased to exist despite the fact that the creator of the general theory of relativity devoted his entire life to the search for truth and certainty. The problem of relativization of epistemology emerged - the essence and value of cognition of reality Richard McKay Rorty stated explicitly that the concept of theory of cognition is completely meaningless because it is based on an empirically questionable assumption, and that the process of cognition itself is a reflection of reality (Rorty, 1997). However, when studying human behavior, it is important to remember that processes are determined by the structure of the natural world and have nothing to do with the practices inherent in the social world. They are various events that are the consequence of human decisions - a function of the interaction of intelligence and the environment. And therefore, although various human affairs are characterized by a certain degree of regularity, they are not determined by the immutable laws of nature. However, if the notion that "everything is relative" is perpetuated in the social consciousness, then also the attitude towards lying (taking into account the cultural context) facilitates its acceptance. Moreover, cognitive relativism rationalizes moral relativism and ethical relativism. The analysis of the destruction of the foundations of the axionormative order at the end of the 19th century initiated a discussion of the social, political and economic consequences of the phenomenon of anomie. This phenomenon is now considered in terms of objective states of society and subjective states of individual consciousness. For Durkheim, anomie is a state "(...) in which the normative system loses coherence and turns into chaos. Signposts of action - goals and means - become vague, ambiguous. People lose their sense of what is good and what is bad, what is worthy and what is unworthy, what should be pursued and what should be avoided, what methods are allowed and what are forbidden. Disorganization of normative culture means disorientation of members of the collective" (Sztompka, 2002, p. 275). It should be borne in mind that the essence of anomie understood in this way is the sudden deprivation of rules and

387

restrictions that have hitherto determined the possibilities and ceiling of an individual's aspirations. Another understanding of anomie is related to the concept of the welfare state. The extensive offer of goals to be pursued with universal satisfaction of the possibilities of their satisfaction becomes insufficient for individuals and social groups - their expectations exceed the proposals of the system. The realization of subjectively irrelevant goals is deprived of a sense of social gratification (Simon, Gagnon, 1976). I make the assumption that language determines the way and orientation of thinking. In other words - it shapes our perception of the world around us (Sapir, 1978; Whorf,, 2002). The existential context today co-creates the so-called knowledge society. The euphemism of the knowledge society revealed in the form of the world risk society is a situation in which "(...) we are dealing with a society of ignorance in a certain very strict sense: it cannot be overcome - like pre-modernity - by more extensive and better knowledge, more extensive and better science, but conversely, more extensive and better science just produces it. In a global risk society, Dr. Ignorance rules. Living in an environment of manufactured ignorance consequently means seeking unknown answers to questions that no one can clearly ask" (Beck 2012, p. 171). This is why the concept of post-truth (a situation of social acquiescence to the creation of substitute information that does not always conform to reality) and the phenomenon of fake news, i.e. information relating to (or describing) circumstances in which objective facts exert less influence on the formation of public opinion than emotions and personal beliefs, have gained social acceptance. In other words - emotions are more important than objective truth. The social consequences of lying were pointed out by Wojciech Chudy, among others (Chudy, 2003, pp. 201-221):

- 1. Acceptance of ideological content without self-acceptance.
- 2. Deformation of culture, negation of positive values.
- 3. Subordination of social truth to the principle of profit maximization.
- 4. Erosion of the basic sense of communication erosion of personal relationships.
- 5. Deprivation of the right to truth.
- 6. Aggression and the desire for retaliation (both sides).

The contemporary existential context outlined above generates the prevalence and acceptance of the phenomenon of lying, including recruitment lying.

3. Summary and conclusions

The presented article analyzes the importance of trust and lies in organizational life. According to the author, in Polish conditions, the importance of the concept of trust management is overestimated while the recruitment lie is an effect of the progressive phenomenon of relativization of phenomena - including social norms, which corresponds to the phenomenon of chaos of the axionormative order. The connotation of concepts related to the concept of truth is also changing. According to the author, the sociological perspective in the study of trust and lying in organizations should be expanded to include analyses from institutional economics and the issue of social capital. Management science enables interdisciplinary discourse.

Acknowledgements

Publication funded by the subvention for maintenance and development of research potential.

References

- 1. Beck, U. (2012). Społeczeństwo światowego ryzyka. W poszukiwaniu utraconego bezpieczeństwa. Warszawa: Wydawnictwo Naukowe Scholar.
- 2. Blum Susan, D. (2007). *Lies that Bind: Chinese Truth, Other Truths*. Lanham: Rowman & Littlefield.
- 3. Bugdol, M. (2010). Zaufanie jako element systemu wartości organizacyjnych. *Współczesne Zarządzanie*, *No.* 2. pp. 11-25.
- 4. Campbell, J. (2002). *The Liar's Tale: A History of Falsehood*. New York-London: W.W. Norton.
- Chudy, W. (2003). Kłamstwo społeczne i jego skutki. In: A. Maryniarczyk, K. Stępień, (Ed.), *Błąd antropologiczny* (pp. 201-222). Lublin: Polskie Towarzystwo Tomasza z Akwinu.
- 6. Dąmbska, I. (1979). Pseudos i pseudes w filozofii Platona. Roczniki Filozoficzne, No. 1.
- 7. DePaulo, B.M. (2008). Różne oblicza kłamstwa. In: A.G. Miller (Ed.), *Dobro i zło z perspektywy psychologii społecznej* (pp. 379-408). Kraków: WAM.
- 8. Florek-Moskal, M. (2009). Kłamstwo jest w cenie. Tygodnik Wprost, nr 38.
- 9. Fukuyama, F. (1997). Zaufanie. Kapitał społeczny a droga do dobrobytu. Warszawa-Wrocław: PWN.
- 10. Gesteland, R.R. (2005). Cross-cultural business behavior: negotiating, selling, sourcing and managing across cultures. Copenhagen: Copenhagen Business School Press.
- 11. Goffman, E. (2008). Człowiek w teatrze życia codziennego. Warszawa: Aletheia.
- 12. Hall, E.T. (2009) Ukryty wymiar kultury. Warszawa: Muza.

- Hampden-Turner, Ch., Trompenaars, A. (1998). Siedem kultur kapitalizmu. USA, Japonia, Niemcy, Francja, Wielka Brytania, Szwecja, Holandia. Warszawa: Dom Wydawniczy ABC.
- 14. Hofstede, G., Hofstede, G.J., Minkov, M. (2011). Kultury i organizacje. Warszawa: PWE.
- 15. Inglehart, R. (1997). *Cultural, Economic, and Political Change in 43 Societies*. Princeton, New York: Princeton University Press.
- 16. Komunikat z badań, No. 37. CBOS (2022).
- Kucharski, J. (2014). Usprawiedliwione kłamstwo we współczesnej etyce stosowanej.
 In: A. Gielarowski, P. Janik (Ed.), *Uniwersum philosophiae*. Kraków: Akademia Ignatianum.
- 18. Lewicka-Strzałecka, A. (2003). Zaufanie w relacji konsument-biznes. *Prakseologia*, *No. 143*, pp. 195-208.
- 19. Malinowski, B. (2002). *Dziennik w ścisłym znaczeniu tego wyrazu*. Kraków: Wyd. Literackie.
- 20. Metcalf, P. (2002). They Lie, We Lie: Getting on with Anthropology. New York: Routledge.
- 21. Pawnik, W. (2016). Zaufanie społeczne paradoks procesów modernizacyjnych. Kraków: ZN WSH Zarządzanie.
- 22. Piechowicz, R. (2009). Kłamstwo, prawda i... In: W. Zuziak, J. M. Byrska (Ed.), *Kłamstwo w życiu publicznym*. Kraków: WN UPJPII.
- 23. *Raport EY* (2016). *Globalne pokolenia 3.0. Badanie zaufania w miejscu pracy*. Retrieved from https://www.prawo.pl/kadry/ey-zbadal-poziom-zaufania-w-miejscu-pracy-wsrod-przedstawicieli-roznych-pokolen,286528.html, 15.04.2022.
- 24. Raport Hays Poland (2016). Prawdziwe aspekty miejsca pracy 2019. Retrieved from https://hrnews.pl/satysfakcja-ktora-zatrzymuje-pracownikow, 20.04.2022.
- 25. *Raport z badań* (2013). *Zaufanie w firmie*. Retrieved from https://www.procontent.pl/ 2013/01/polacy-nie-ufaja-szefom/, 16.04.2022.
- 26. *Raport z badań LiveCareer, Jak i dlaczego kłamiemy na rozmowach o pracę*. Retrieved from https://mlodziwlodzi.pl/blisko-polowa-polakow-klamie-na-rozmowie-o-prace-wyniki-badania-livecareer/, 20.04.2022).
- 27. Robbins, S.P. (1998). Zachowania w organizacji. Warszawa: PWE.
- 28. Rorty, R. (1997). Filozofia a zwierciadło natury. Warszawa: Aletheia.
- 29. Sapir, E. (1978). Kultura, język, osobowość. Warszawa: Państwowy Instytut Wydawniczy.
- 30. Simon, W.J.H., Gagnon, J.H. (1976). The Anomy of Affluence: A Post-Mertonian Conception. *The American Journal of Sociology*. *No. 2*, pp. 356-378.
- 31. Straussa, W., Howe, N. (1991). *Generations: The History of America's Future 1584 to 2069*. New York: William Morrow & Company.
- 32. Surmiak, A. (2014). Antropologia kłamstwa? Badania nad kłamstwem w perspektywie antropologii społeczno-kulturowej. *Kultura i społeczeństwo, No. 4,* pp. 201-224.
- 33. Sztompka, P. (2002). Socjologia. Analiza społeczeństwa. Kraków: Znak.

- 34. Tönnies, F. (2008). *Wspólnota i stowarzyszenie. Rozprawa o komunizmie i socjalizmie jako empirycznych formach kultury*. Warszawa: PWN.
- 35. Trompenaars, F., Hampden-Turner, C. (1999). *Riding the Waves of Culture. Understanding Cultural Diversity in Business*. London: Nicholas Brealley Publishing.
- 36. Tumiłowicz, B. *Dlaczego polski kapitalista nie ufa swoim pracownikom a oni jemu?* Retrieved from https://www.tygodnikprzeglad.pl/dlaczego-polski-kapitalista-nie-ufaswoim-pracownikom-jemu/, 17.04.2022.
- 37. Vrij, A. (2009). *Wykrywanie kłamstw i oszukiwania Psychologia kłamania i konsekwencje dla praktyki zawodowej*. Kraków: WUJ.
- 38. Whorf, B.L. (2002) Język, myśl i rzeczywistość: Warszawa: Wydawnictwo KR.
- 39. Wilkin, J. (2016). *Instytucjonalne i kulturowe podstawy gospodarowania. Humanistyczna perspektywa ekonomii.* Warszawa: Scholar.
- 40. Witwicki, W. (1958). Platon, Hippiasz Mniejszy. Warszawa: PWN.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

HUMAN RESOURCE MANAGEMENT IN THE PUBLIC SECTOR. THE CHALLENGES OF THE INDUSTRY 4.0

Agnieszka POSTUŁA^{1*}, Tomasz ROSIAK²

¹University of Warsaw, Faculty of Management; apostula@wz.uw.edu.pl, ORCID: 0000-0001-9495-0733 ²University of Warsaw, Faculty of Management; tomasz.rosiak@uw.edu.pl, ORCID: 0000-0001-8599-3862 * Correspondence author

Purpose: The aim of the article is to present the issues of underinvestment of public administration bodies and its impact on problems related to human resource management. The article presents the consequences of underinvestment in public administration and other organisations in the budgetary sphere. The inference was based on the example of one of the state institutions.

Design/methodology/approach: Ethnographic research methods were used in the project. 51 interviews were collected based on a partially structured scenario. The survey was conducted in 17 public administration units (with employees of various management levels and regular employees) and among the recipients of these offices.

Findings: The research results clearly show the devastating effect of low wages on employee motivation. The collected field material indicates the specific negative consequences of underfinancing in the entire area of human resource management.

Research limitations/implications: Despite the significant scale of the diagnosed problems, the authors are aware that it will be difficult to implement the recommendations formulated in the text in conditions of high inflation. However, in order to avoid the diagnosed risks, the strength of the remuneration offered should be taken into account at the stage of designing the institution's budgets. We are also aware that there are significant income inequalities within the public sector, so our recommendation should not be treated as a one-size-fits-all solution.

Practical implications: The implementation of the proposed solutions in the examined institution may significantly improve the involvement of employees. It will also have a positive impact on their overall motivation to work. The effect of these actions can positively affect many processes taking place in the organisation. Overall the image might improve.

Social implications: Practical changes could improve the image and prestige of the organisation. Moreover, changes might increase the social awareness and responsibility which is crucial for the public institution.

Originality/value: The problem of under-financing of the public sector is not new, but its value comes from the conditions of a overheated labour market in Poland, which raises many new, unprecedented risks for public sector organisations.

Keywords: underinvestment of public administration, consequences of underinvestment, human resource management, ethnographic research methods.

Category of the paper: Research paper.

1. Introduction

The focus of the article is social reality in the public sector. The work undertaken in this sector is usually associated with employment stability but, unfortunately, also with lower earnings than in the private sector. In one part of this sector, namely the civil service, the average total gross salary was PLN 7,419, i.e. 7.8% more than in 2020. However, taking into account the inflation rate (5.1%) in 2021, the real growth of salaries in the civil service was much lower and amounted to 2.6%. In the national economy, it was 9.6% nominally and 4.3% in real terms according to the Report of the Head of the Civil Service on the state of civil service and on the implementation of its tasks in 2021 (Sprawozdanie..., 2021). Moreover, in 2021, the average salary in more than half of the offices (1,005) employing members of the civil service was lower than the salary in the national economy (PLN 5,663 gross). This is an increase of 11.5% (104 offices) compared to 2020 (ibid.). The salary situation of teachers or doctors was no better. The minimum remuneration of an appointed teacher in 2022 is PLN 3,445, i.e. only PLN 435 above the minimum wage.

Is it possible to build education, health care and state support services based on such salaries to meet the expectations of taxpayers? It seems not. This means, therefore, that a certain paradox occurs between expectations and the financing of the public sector. It is the result of, inter alia, a neo-liberal trend in public administration management which assumes that the lower the costs (more limited participation of the State in the economy), the better. However, the issue of low funding is not confined to offices but also holds true of the aforementioned education and health care. New Public Management called for the use of business tools and techniques in the public sector. The efficiency of state institutions was to be achieved through decentralisation and managerialization (Pasieczny, Rosiak, 2021). The question that naturally arises in this connection is how to encourage professional managers to work in the public sector for salaries that are offered there. Due to a narrow pay table successively flattened in recent years under the project of increasing the minimum wage to PLN 4,000 gross in 2023, the problem with recruitment of professional managers concerns not only top but also middle management.

Meanwhile, cost cuts that bring the average wage closer to the minimum wage in some government institutions must lead to a lower quality of supply of public services. The problem of underinvestment in administration is not a new topic. However, it deserves special attention at present. Firstly, it is because the labour market has become an employee's market, which means that even very efficient private companies have trouble with recruiting employees. Secondly, the described salary levels are offered in the period of high (in excess of 10%) inflation in Poland, which additionally adversely affects the assessment of job offers in the public sector. With low unemployment that has remained below 5% since 2017 (Eurostat data), the main advantage of work in the public sector, i.e. employment stability, is no longer relevant.

The aim of the article is to provide some insight into underinvestment in many public sector organisations and its impact materialising as problems with human resource management. The specific objectives are:

- to reveal real effects of underinvestment in public sector organisations,
- to show the level of awareness of employees who function in conditions that make it difficult for them to perform their current duties,
- to present the main challenges for HRM, such as protracted and inefficient recruitment, on-boarding and knowledge succession processes in organisations, resulting from the low attractiveness of such workplaces for young employees.

Our inference is based on the example of human capital management in a public sector organisation.

2. Literature review

In our paper, we have adopted two research perspectives. The first one concerns technological changes taking place in today's world and the challenges they pose to society and contemporary organisations. The fourth industrial revolution (industry 4.0) deserves attention due to three unique features that distinguish it from previous breakthroughs: the speed with which changes are occurring (evolution at an exponential rather than linear pace), their scope and depth, and systemic impact. Hence, this revolution is pressing for changes in entire systems (Schwab 2016). Its foundation also lies in digital solutions. One of the concepts to implement industry 4.0 in organisations is digital transformation. From the perspective of management science, it is, however, incorrect to believe that technology plays a major role in digital transformation (Frankiewicz, Chamorro-Premuzic, 2020) since IT solutions are relatively easy to acquire. What is much more difficult is to adjust processes, develop talents and new skills in organisations, close the gap between demand for and supply of talents, and – when this is achieved – to manage them appropriately. Why is it difficult? Because it involves systemic issues and these are not easy to design.

The second research perspective concerns employee motivation systems. An employee's motivation depends on the possibility of achieving the main goal, namely receiving a reward that will meet the employee's specific needs. Well-motivated people have a clearly defined goal and are willing to take action to attain it (Armstrong, 2009). Nonetheless, an employee's motivation depends not only on goals or remuneration. What is also very important is employees' expectations, i.e. how they assess the probability that they will receive a decent remuneration. The greater control employees have over the means of achieving their goals, the greater their motivation will be. This implies that remuneration systems in which wages

depend on efficiency, competences, contribution or skills can increase employee motivation. However, there are certain conditions:

1) employees should know what they will receive in return for their efforts or achievements,

2) employees should know that what they can get is worth having,

3) employees can expect to receive it.

Money is one of the most important motivators. It fulfils various roles for various social and employee groups. It is money that attracts the best specialists to enterprises. Money in the form of wages is a source of employee income, an indication of the standard of living, social security, a determinant of the sense of worth, and recognition of talents, skills and qualifications. Thus, wages in the form of money ensure positive motivation, but not because people need and want money. Money makes people appreciated for the work they do. So money is an expression of recognition. The salary makes it possible to live at a lower or higher standard, it is often also perceived as a determinant of employees' achievements and of how the employer assesses them (Kopertyńska,, 2009).

In practice, all employee needs correspond to the basic levels identified by Abraham Maslow, i.e. physiological, safety, belonging, esteem and self-actualisation needs (Maslow, 2022). The relationship between work and physiological needs is obvious. It is mainly thanks to work that people acquire means to satisfy them. Safety needs are activated in new situations. When taking up the first job in life, employees are concerned about whether they will cope with unknown responsibilities or whether they will be able to adapt to a new social environment. New situations generate uncertainty, sometimes even fear. In older workers, concerns about their unfitness for work may increase. In the organisation in question, these issues are of particular importance as a clash of generations can be observed there - vast knowledge and experience accumulated as resources of older employees on the one hand and the need to recruit new, younger people who could find their feet at work on the other. This is a source of conflict in that institution. The next level of the hierarchy – the need for affiliation (belonging to a group) – is related to the social nature of an individual and is manifested in the search of a positive bond with other people. According to Maslow, the needs of belonging are especially strong in young people. This makes their situation even more difficult if they are not accepted or are rejected by a group of older workers. This clash of expectations and reality is one of the reasons for high turnover of staff who have been employed for less than a year. Therefore, during professional adaptation, great importance should be attached to creating conditions that facilitate the formation of positive bonds between new and long-term employees in organisations.

The significance of people's need for esteem depends heavily on the type of culture. The contemporary Western culture is success-oriented – it shapes and strengthens the pursuit of excellence, success, career and accomplishment in any field. Most people work for money. This is because money is one of the most universal means of meeting other needs. The need for esteem is no different in this respect. Indeed, many people treat the amount of their salary as a measure of recognition of their profession, education, skills and work performance. The desire to increase income and the willingness to demonstrate external signs of prestige largely affect their motivation to work. The direction of this impact, however, is conditional on many other factors such as, for example, real and perceived income growth opportunities through increased earnings and the latter through improved performance, actual and perceived opportunities to acquire the desired goods. The same goes for any organisation.

Using the pursuit of social esteem as a driver of motivation to work also involves building attractive career development paths (patterns) for organisation members. They make everyone aware of the possibilities and conditions of promotion. They also form a basis for comparing individual instances of success or failures.

The last group of needs – self-actualisation – is related to the pursuit of employees' interests and their use of potential opportunities in the environment. By taking actions connected with a personal passion and interests, employees develop. The satisfaction of this need results in good performance, without linking the employee's own activity directly and too closely to the level of earnings. An employee self-actualising at work is reluctant to change the type of job and carries out tasks regardless of temporary difficulties. Self-actualisation is related to employees' satisfaction with the very action that they like to perform and their participation in the creation process rather than with the end result and evaluation (praise, reward). An important condition conducive to self-actualisation of employees is to allow them adequate (from the point of view of the needs and capabilities of an enterprise) freedom of action.

That is why effective systemic solutions in the field of remuneration are so crucial as they affect many other dimensions of organisations. A defectively designed or poorly managed remuneration system becomes a de-motivator for employees of organisations, thus ceasing to properly serve its elementary functions. A remuneration system should fulfil the following functions (Borkowska, 2001, p. 21):

- attracting employees to work (base salary in line with job valuation and market remuneration reviews, performance-related variable salaries, additional benefits, a link between the remuneration system and the organisational culture),
- maintaining employees at work (deferred (long-term) remuneration, profit sharing, gainsharing, cafeteria remuneration),
- stimulating employees to work efficiently (flexible pay tables based on wide wage brackets, variable remuneration depending on performance),
- stimulating employees to develop professionally (remuneration based on competences, variable remuneration depending on performance, additional benefits targeted at employee training).

In knowledge-based service companies, the most valued feature of remuneration is its uniformity throughout the organisation (for all employees), both in terms of principles and amounts. In the case of such companies, remuneration systems are built in a consistent manner because the value of human capital is high and equal (Urbaniak, Bohdziewicz, 2013).

If the remuneration system does not fulfil a given function (or worse, several functions), it may seriously disrupt the functioning of various other organisational systems. The most severe negative consequences of no or upset motivation systems include dysfunctions in job valuation and construction of pay tables and dysfunctions of bonus systems (Oleksiak 2013). In order to avoid the basic dysfunctions of such a system, people designing it should remember about the following:

- linking the remuneration system with the company's development strategy and human resource management strategy,
- the foundations of such a system should be adequately explained and communicated to all employees,
- components of the remuneration system should depend on the employee's performance (base salary, bonuses, rewards) as much as possible rather than, for example, on the duration of employment (e.g. with regard to increases in base salaries or rewards),
- each remuneration system should rest upon an appropriate job valuation process leading to flexible pay tables (Borkowska, 2001).

It is worth pointing out that for younger generations of employees, non-material factors are becoming more and more important as well. As shown by the Randstad survey (2022) conducted on a sample of 35,000 employees from 34 countries for the Millennial (Y) and Post-Millennial (Z) generations, the values of the organisation are also vital. A significant proportion of the respondents (43%) indicated that they would not take up a job in an organisation that acts contrary to their social and environmental beliefs. Development also matters: 85% of the respondents would get involved in educational and development programmes if such an opportunity arose. At the same time, as many as 41% of Generation Z respondents declared that they would quit their job if it did not fit their concept of personal life.

The fulfilment of these basic principles and expectations of employees can be a starting point towards avoiding major dysfunctions of the remuneration system and developing an efficient motivation system (Oleksiak, 2013).

3. Research Method

The study we present was a part of a bigger research embracing 17 public administration units. Even though the main scope of the conducted research (wasn't focused on..) didn't concern financial issues, they appeared as a very significant one and had impact on many other dimensions of organisation.

Ethnographic research methods were used in the project. In general, 51 interviews were collected based on partially structured scenarios (Appendix 1). The method was a semi-standardized open interview with non-structuralized questions. We chose to have the scenario

to increase the possibilities of analysing the results. The interviews were conducted with employees of various management levels and regular employees and among the recipients of their services. We present the structure of the sample in Appendix 2. After gathering the data the field material was coded (with Atlas.ti program) and categorised afterwards. In this process the topic of this paper emerged amongst all the other issues.

The work under the project was planned in accordance with the principle of triangulation: methodological, theoretical and the researcher's (Denzin, 2012). The researcher's triangulation criteria were satisfied through the participation of eight researchers in the study and analyses of the field material. Researchers represented various organisational units of the Faculty of Management, University of Warsaw, and had diverse knowledge, professional experience and research interests. In order to coordinate the work, the team met regularly, and a certain level of work standardisation was to be achieved by creating solutions such as an ex-ante list of issues for interviewers. To implement the principle of methodological triangulation, the following techniques for collecting data and information about the organisation were used: field research (interviews), literature analyses, desk research (organisational data analytics) (Konecki, 2000).

4. Empirical Material

In this section, we will present some extracts from the collected empirical material concerning the work motivation of employees of the examined institution. In general collected material was very wide and complex. We aim only to present a small part of findings embraced with one category: human resources. We classified certain codes into this category: competencies, workers' motivation, motivation tools, low salaries, low pay gap, unequal workload. In this paper we will focus specifically on quotes regarding too low remuneration, the issue often raised by interlocutors. In line with the adopted methodology, we will present a few selected quotes that most accurately illustrate the phenomenon in question.

Systemic solutions are undoubtedly a challenge for the employer, namely a public sector organisation. Even if the heads of individual units have the will to increase the remuneration of their employees, they are not empowered to do so. This is noticed by employees who perceive the promotion path as very unattractive. Each promotion, if any, involves a barely noticeable change in salary. Many people openly regret this.

And somewhere I heard that money is, I don't know, in the seventh position when it comes to job satisfaction. Well, despite everything, it seems to me that our offices, however, flounder in this regard and our office is underrated in this respect and this causes frustration, not only in me, but also among employees. Differences are too small between someone who has just started work and someone who has been working for many years, and it also bothers me as a manager. Because, by the way, of course, the boss [...] decides who gets how much, but I, maybe not all managers do that although they can and I take this opportunity to once a year file a request, for example, to arrange a rise, a change in grade. This career ladder is strictly limited here and if someone jumps from [a specialist] to a senior [specialist], it is not that someone who is [a specialist] cannot sleep because of it, because if I was a senior [specialist], I'd earn a thousand zlotys more, for example. These are such small differences that it is not important to anyone, it is only for my ego to jump to another position, because I won't feel it financially anyway. The disproportion between a manager and an employee is small, the disproportion between someone who has just started work and someone who has been working for twenty years at a position, regardless of whether [specialist] or senior specialist, is too small [UNIT 13 EMP 04].

What can be noted is that systemic solutions are necessary to improve the situation. Low salaries do not result from bosses' bad will but from the adopted statutory regulations. A poorly designed pay table and minimum wage discourage employees from taking their own initiatives or even from performing their daily duties in a due manner.

Although I don't know how, because the government's announcements are very fine that, well, the minimum wage will go up, right? But what about the wages of the others, because today we don't have such ... Well, this will be flattened now, as two thousand six hundred comes in, it seems, right? So, a [specialist] who has worked for five years will have two six hundred and the one whom I will hire will also earn two six hundred, would you like to work in such a team? Because I wouldn't. And the young certainly wouldn't, so this is the most important challenge and it isn't just about our [organisation] [UNIT 13 EMP 01].

A defective remuneration system severely affects other dimensions of the organisation, leading to problems with recruitment or on-boarding. Low salaries attract less qualified employees for whom the on-boarding process takes longer. They also cause distraction and reduce the efficiency of employees, for example because they consider alternative sources of earning.

Motivation, well, the greatest motivation is financial motivation, then everyone will focus on what to do, not on looking for a job [UNIT 15 EMP 04].

Thus, demotivation of employees who are no longer involved in current operational work or in activities improving the functioning of the organisation grows. With low wages, such individual activities and efforts simply lose their relevance from the employee's point of view. Therefore, some of them eventually decide to change jobs and take this step and leave the organisation. The effects are visible to the naked eye – increased staff turnover and a significant number of vacancies. The cost for the institution is huge: the organisation invests a lot and the market quickly absorbs qualified employees.

Managers of individual branches openly talk about the difficulties in acquiring new staff, especially highly qualified employees. Taking into account the professional characteristics of the new generations, it is becoming more and more difficult every year. Filling positions with

qualified staff is a huge challenge. The lowest-paid jobs of the lowest level often remain vacant for a long time.

Here, this [department] has really dedicated staff. Maybe it looks a bit different with these very young recruits, but this, let's say, this age group above forty or thirty something are employees who really identify with the organisation [UNIT 13 EMP 02].

The financial dimension of the organisation thus affects most organisational areas. The above-mentioned situations mainly concern the physical, tangible ramifications of poor management of employee remuneration. However, the poor pay table also has a symbolic meaning in terms of values. Employees who are badly or poorly paid suffer mental damage. The interlocutors felt a loss of dignity, depreciation of their own position and humiliation.

As we are talking about the fact that money gives satisfaction, but also during these trainings it was also concluded that in order for an employee to be satisfied with the job, they must feel good in this job, and above all we, if we work with an external client, it matters a lot, in my opinion, how we are perceived by the entities we inspect. And I'm not just talking about [workers] who ... Well, there are also now, these class disproportions among [workers] are also significant, there are those who are very rich and those who are very poor. It is more and more evident that large, large-scale [enterprises] are being established where there are entrepreneurs, not [specialists]. And with such entrepreneurs, we, as inspectors, don't feel comfortable arriving in a twenty-year-old car, writing a report, well, not through carbon paper any more, but by hand [UNIT 13 EMP 04].

The effects are therefore devastating, and even worse – long-term and hardly reversible. This is noticed by employees who are aware of such shortcomings in the organisation. They feel the injustice of having invested much in their own education and the inappreciation of this fact by the market, by the employer. When starting higher studies, employees expect a certain rate of return on this initiative. The lack of a positive, measurable reaction from the organisation demotivates them quite significantly.

[...] it is work related to studies. It was also important to me that these studies were not in vain, that you studied for five years, you leaned not to subsequently work in a profession that is not related to this at all, but for this education to be somehow used. Well, money, I can't say that it motivates me, because it's moderate, not to say poor, although theoretically it's supposed to improve, but that's what they say every year, so this is constant pitch [UNIT 15 EMP 02].

Salaries, yes. Here, this is a weakness, for sure. Here, my colleagues really have poor motivation to work, because you know that you have to make a living, and here it's painful [UNIT 06 EMP 03].

At the end of the presentation of the research material, we would like to draw attention to how aware the employees of the examined institution are. They realise the problem of low wages and also see multidimensional negative effects of a malfunctioning remuneration system. If our wages increased, the motivation would be completely different, right? Everyone would go to work like a wind, and not "oh my, I have to go to this work again" [UNIT 10 EMP 01].

In this regard, it is important to have a positive attitude towards potential changes and improvement of the organisation's performance. Employees see opportunities for change and appreciate every step towards improvement.

... when it comes to money, I have to say yes, money actually motivates and the motivation system has to be there too. In fact, every motivation system has to be very well thought-through, even this financial motivation system, because people have to know what they get money for, when they get it and when they can get it [UNIT 15 EMP 01].

Summarising the presented material, we shall quote an opinion of the customers of the organisation in question. The quote shows how important remuneration is not only for employees within the underfunded organisation but also how negatively it affects its image outside.

Well, we can be aware that we can't expect miracles from officials, right? Because they are only officials who are supposed to have, just like a policeman on the road, rules, to know what rules they have to follow and to act accordingly. If [the Institution] has the same guidelines and people change their attitude in [the Institution] and start to be better paid, because how these people are paid is pathetic, I think that all this has a chance to progress very quickly. What is needed is just will. And frankly speaking, the most important thing will be political decisions [CLI 13].

5. Discussion & Conclusions

On the basis of the research carried out, it can be noticed that underinvestment of public sector organisations can be a serious problem for contemporary organisations. It has a negative impact not only on job satisfaction of employees. It can even generate additional costs related to, among others, lengthy recruitment and on-boarding processes. It also poses a threat to knowledge succession. A negative impact of apparent savings is also visible to the customers of organisations, who perceive organisations' inefficiency also through the problems ensuing from the limited resources at their disposal. Meanwhile, it is easy to notice a certain paradox. On the one hand, taxpayers usually expect the public sector staff to be highly qualified, efficient, professional (including objective) and committed, meaning able to devote themselves. On the other hand, they expect low operating costs from the financing bodies (central or local government). This makes us reflect on whether the low funding of public sector organisations actually leads to the efficient management of taxpayers' money. Perhaps more funding in this sector would contribute to a more efficient use of public funds? A change of the operational

paradigm of public sector organisations would therefore also require education of the society to make it aware that a high quality of goods and services usually does not result from very limited funds allocated for the operations of organisations. We realise that for this to become possible, many other conditions must be met such as employment transparency, especially at higher management levels.

Furthermore, it is worth noting that the challenges posed by new generations to all organisations, including private ones, also require expenditure, i.e. on efficiently functioning HR departments which will be able to ensure not only financial motivation but also personal development of employees. It is some consolation that new generations (Y and Z) are willing to work even for lower wages if they consider that the operation of the organisation is consistent with their values.

References

- 1. Armstrong, M. (2009). Zarządzanie wynagrodzeniami. Warszawa: Wolters Kluwer.
- 2. Borkowska, S. (2001). Strategie wynagrodzeń. Kraków: Oficyna Ekonomiczna.
- 3. Denzin, N.K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research*, 6(2), pp. 80-88.
- 4. Frankiewicz, B., Chamorro-Premuzic, T. (2020). Digital Transformation Is About Talent, Not Technology. *Harvard Business Review, May* 6.
- 5. Konecki, K. (2000). Studia z metodologii badań jakościowych. Teoria ugruntowana. Warszawa: PWN.
- 6. Kopertyńska, M. (2009). Motywowanie pracowników. Teoria i praktyka. Warszawa: Placet.
- 7. Maslow, A. (2022). Motywacja i osobowość. Warszawa: PWN.
- 8. Oleksiak, P. (2013). Dysfunkcje systemu wynagradzania w organizacji. *Acta Universitatis Lodziensis. Folia Oeconomica*, 288.
- 9. Pasieczny, J., Rosiak, T. (2021). *W kierunku organizacji uczącej się. Transformacja organizacyjna na przykładzie jednostki administracji publicznej*. Warszawa: Wydawnictwa Uniwersytetu Warszawskiego.
- 10. Schwab, K. (2016). The Fourth Industrial Revolution. Geneva: World Economic Forum.
- 11. Sprawozdanie Szefa Służby Cywilnej o stanie służby cywilnej i o realizacji zadań tej służby w 2021 (2021).
- 12. Urbaniak, B., Bohdziewicz, P. (2013). Wdrażanie zmian w administracji samorządowej: deficyty uczestnictwa pracowniczego. *Zarządzanie Zasobami Ludzkimi, nr 2(91),* pp. 51-66.

13. Workmonitor 2022: a new era in the #homeworkrevolution (2022). Randstad, https://www.randstad.com/workforce-insights/global-hr-research/randstad-workmonitor/, 26.04.2022.

Appendix 1

	Zagadnienia	Pytania
1	Pytanie otwierające	1. Jak wygląda codzienna praca: najważniejsze zadania realizowane w
1	r ytalle otwierające	typowym dniu pracy?
		2. Jakie są w Pana/Pani opinii główne cele długookresowe organizacji? (Po co
		istnieje instytucja?)
2	Strategia organizacji	3. Jak Pan/Pani ocenia znajomość tych celów przez pracowników instytucji
2	Strategia organizacji	
3	Najważniejsze procesy	
4	Struktura	
-		
5	Wydajność pracy	
		 1. Jak wygląda codzienna praca: najwaźniejsze zadania realizowane w typowym dniu pracy? 2. Jakie są w Pana/Pani opinii główne cele długookresowe organizacji? (<i>l istnieje instytucja?</i>) 3. Jak Pan/Pani ocenia znajomość tych celów przez pracowników instytuc 4. Kim są główni partnerzy zewnętrzni i wewnętrzni instytucji? (np. usługobiorcy: zrzeszenia, producenci rolni, urzędy, producenci środków ochrony roślin [importerzy]) 5. W jakich procesach organizacyjnych badany uczestniczy? (przy jakich najważniejszych zadaniach organizacyjnych Pan/Pani uczestniczy) 6. Które z tych procesów/zadań są kluczowe dla działania organizacji? 7. Czy są jakieś działy/komórki, które są nadmiernie obciążone pracą? Jestak, to dlaczego są one nadmiernie obciążone? 8. Czy coś utrudnia Panu/Pani sprawne wykonywanie swoich obowiązków 9. Czy istnieją bariery współpracy wewnątrz instytucji? 10. Które obszary organizacji potrzebują najwięcej zmian podnoszących wydajność, a które najmniej? 11. Na czym polegałyby te zmiany? 12. Jakie są podstawowe wyzwania Pana/Pani pracy? 13. Co można byłoby usprawnić, żeby praca była łatwiejsza? 14. Czy występują niedoskonałe lub nietrafione procedury, które warto eliminować?
6	Możliwości	
	usprawnień i problemy	
7	Relacje wewnętrzne	
	Interesariusze wewnętrzni	
8		
0		
9	Usługobiorcy	
10	Motywacja	23. Jakie czynniki motywują Pana/Panią do pracy?

Scenario for the institution (original version)

	Zagadnienia	Pytania
1	Pytanie otwierające	1. Jak wygląda Pani/Pana dotychczasowa historia współpracy z instytucją?
2	Współpraca	 2. Jak ocenia Pani/Pan dotychczasową współpracę z instytucją? 3. Co najbardziej ceni Pani/Pan w tej współpracy? Proszę o podanie przykładu? (silne strony instytucji) 4. Co trzeba by zmienić, żeby Pani/Pana współpraca z instytucją była w pełni satysfakcjonująca? (słabe strony instytucji) 5. Jak ocenia Pani/Pan reakcje instytucji na pojawiające się przeszkody/problemy? Proszę o podanie przykładu. 6. Co zajmuje najwięcej czasu w relacjach z instytucją? (obszar, proces, czynność) 7. Jakie elementy współpracy z instytucją są dla Pani/Pana najtrudniejsze? 8. Jakie elementy współpracy z instytucją są dla Pani/Pana najważniejsze? Dlaczego?
3	Komunikacja	 9. Z jakich kanałów komunikacji Pani/Pan korzysta współpracując z instytucją? 10. Co jest dla Pani/Pana najistotniejsze w komunikacji z instytucją? Dlaczego? 11. Jak ocenia Pani/Pan komunikację pod względem szybkości reagowania/ skuteczności przekazu? 12. Jak ocenia Pani/Pan reakcję instytucji w momentach zwrotnych? Proszę o podanie przykładów. 13. Jak wyobraża sobie Pani/Pan idealną dla Pani/Pana organizacji komunikację z instytucją (prosimy o opis procesu, wymienienie elementów komunikacji)?
4	Rozwój	 14. Czy i jak ewentualnie instytucja może Pani/Panu pomóc zwiększyć skalę produkcji oraz eksportu? 15. Jakie widzi Pani/Pan bariery i zagrożenia (związane z działalnością instytucji) w zwiększaniu skali produkcji oraz eksportu? 16. Co instytucja mogłaby zrobić, aby zwiększyć szanse Pani/Pana organizacji na rozwój produkcji oraz eksportu?
5	Pytanie podsumowujące	17. Co by Pani/Pan dodał, żeby pomóc w rozwoju Pani/Pana współpracy z instytucją?

Appendix 2

Structure of the sample

Province	Number of interviews
Greater Poland	5
Lodzkie	6
Lublin	5
Masovia	10
Świętokrzyskie	5

Interlocutors from the institution

Recipient (client)	Number of interviews
Greater Poland	3
Kuyavia-Pomerania	1
Lodzkie	2
Lublin	2
Masovia	10
Pomerania	1
Warmia-Masuria	2

Interlocutors outside the institution (recipients)

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

SOCIAL POLICY AND POVERTY AND INCOME INEQUALITIES IN POLAND IN 2008-2020

Janusz ROSIEK

Cracow University of Economics; rosiekj@uek.krakow.pl, ORCID: 0000-0001-6290-4724

Purpose: The publication discusses the problems of poverty and income inequalities in Poland against the background of the European Union in terms of the possibility of the influence of social policy on reducing the size of these negative phenomena.

Design/methodology/approach: Three basic indicators were used: the number of people at risk of poverty or social exclusion, the rate of material deprivation and the Gini coefficient of income inequality. In addition, the development of three basic categories of poverty was presented for Poland: extreme (subsistence minimum), relative and statutory.

Findings: As for the categories of poverty in Poland in the period under review, it can be concluded that two of them (extreme poverty (subsistence minimum) and statutory poverty) were characterized by a relatively high level of stability (except for the case of a significant increase in statutory poverty in 2013), while the third one (relative poverty) demonstrated a fairly clear downward trend. With regard to the three indicators characterizing the effects of the EU governments' social policies, it should be noted that the situation of Poland is relatively good/average as compared to the other 25 EU member states.

Research limitations/implications: Limited comparability due to methodological differences in the measurement of the basic categories examined in the study. In addition, no data for the UK and Italy.

Practical implications: Material for the analysis of the effectiveness of social policy and the basis for its development by the governments of the EU countries in the future.

Social implications: The basis for conducting inclusive social policy leading to the improvement of the quality of life of EU citizens.

Originality/value: Combining theoretical aspects with the practical comparative analysis of social policy effectiveness indicators. The article is aimed in particular at economic analysts and politicians.

Keywords: Social policy, poverty, income inequalities.

Category of the paper: Viewpoint/case study.

1. Introduction

Along with fiscal and monetary policy, social policy is one of the basic types of macroeconomic policy. This policy pursues a wide variety of objectives, among which the following can be singled out in particular: elimination of poverty, prevention of social exclusion, equitable social development, reduction of income inequalities, etc. There are very many definitions of social policy, most of which are based primarily on the concept of the welfare state. This study focuses on its impact on two phenomena that are particularly painful for society, i.e. poverty and income inequalities, which can be reduced through the skillful use of social policy tools. Chapter two of the study presents the definitions, conceptual scope and goals of social policy, as well as the models of this policy implemented by EU countries. Chapter three, in turn, presents the general characteristics of poverty and income inequalities as well as methods/ways of measuring of these phenomena. Chapter four presents the development of the basic categories of poverty and income inequalities in Poland in the period 2008-2020. The summary (Chapter five) contains the most significant conclusions resulting from the considerations carried out in the article.

2. Discussion

2.1. Definition, conceptual scope and goals of social policy

Etymologically, social policy constitutes a kind of art of selecting social goals, as well as the ability and skill to achieve them (Encyclopedia of Political Science, 1999, p. 233). In the critical current, it is such activities through which power can be maintained by achieving social goals. In particular, the nature of social policy is determined by such factors as political, social (including demographic), as well as technical or economic conditions, among others. Cultivation of the science of social policy is intended to indicate the principles of selection of means and methods appropriate for the realization of planned goals. In practical terms, the science of social policy presents the institutions, mechanisms and instruments of influence of public institutions on society and the economy. In broad terms, it deals with the methodology of preparing and making appropriate decisions in the social area (Dobrowolski, 2017, pp. 159-173). Selected definitions of social policy, formulated between 1891 and 2015, are presented in Table 1. Attention should be drawn, first of all, to their multifaceted nature taking into account the various aspects and objectives of its impact on the economy, as well as the role of various institutions responsible for its implementation.

Author	Definition
W. Zawadzki	The purpose of social policy is to raise the welfare of the working classes with moderate
	democratization of social relations and development of social legislation.
S. Głąbiński	It aims to ensure peace and harmony among the social classes.
A. Rajkiewicz	The activity of the state and other entities shaping the conditions of work and existence of the population.
K. Secomski	It aims to ensure, through direct shaping and indirect influence, comprehensive social progress, universality and equal access to social benefits, as well as gradation and optimization of the rate of desired social changes.
J. Rosner	A tool for the state and social organizations to shape the conditions of work and existence, as well as social relations.
W. Szubert	Purposeful influence of the state, trade unions and other organizations on the existing system of social relations, aimed at improving the living and working conditions of broad segments of the population, removing social inequalities and raising the culture of life.
E. Wnuk-Lipiński	Continuous, organized and conscious activity directed at maintaining a relative balance between two values: freedom and equality.
J. Auleytner	Activities of the state, local government and non-governmental organizations aimed at bridging drastic social differences among citizens, giving them equal opportunities and insuring them against the effects of social risks.
J. Orczyk	Providing a sense of existential security.
Z. Dobrowolski	The activity of state institutions, in cooperation with social partners, aimed at determining current and future social goals, ways of their implementation and evaluation.
	The activity of the state consisting in setting goals and tasks and determining the means and methods of their implementation, aimed at solving social problems.

Table 1.

Salaatad	Daliah	definitions	ofgooig	1 notion
Selected	rousn	definitions	oj socia	i policy

Source: R. Szarfenberg, Criticism and Affirmation of Social Policy, OW Aspra-Jr, Warsaw 2006, pp. 159-173 (except for the definition of Z. Dobrowolski).

Social policy pursues a certain bundle of goals. One can distinguish among them first of all: elimination of poverty, prevention of social exclusion, equitable social development, reduction of income inequalities, etc. However, all of these goals are aimed at one thing, which is to improve the well-being of members of the social community. The goal of social policy is also to ensure the stability of the state by reducing the degree of social discontent. Some authors (see Dobrowolski, 2017, pp. 159-173) indicate that its goal is to achieve equality and maximize welfare/well-being, and adopting the approach of the critical current, to legitimize social inequalities. It seems that the goal specified in this way remains only in the hypothetical sphere, since it is impossible to achieve equality through the payment of benefits and through the implementation of other social policy tasks in today's world which is characterized by a very high stratification of earned income. It is also difficult to regard as appropriate the statement that the goal of social policy is welfare maximization. Rather, one should point to a much more realistic goal in the form of poverty elimination (Dobrowolski, 2017, pp. 159-173). The fundamental goals of social policy are presented in Table 2. They are very extensive, and therefore one can speak of the existence of a complex bundle of goals, the implementation of which is very difficult in practice, primarily due to the budgetary constraints that exist in national economies, as well as due to the contradictions that exist between these goals.

Table 2.					
Goals of social policy					
Author	Goals of social policy				
T.H. Marshall	Eliminating poverty, achieving equality, maximizing welfare.				
J. Szczepański Overcoming scarcity, seeking justice in society, ensuring living conditions in prosperity for all citizens.					
K. Secomski	Comprehensiveness of social progress. Universality and equal access to social benefits.				
Gradation and optimization of the rate of desirable social changes.					
W. Szubert	Improvement of living and working conditions of broad segments of the population.				

Tabla 2

J. Auleytner

P. Spicker

I. Nachsen

G. Esping- Andersen

Z. Dobrowolski Redistribution of resources among citizens and elimination of poverty. Source: R. Szarfenberg, Criticism and Affirmation of Social Policy, op. cit. pp. 27, 162, 166 (except for the goals of Z. Dobrowolski).

Removal of social inequalities. Raising the culture of life.

insuring them against the effects of social risks.

Maintaining or changing patterns of social relations.

Bridging drastic social differences among citizens, giving them equal opportunities,

Mitigating inequality and poverty, reducing social risks and optimizing the distribution

Protecting and supporting socially vulnerable segments of society and preventing or

mitigating disorders and conflicts arising in the course of social processes.

2.2. Origins, historical development and models of EU social policy

of fortune.

The definitions of social policy presented in the previous section are based primarily on the concept of the welfare state and on the following two premises:

- 1) a state that provides a minimum level of income, food, housing and education, with public support for each citizen as a political right rather than a manifestation of charity (Wilney, 1975, pp. 584-586),
- 2) a state that does not feed, clothe or house, but provides conditions in which citizens are able to provide everything they need to achieve so-called civic efficiency (Giddens, 2006, p. 20).

Modern social policy can be defined as one of the public policies that serves to correct market mechanisms in order to achieve comprehensive welfare/well-being of all citizens, taking into account the existing socio-economic inequalities. The state pursues economic goals related to the growth of the general standard of living and social goals to ensure the universality of prosperity and its even distribution among the population of a country, as well as the strengthening of economically most vulnerable groups (Szarfenberg, 2009). Social policy understood in this way is implemented through various specific policies, such as social security policy, health care policy, employment policy, education policy, labor protection policy, family policy, housing policy and cultural policy (Zgliczyński, 2017, pp. 37-58).

Common features of social policies implemented by EU countries include: emphasis on social protection according to the logic of compensation for lost income, ex-post benefits for traditional social risks (old age, illness, disability, unemployment, homelessness) and needs; the essential role of "passive" transfers during periods of unemployment for various reasons, the residual nature of the remaining forms of social protection and, above all, protection from poverty, focus on households and maintaining the importance of care services provided by

women in the family, and leaving the sphere of education and training outside social protection (Zgliczyński, 2017, pp. 37-58).

The European social model is a common denominator for national social policy models in Europe. It can also be called a European model for the organization of public life, the components of which include in particular: a universal right to a minimum standard of social security, developed structures for social dialogue, and relatively equal wages and incomes.

3. Methods

3.1. The essence of the phenomena of poverty and income inequalities

3.1.1. Poverty

Poverty can be understood in absolute or relative terms. The category of poverty in absolute terms is based on the concept of the state of satisfaction of needs, defined in terms of quantity and value. Economic entities (individuals, families, households) are defined as poor when their needs are not sufficiently satisfied. The level of their satisfaction is not related to the level of satisfaction of the needs of other members of society. According to the views of proponents of the absolute approach, the problem of poverty can be considered solved when the basic needs of all members of society are satisfied. Poverty in the absolute sense can disappear by ensuring an adequate rate of economic growth. It should be noted, however, that the absolute approach always carries a certain amount of relativism, since the determination of the "basket" of needs covered by the poverty category and the minimum level of their satisfaction always depends on the level of socio-economic development of a country.

In contrast, the category of poverty in relative (relativistic) terms is based on the reference of the level of satisfaction of the needs of individuals to the level of their satisfaction by other members of the community. Poverty in this case is identified with excessive differences in the level of satisfaction of social needs. In this sense, the phenomenon of poverty cannot be completely eliminated, but only diminished, as a result of reducing the level of satisfaction of these needs (Panek, 2017, pp. 5-6).

3.1.2. Income inequalities

Depending on the ideological assumptions made, socioeconomic inequalities are considered either a basis for the functioning of the social system or an undesirable problem (Zwiech, 2013, p. 90). Ideological assumptions based on the currents of elitist, meritocratic, egalitarian ideologies imply the emergence of three approaches to these inequalities - legitimizing inequality as a phenomenon immanently inherent in the order of the market economy with acquiescence to any level of these inequalities, lack of approval for them with the assumption of the necessity for systemic solutions to eliminate them, or conditional acquiescence to inequalities with the definition of conditions limiting the growth of inequalities and their acceptable limits (Zwiech, 2016, pp. 30-31).

3.2. Criteria for defining poverty

The choice between interpreting poverty in an absolute and relative way, and making a choice between objective and subjective ways of measuring poverty do not constitute the end of the procedures of choices enabling one to measure poverty. The next decision, as difficult and controversial as those made in the previous stages, is to determine the criteria for poverty. Studies of the phenomenon of poverty conducted until the 1970s were dominated by the classical approach, based on monetary indicators, whose foundations were laid by the Material Prosperity School. In this approach, the assessment of the level of satisfaction of needs was carried out solely through the prism of incomes (expenditures). Gradually, however, the view that the identification of the poor based solely on the category of income is far from sufficient began to gain more and more adherents. This was not just about the fact that the income declared by individuals and families (households) participating in the empirical studies was underestimated. Far more important was the belief that poverty is a multidimensional phenomenon and that non-income factors should also be taken into account when identifying it. These views were reflected in the evolution of the definition of the poverty category itself. The multidimensionality of the concept of poverty is pointed out, among others, by the authors of a report containing recommendations for the countries of the European Union, in terms of indicators of poverty and social exclusion (Atkinson et al., 2002). The summary of considerations regarding possible ways to analyze the sphere of poverty is presented in Figure 1. This analysis is based on two principal approaches: the classical one which emphasizes incomes and expenditures, and the multidimensional one which takes into account additional non-income factors.

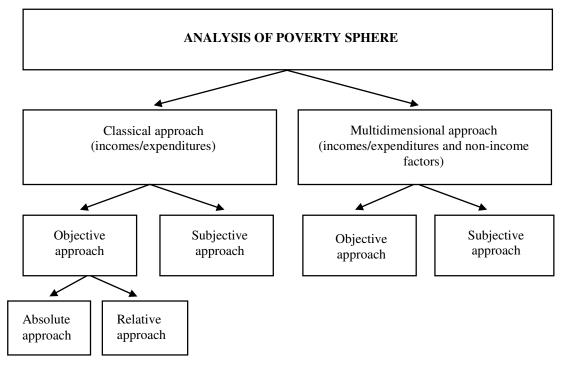


Figure 1. Ways of analyzing the poverty sphere - general approach. Source: Panek, 2017, p. 7.

3.3. Methods/ways of measuring poverty and social inequalities

Choosing a variant of the way to understand poverty is a preliminary step in deciding how to measure it and the criteria for identifying it. Deciding how to measure poverty involves choosing between considering poverty objectively or subjectively (Hagenaars, 1986). Both methods of measurement can be used in either an absolute or a relative approach. In doing so, the terms objective and subjective should not be associated with the degree of arbitrariness used in measuring poverty. In each of these measurement approaches there are some findings of an arbitrary nature.

In the case of the objective approach, the assessment of the level of satisfaction of the needs of the surveyed entities (individuals, families, households) is made regardless of their personal evaluations in this respect. Most often, such an assessment is made by experts.

In the subjective approach, the assessment of the level of satisfaction of needs is carried out by the surveyed units themselves (individuals, families, households).

3.4. Determining the extent/scale of poverty

When calculating the extent of objective poverty, the Central Statistical Office (CSO) takes into account the following limits of poverty (Dobrowolski, 2017, pp. 33-34, based on: CSO, 2013):

- 1) the relative poverty line, i.e. 50% of the average expenditures of all households,
- 2) the statutory poverty line, which, according to the current laws on social assistance, entitles one to apply for a cash benefit from social assistance,
- 3) the subsistence minimum level, as the extreme poverty line, where the subsistence minimum takes into account only those needs whose satisfaction cannot be postponed, and consumption below this level leads to biological elimination.

In addition to the one-dimensional approach, in which the extent of poverty is determined on the basis of household incomes or expenditures, one can also distinguish a multidimensional approach, where three dimensions are taken into account:

- 1) income poverty,
- 2) poverty of living conditions,
- 3) poverty of lack of balanced budget.

Households are considered to be income poor if the monthly cash income the household had (in the 12 months preceding the survey) was below the value considered the poverty threshold. The poverty line (threshold) was assumed to be 60% of the median equivalent income for the country as a whole (Dobrowolski, 2017, p. 34, based on: CSO, 2013).

The assessment of the extent of poverty of living conditions is made on the basis of a composite (aggregate) index of poor living conditions, consisting of 30 partial indicators, i.e. the failure to satisfy various needs, both of a material and immaterial nature, which are considered by the majority of the population as necessary for normal existence. For example, concerning living space per capita, possession of durable goods. In Poland, it was assumed that the occurrence of 10 negative indicators out of the 30 accepted for the calculation determines the inclusion of a household in the group with poor living conditions. The starting point for the analysis of budget imbalance poverty was a composite indicator determining the budgetary difficulties of households, including payments in arrears. A household is considered poor if at least 4 of the 7 included symptoms occurred (Dobrowolski, 2017, p. 34, based on: CSO, 2013).

Within the European Union one uses an indicator of material deprivation, which determines the state of the population at risk of poverty or social exclusion. The calculation of this indicator takes into account the inability of people to meet their needs which are considered elementary in EU member states. The indicator of people at risk of aggravated material deprivation is the percentage of people in households declaring an inability, for financial reasons, to satisfy at least 4 of the 9 expressly listed needs (Dobrowolski, 2017, p. 34, based on: CSO, 2013).

Figure 2 presents in dynamic terms the basic types of social policies aimed at addressing poverty and social exclusion. According to this figure, there are three basic objectives of the impact of these policies; (1) preventing entry into the problem, (2) helping people to get out of the problem, and (3) preventing the return of the problem. Their implementation should lead to ensuring the optimization of three basic streams: inflows, outflows and returns. They are related to the resources of poverty and social exclusion.

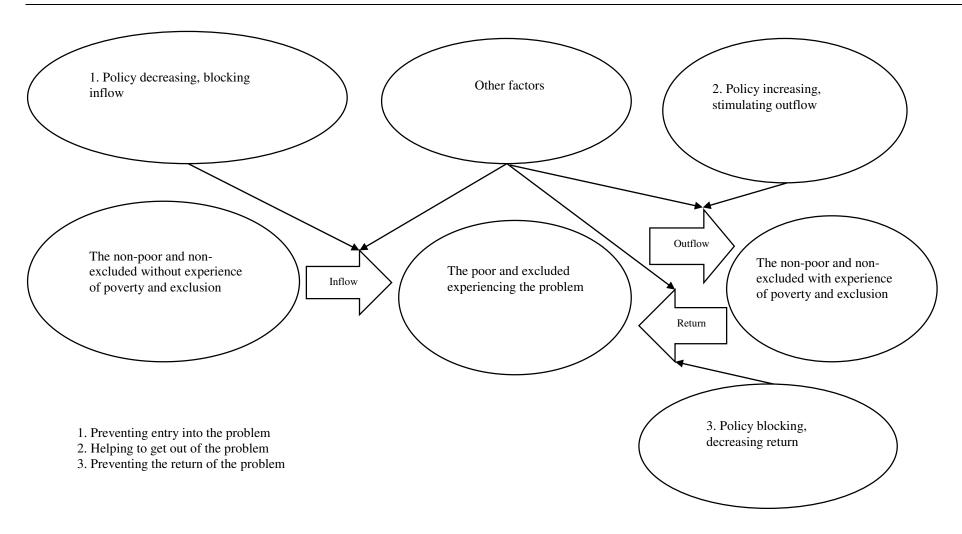


Figure 2. Three main types of social policies aimed at addressing poverty and social exclusion (dynamic approach). Source: Szarfenberg, 2019, slide 5.

In turn, Figure 3 illustrates four principal stages of social policy impact on the extent of poverty and social exclusion: (1) existing policy, (2) its implementation, (3) changes 1 resulting from the implementation of this policy instruments in particular cases, (4) changes 2 resulting from changes 1.

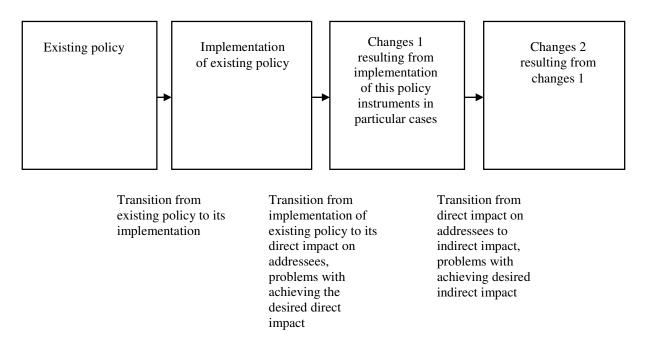


Figure 3. Model of social policy impact on poverty and social exclusion. Source: Szarfenberg, 2019, slide 6.

Figure 4, on the other hand, presents the mechanism of impact of social policy tools on the extent of poverty and social exclusion.

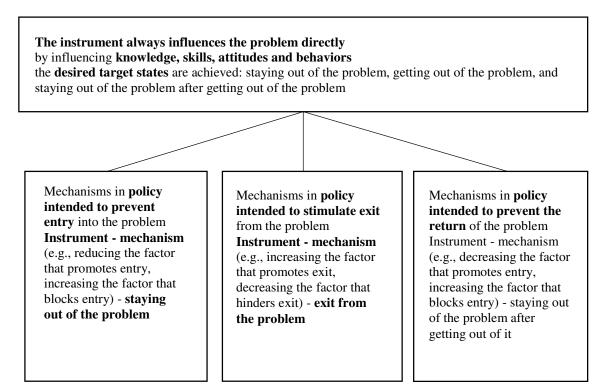


Figure 4. Mechanism of impact of social policy instruments on poverty and social exclusion. Source: Szarfenberg, 2019, slide 7.

4. Results

4.1. Determining/defining the poverty line

The basis for determining the extreme poverty line is the subsistence minimum estimated by the Institute of Labor and Social Studies (IPiSS). The category of subsistence minimum determines a very low level of satisfaction of needs. Consumption below this level hinders survival and threatens the psychophysical development of a person. In 2020 the extreme poverty rate was 5.2%, which is 1 percentage point higher than in 2019 (CSO, 2021, p. 1).

The inclusion of the so-called "statutory limit" indicates the group of people who, under current legislation, are potentially eligible to apply for a cash benefit from social assistance. In 2020 the extent of statutory poverty was 9.1%. Thus, it was at almost the same level as in 2019 (9.0%).

The application of the relative poverty line at 50% of the amount that households in Poland spend on average per month makes it possible to single out those households and individuals whose level of consumption significantly deviates from the average level. According to this

criterion, in 2020 the relative poverty rate was 11.8%, more than 1 percentage point lower than in the previous year (13.0%). The one-point increase in the percentage of extremely poor people recorded in 2020 took place at a slightly higher level of poverty lines than in 2019. In the case of statutory poverty, the level of poverty lines in 2020 was the same as in 2019, while the decrease in relative poverty recorded in 2020 occurred at a lower level of poverty thresholds than in 2019. (CSO, 2021, p. 1)

Figure 5 shows the extent of poverty in Poland from 2008 to 2020 according to the poverty thresholds adopted in a given year.

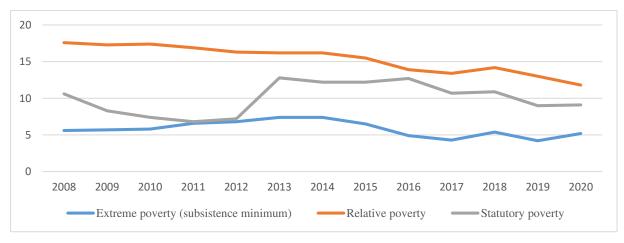


Figure 5. Extent of poverty in Poland from 2008 to 2020 according to the poverty thresholds adopted in a given year (expressed as % of people in households).

Source: own elaboration based on CSO data.

Statutory poverty lines valid in Poland in 2008-2020 are presented in figures 6 and 7.

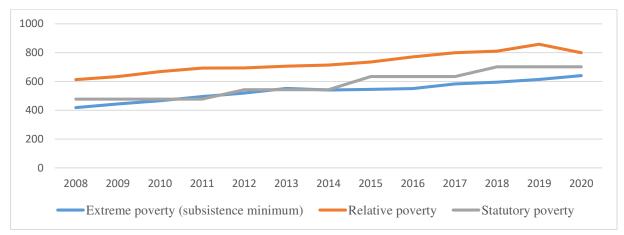


Figure 6. Poverty lines for 1-person households in Poland in 2008-2020 (in PLN). Source: own elaboration based on CSO data.

4.2. Poverty and social inequalities in Poland in years 2008-2020 compared to EU countries

Figure 7 shows the evolution of the three basic categories of poverty in Poland between 2008 and 2020: extreme poverty (subsistence minimum), relative poverty and statutory poverty. The first and third indicators showed a slight upward trend in the period under study, while the latter was characterised by a leaping increase in some years, while it clearly stabilised after 2015.

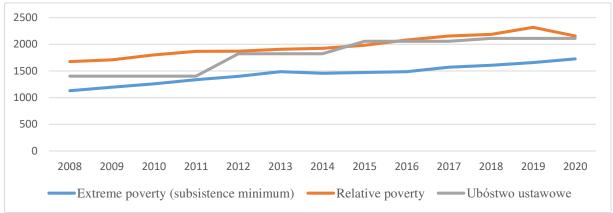


Figure 7. Poverty lines for 4-person households (2 adults + 2 children up to 14 years of age) in 2008-2020.

Source: own elaboration based on CSO data.

Figure 8, in turn, illustrates the comparison of the development of key social indicators for EU countries in 2020. For all the indicators presented, Poland is in the top eight and ahead of the most of the other CEE countries. For the first two indicators, Poland ranks seventh, while for the third, it ranks eighth.

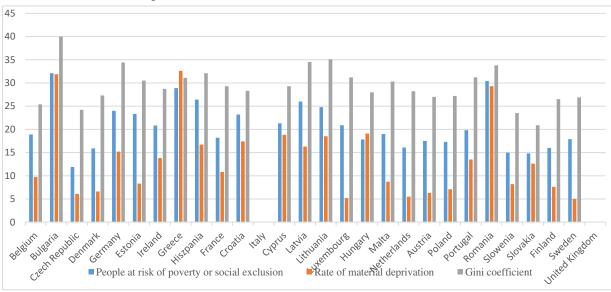


Figure 8. People at risk of poverty or social exclusion, rate of material deprivation and Gini coefficient in EU countries in 2020 (In the case of Italy and the United Kingdom data are not available).

Source: own elaboration based on Eurostat data.

5. Summary

The study presents the essence of the phenomena of poverty and social inequalities, which constitute one of the most significant threats and at the same time development challenges for the modern world. In addition, the theoretical part discusses the basic principles and models of social policy in EU countries. The empirical part, on the other hand, contains two key elements in the form of an analysis of the development of the three basic categories of poverty in Poland in 2008-2020, and a comparative analysis of the three key indicators describing the effects of social policy in 2020. As for the categories of poverty in Poland in the period under review, it can be concluded that two of them (extreme poverty (subsistence minimum) and statutory poverty) were characterized by a relatively high level of stability (except for the case of a significant increase in statutory poverty in 2013), while the third one (relative poverty) demonstrated a fairly clear downward trend. With regard to the three indicators characterizing the effects of the EU governments' social policies, it should be noted that the situation of Poland is relatively good/average as compared to the other 25 EU member states (except for the UK and Italy, for which data are not available), which was expressed in the following positions occupied by it for each of them: people at risk of poverty or social exclusion - 7th place, material deprivation rate - 7th place, Gini coefficient - 8th place.

The theoretical considerations carried out in the publication, illustrated by data regarding the development of selected indicators of poverty and income inequalities in Poland, compared to other EU countries, can provide a basis for the development of more detailed analyses in the future.

Acknowledgements

The publication of this paper was financed from the fund: "Support for Publication Activity" of the Cracow University of Economics.

References

- 1. Atkinson, T., Cantillon, B., Marlier, E., Nolan, B. (2002). *Social Indicators: The EU and Social Inclusion*. Oxford: Oxford University Press.
- 2. CSO (2013). Ubóstwo w Polsce w świetle badań GUS. Warszawa.

- 3. Dobrowolski, Z. (2017). *Instrumenty finansowania polityki społecznej. Zarys problematyki*. Monographs and Studies of Institute of Public Affairs at Jagiellonian University, Kraków.
- 4. *Encyclopedia of Political Science: theory of politics* (1999). Kraków: Kantor Wydawniczy Zakamycze.
- 5. Giddens, A. (2006). *Social Model for Europe?* In: A. Giddens, P. Diamond, R. Liddle (ed.), Global Europe, Social Europe, Cambridge: Polity Press.
- 6. Hagenaars, A.J.M. (1986). *The Perception of Poverty, 1st Edition February 1, Series: Contributions to economic analysis.* North-Holland: Elsevier, https://www.elsevier.com/ books/the-perception-of-poverty/hagenaars/978-0-444-87898-4.
- 7. Panek, T. (2008). Ubóstwo i nierówności: dylematy pomiaru. In: Statystyka społeczna dokonania, szanse, perspektywy. *BWS, vol. 57.* Warszawa: CSO.
- 8. Szarfenberg, R. (2006). Krytyka i afirmacja polityki społecznej. Warszawa: OW Aspra-Jr.
- 9. Szarfenberg, R. (2009). *Modele polityki społecznej w teorii i praktyce* (version 1.7, 27.06.09), http://rszarf.ips.uw.edu.pl/pdf/modele_ps.pdf.
- Szarfenberg, R. (2019). Polityka przeciwdziałania ubóstwu i wykluczeniu społecznemu. PowerPoint presentation at the seminar organized in Warszawa on 24.06.2019, in relation with the project "Narzędzie agregowania i monitorowania danych w obszarze włączenia społecznego" - POWR.02.05.00-00-0111/16, realized within Działania 2.5 - Skuteczna pomoc społeczna within Operational Programme Knowledge Education Development 2014-2020.
- 11. Wilensky, H. (1975). *The Welfare State and Equality*. Los Angeles: University of California Press.
- Zgliczyński, W.S. (2017). Polityka społeczna w Europie ewolucja i rozwiązania modelowe. *Studies of Bureau of Research Chancellery of the Sejm (BAS), No. 2(50),* http://orka.sejm.gov.pl/wydbas.nsf/0/5DA0AED03DC44FC5C125815D004A5B0E/%24F ile/3%20Wojciech%20Stefan%20Zgliczy%C5%84ski%20Studia%20BAS%20nr%202%2 02017.pdf.
- Zwiech, P. (2013). Nierówności dochodowe w państwach europejskich analiza przy wykorzystaniu współczynnika Giniego. Economic Studies. *Scientific Journals of University* of Economics in Katowice, no. 145, pp. 89-102.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

ATTITUDES OF MANAGERS OF THE HIGH-TECH ENTERPRISES IN POLAND

Gabriela ROSZYK-KOWALSKA^{1*}, Janusz KRAŚNIAK², Tomasz KLIMANEK³

¹Poznań University of Economics and Business; g.roszyk-kowalska@ue.poznan.pl, ORCID: 0000-0002-8424-471X

² Poznań University of Economics and Business; janusz.krasniak@ue.poznan.pl, ORCID: 0000-0003-1864-9687
 ³ Poznań University of Economics and Business; tomasz.klimanek@ue.poznan.pl,

ORCID: 0000-0001-6411-8145

* Corresponding author

Purpose: The article attempts to answer the following questions: What key competences and attitudes should characterise the management staff in the high-tech sector; is there an attitude gap, that is, a discrepancy between the desired and actual attitudes of the managers of high-tech enterprises; and what actions can contribute to minimising an identified attitude gap?

Design/methodology/approach: Answering the above-mentioned research questions required reviewing the literature on the subject and conducting research. The research covered 504 managers representing all levels of management in high-tech enterprises operating in Poland. The collected data were subjected to statistical analysis, based on which conclusions were drawn.

Findings: The research results show that the key competences of creativity, knowledge management and entrepreneurship are the most highly evaluated of the surveyed attitudes of managers (the lowest gap). A disturbing phenomenon is the relatively low assessment of the attitudes (a large gap) characterising the key competences of basing communication systems on modern information technologies, innovation and cooperation in relational systems.

Practical implications: The presented results on the skills gap is part of a wider research project aimed at identifying and assessing the levels of the key competences of managers employed in high-tech enterprises. In order to minimise the identified attitudes gap, specific actions were recommended be taken to improve these attitudes.

Originality/value: The value of the conducted research procedure is the identification of key attitudes of tactical and operational level managers of high-tech enterprises and their arrangement due to the size of the gap between the actual and desired state. Actions to improve key managerial attitudes were also identified. These activities may help increase the effectiveness and competitiveness of Polish high-tech enterprises.

Keywords: core competencies, managerial competences, attitudes of managers, high-tech enterprises.

Category of the paper: Research Paper.

1. Introduction

When characterising human capital, it should be emphasised that, nowadays, the most valuable resource is people. Human capital is the basic pillar of the entire intellectual capital of an organisation (Jabłoński, 2009, p. 73). There are a number of reasons why people are identified as an organisation's invaluable resource. First of all, it is the people employed in an organisation who decide on the use of the remaining resources of the enterprise. The success of an organisation is built by people and their competences determine its efficiency and effectiveness. Competences are an internal property of an individual: motives, features, attitudes, values, knowledge and skills, which are in a cause-and-effect relationship with exceptional achievements at work or in a given situation based on specific criteria (Spencer, Spencer, 1993, pp. 9-11). The importance of the issue of competences prompted the authors of the article to undertake research aimed at identifying the key competences of high-tech managers and any gap in their attitudes, which are among the components constituting key competences. The problem outlined above is the basis for formulating the three research questions that define the scope of the research procedure presented in this article:

- What key competences and attitudes should characterise the managers of high-tech enterprises?
- Is there an attitude gap, that is, a discrepancy between the desired and actual attitudes of high-tech managers?
- What actions can contribute to minimising the identified attitude gap?

2. The essence of managerial attitudes

The concept of competences was first used by the American social psychologist McClelland in the 1970s, and since the beginning of the 1980s, competences have become the focus of interest for many researchers. The authors have reviewed the literature on the subject (McClelland, 1973; Boyatzis, 1982; Wynne, Stringer, 1997; Wood, Payne, 1998; Becker, Huselid, Ulrich, 2002; Rankin, 2002; Whiddett, Hollyforde, 2003; Delobbe, Karnas, Vondenberghe, 2003; Woodruffe, 2001; Filipowicz, 2004; Friesen, Anderson, 2004; Tate, 1995; Cheetham, Chivers, 2005; Dessler, 2009; Oleksyn, 2010; Kuz'mina, P'yankova, Tret'yakova, 2020; Dubois, 1993; Spencer, L., Spencer, S., 1993; Thierry, Sauret, Monod, 1993; Nordhaug, Gronhaug, 1994; Lévy-Leboyer, 2009; Jahja, Kleiner, 1997, Roszyk-Kowalska, 2018), which has revealed that the notion of competences is ambiguous. Competences are classified in a number of ways, and the modern concepts of competences, regardless of the area in which they are used, increasingly expand in scope. Competences are the knowledge, skills, behaviour, attributes and attitudes that distinguish those who achieve the highest efficiency (Gick, Tarczyńska, 1999, p. 45). These are behaviours that distinguish employees in various professional situations, determined by the knowledge and skills they use, as well as their attitudes and motivations (Sall, 2004, p. 14). The basis of competences is the knowledge, skills and attitudes related to the performance of specific activities, regardless of the manner in which they were acquired and whether they have been confirmed through a validation procedure. Relatively often, the components of competences include an attitude understood as:

- permanent mental representation of people, places or objects making a person react with positive or negative emotions and influencing behaviour (Rathus, 2011, p. 769),
- general orientation that can make a person when certain stimuli appear behave or react in a certain way (Frankfort-Nachmias, Nachmias, 1992, p. 269),
- permanent evaluation positive or negative of people, objects and ideas (Aronson, Wilson, Akert, 2000, p. 313),
- readiness and a tendency to react in a certain way to certain stimuli (Oppenheim, 2001, p. 203),
- an evaluative disposition based on cognitive elements, emotional reactions, intentions for the future and behaviour (Zimbardo, Leippe, 1991, p. 52),
- a relatively stable, dynamic organisation that determines how an individual behaves in relation to other people or objects, cognitive and emotional structures and processes, and patterns of behaviour, characterised by varying degrees of complexity, compactness, strength, persistence, intensity, importance and adequacy (Holly, 1985, p. 215).

When analysing the concept of an attitude, a certain inconsistency between declared attitudes and behaviour is noticed. To explain this, it is necessary to distinguish the categories of general attitudes and attitudes towards behaviour. The first means a general attitude of a person to an object: a person/group of people, a social group, an institution, an event or a product. The other indicates attitudes towards specific behaviours related to these objects. When there is no relationship between the general attitude and a specific behaviour, there is evaluative inconsistency (Stasiuk, Maison, 2017, p. 342).

To recapitulate, it is further assumed that an attitude is a relatively permanent tendency to positively or negatively respond to various objects – people, ideas and specific things – which determines behaviour in certain situations.

3. Research method

The research procedure aimed at identifying the key competences and key attitudes of hightech managers, and assessing the attitude gap, included three stages:

- Stage 1. Identification of the key attitudes of high-tech managers based on the opinions of managers and experts representing selected academic centres in Poland and business.
- **Stage 2.** Identification of the variables characterising the key attitudes of hi-tech managers based on the opinions of managers and experts.
- Stage 3. Identification of an attitude gap understood as a discrepancy between the expected attitude, determined based on indications made by strategic managers, and the declared attitude, defined based on indications made by tactical and operational managers. To assess the expected and declared key attitudes described by the degree of acceptance of selected statements, a seven-point Likert scale was used (1 strongly disagree, 2 disagree, 3 somewhat disagree, 4 neutral, 5 somewhat agree, 6 agree, 7 strongly agree).

The first step in the implementation of the third stage, which was defined as 'identification of the attitude gap', involved selecting strategic, operational and tactical managers of high-tech enterprises.

The questionnaires were addressed to the management staff of all levels in high-tech enterprises operating in Poland. The survey questionnaire was sent to the management of all enterprises forming the high technology sector, where the number of employees was 250 people and more. A total of 563 correctly completed questionnaires were received. However, not all of them were analysed in the research process because of a restriction introduced to the survey questionnaire, in which strategic managers were asked how long tactical and operational managers should work in a current company and in the position currently held so that their key competences could be identified. This means that, although 4.01% of the managerial staff of all high-tech enterprises participated in the research procedure, the effective size of the research sample accounted for 3.62% of this staff. A detailed analysis of the representativeness of the research sample is presented in the work of Roszyk-Kowalska (2018, pp. 104-108). The possible limitations of inference based on the research are related to the fact that, without having additional information on the characteristics of the management staff who participated in the study, it was assumed that the mechanism behind the fact of taking part or not in the survey is independent of the attitudes studied.

The analysis of the research material obtained made it possible to determine the mean length of service of tactical and operational managers in the position held, which was 1.68 years. As a result, 55 questionnaires filled in by tactical and operational managers were eliminated from further analysis because, in order to analyse the key competences of tactical and

operational managers, the length of service should be longer than 1.68 years (this threshold was indicated by strategic managers). Then, the mean length of service in a current enterprise in the positions occupied by tactical and operational managers was calculated. The mean was 2.83 years, which resulted in the exclusion of four questionnaires that did not meet the required condition for further analysis. These means together (a restrictive condition for the position held and the length of service in a current enterprise) resulted in the reduction of the research sample at the tactical and operational levels.

In total, the responses of 504 managers at all levels in high-tech enterprises were analysed. The research sample consisted of managers aged 23 to 72. Most were tactical managers – 43.7%, while the share of the other two levels was similar and amounted to approximately 28% each. The highest percentage of men was at the tactical level of management (70.5%) and the lowest at the operational level (63.64%). The lowest mean ages were characteristic for operational managers and were slightly over 38 for men and slightly over 39 for women. Strategic managers were the oldest – here the mean ages were 51.3 years for men and 51.1 for women.

Due to age, the above-mentioned sections of the research sample (management level * gender) constituted weakly or moderately differentiated sub-groups – the coefficient of variation ranged from 12.6% (the most homogeneous category in terms of age: men occupying the strategic management level) to 26.1% (the most heterogeneous category in terms of age: women at the operational management level). The age distributions observed in the research sample are generally unimodal, with marked right-sided asymmetry, indicating more frequent participation of managers aged lower than the mean. The exception here is the category of women occupying the strategic management level, where the age distribution is bimodal with the dominant age groups of 40-45 and 55-60.

In order to synthetically present the broader context of the high-tech sector and its changes, the data of Statistics Poland (Główny Urząd Statystyczny – GUS) for the years 2001-2020 was used. This indicates a stable share of the high-tech sector sold production in the industrial processing section. This remained at the level of about 5% in the discussed period (see Figure 1). It should be noted that, in accordance with the methodology used in Polish official statistics, entities in the industrial processing section are classified according to the degree of technological advancement (high, medium-high, medium-low and low) (GUS, 2022). It is worth paying attention to the positive trend from 2001 to 2020, which was undoubtedly a decrease in the share of sold production in the industrial processing section in entities classified as low technology (a decrease from 41.9% in 2001 to 35.7% in 2020). At the same time, the share of sold production in the industrial processing section in high and medium-high technology companies increased in the same period (from 27.4% in 2001 to 32.4% in 2020).

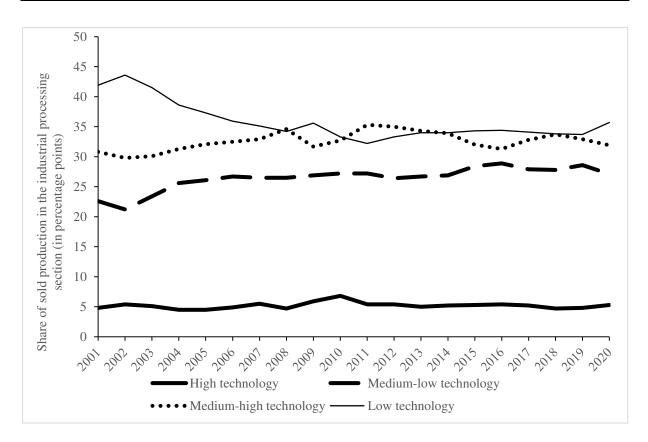


Figure 1. Changes in the structure of sold production in the industrial processing section by the level of technology from 2001 to 2020.

Source: GUS data (https://stat.gov.pl/obszary-tematyczne/nauka-i-technika-spoleczenstwo-informacyjne/, April 12, 2022).

4. Research results

At the first research stage, participating managers and experts were presented with a set of 18 potential key competences, which were identified based on a literature review and practical experience. Taking into account the opinions of managers and experts, as well as limiting the number of key competences to those nine out of 18 for which the mean importance assigned by experts was the highest, the following key competences in high-tech sector enterprises were included:

- high level of entrepreneurship,
- high level of creativity,
- effective processes of acquiring, using and sharing knowledge,
- extensive use of the potential of teamwork,
- high level of innovation,
- ability to cooperate in relational systems,

- high independence of employees,
- skilful management of research and development (R&D) activities,
- basing communication systems on modern information technologies.

The second stage of the research aimed at transforming the key competences of high-tech managers into a set of variables characterising key attitudes. Based on the opinions of managers and experts, a set of 54 potential key attitudes was limited to the 27 attitudes of the highest importance. Table 1 shows the variables characterising key competences transformed into a set of variables characterising key attitudes.

Table 1.

Transformation of the key competences of high-tech managers into a set of variables characterising key attitudes

Key competences (abbreviation)	Key attitudes (abbreviation)
	persistence (En1)
Entrepreneurship (En)	independence in thinking, opinions and judgements (En2)
	self-esteem (En3)
	no fear of making a mistake or failing (C1)
Creativity (C)	readiness for continuous learning (C2)
	cognitive curiosity (C3)
	stimulating employees to develop (KM1)
Knowledge management (KM)	focus on the success of the organisation (KM2)
	openness to other people (KM3)
	determination in pursuing goals (T1)
Teamwork (T)	focus on tasks and success (T2)
	acceptance of people as they are (T3)
	questioning what others consider to be unchangeable (I1)
Innovation (I)	searching for more relevant solutions (I2)
	open attitude towards innovation (I3)
	positive attitude towards other entrepreneurs (CRS1)
Cooperation in relational systems	understanding the need to create and maintain good relations with the
(CRS)	environment (CRS2)
	prosocial attitude (CRS3)
	resistance to stress (E1)
Empowerment (E)	self-criticism (E2)
Empowerment (E)	resignation from one's own influence in favour of employees with higher
	competences (E3)
	personal responsibility for the development of the organisation (RDM1)
R&D management (RDM)	propensity to take risks (RDM2)
	focus on development (RDM3)
Basing communication systems	willingness to learn new things (B1)
on modern information	high level of achievement motivation (B2)
technologies (B)	involvement in the implementation of tasks (B3)

Source: own study based on the research sample.

The Mann–Whitney U test was used to assess the significance of a gap in the key attitudes. The null hypothesis was formulated in such a way that the distributions of the mean significance of a given key attitude indicated in the compared populations (strategic managers and tactical or operational managers) were equal. The level of significance was set at $\alpha = 0.05$.

The W test statistic was determined as follows:

$$W = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1 \tag{1}$$

$$W' = n_1 n_2 + \frac{n_2 (n_2 + 1)}{2} - R_2 \tag{2}$$

where:

- the sizes of the samples taken from population 1 and population 2, respectively;
- the sums of the ranks for the samples taken from population 1 and population 2, respectively.

The lesser value W or W' was subject to interpretation.

Analysis of the results has allowed the following conclusions to be formulated (Table 2):

- the smallest attitude gap is in: readiness for continuous learning (0.74), stimulating employees to develop (1.28), perseverance (1.28) and openness to other people (1.32),
- the largest attitude gap is in: willingness to learn new things (2.13), involvement in the implementation of tasks (1.96), as well as understanding the need to create and maintain good relations with the environment (2.2).

Table 2.

Gaps in the key attitudes and the significance from the smallest to the largest attitude gap

Key competences	Key attitudes	Mean assessment by strategic managers	Mean assessment by tactical or operational managers	Attitude gap	Test statistics (W)	p-value
С	C2	6.49	5.75	0.74	41381.5	< 0.05
KM	KM1	6.38	5.10	1.28	41590.0	< 0.05
En	En1	6.43	5.15	1.28	40529.0	< 0.05
KM	KM3	6.32	5.00	1.32	39652.5	< 0.05
Т	T3	6.34	5.01	1.34	38603.5	< 0.05
С	C3	6.31	4.95	1.36	41079.0	< 0.05
E	E3	6.28	4.86	1.42	40486.5	< 0.05
En	En3	6.41	4.98	1.43	42638.5	< 0.05
Т	T1	5.66	4.20	1.46	38553.0	< 0.05
RDM	RDM2	6.14	4.64	1.50	41037.0	< 0.05
С	C1	6.18	4.68	1.50	40585.0	< 0.05
KM	KM2	6.51	5.01	1.51	41938.0	< 0.05
CRS	CRS1	6.14	4.61	1.52	41848.0	< 0.05
RDM	RDM3	6.39	4.85	1.54	42678.5	< 0.05
En	En2	6.05	4.46	1.59	40791.0	< 0.05
E	E2	6.36	4.77	1.59	42149.5	< 0.05
В	B2	6.46	4.80	1.65	43519.0	< 0.05
RDM	RDM1	6.59	4.91	1.68	44173.0	< 0.05
CRS	CRS3	6.49	4.81	1.69	43617.0	< 0.05
Ι	I2	6.51	4.83	1.69	43695.5	< 0.05
Т	T2	6.06	4.30	1.76	41833.5	< 0.05
Е	E1	6.49	4.73	1.76	44171.5	< 0.05
Ι	I1	5.64	3.78	1.86	40502.0	< 0.05

Ι	I3	6.36	4.50	1.86	43914.0	< 0.05
CRS	CRS2	6.53	4.61	1.92	45215.5	< 0.05
В	B3	6.39	4.44	1.96	44245.5	< 0.05
В	B1	6.34	4.20	2.13	43707.5	< 0.05
Sources on a study board on the manual comple						

Cont. table 2.

Source: own study based on the research sample.

Analysis of the data contained in Table 3 makes it possible to conclude that the largest gap concerns attitudes constituting such key competences as: basing communication systems on modern information technologies (5.74) and innovation (5.4). On the other hand, the smallest attitude gap covers the following key competences: creativity (3.59) and knowledge management (4.10). Moreover, within the scope of the examined key competences, the following has been found:

- entrepreneurship the largest gap is in the attitude of 'independence in thinking, opinions and judgements' (1.59) and the smallest one concerns 'persistence' (1.28),
- creativity the largest gap is in the attitude of 'no fear of making a mistake or failing' (1.5), and the smallest one is in 'readiness for continuous learning' (0.74),
- knowledge management the largest gap is in the attitude of 'focus on the success of the organisation' (1.51) and the smallest one concerns 'stimulating employees to develop' (1.28),
- teamwork the largest gap is in the attitude of 'focus on tasks and success' (1.76) and the smallest one concerns the attitude of 'acceptance of people as they are' (1.34),
- innovation the greatest gap is in the attitudes of 'questioning what others consider to be unchangeable' and 'open attitude towards innovation' (1.86), and the smallest one concerns 'searching for more relevant solutions' (1.69),
- cooperation in relational systems the largest gap exists in the attitude of 'understanding the need to create and maintain good relations with the environment' (1.86) and the smallest one concerns 'positive attitude towards other entrepreneurs' (1.52),
- empowerment the largest gap is in 'resistance to stress' (1.76) and the smallest one concerns the attitude of 'resignation from one's own influence in favour of employees with higher competences' (1.42),
- R&D management the biggest gap is in the attitude of 'personal responsibility for the development of the organisation' (1.68), while the smallest one concerns 'propensity to take risks' (1.50),
- basing communication systems on modern information technologies the greatest gap is in 'willingness to learn new things' (2.13) and the smallest one concerns the attitude of 'high level of achievement motivation' (1.65).

Table 3.

Attitude gap in the structure of key competences

Key competences	es Key attitudes		Total
Basing communication systems	willingness to learn new things	2.13	
on modern information	high level of achievement motivation	1.65	5.74
technologies	involvement in the implementation of tasks	1.96	
-	questioning what others consider to be unchangeable	1.86	5.40
Innovation	searching for more relevant solutions	1.69	
	open attitude towards innovation	1.86	
	positive attitude towards other entrepreneurs	1.52	
Coordination in relational systems	understanding the need to create and maintain good		5.13
Cooperation in relational systems	relations with the environment	1.92	5.13
	prosocial attitude	1.69	
	resistance to stress	1.76	
Empower	self-criticism	1.59	4.77
Empowerment	resignation from one's own influence in favour of		
	employees with higher competences	1.42	
	personal responsibility for the development of the		
R&D management	organisation	1.68	4.72
R&D management	propensity to take risks	nsity to take risks 1.50	
	focus on development	1.54	
	determination in pursuing goals	1.46	
Teamwork			4.56
	acceptance of people as they are	1.34	
	persistence	1.28	
Entrepreneurship	independence in thinking, opinions and judgements	1.59	4.30
	self-esteem	1.43	
	stimulating employees to develop	1.28	
Knowledge management	focus on the success of the organisation		4.10
	openness to other people	1.32	
	no fear of making a mistake or failing	1.50	
Creativity	readiness for continuous learning		3.59
-	cognitive curiosity	1.36	

Source: own study based on a research sample.

The biggest gap between the expected and actual key attitudes in high-tech enterprises concerns the willingness to learn new things and involvement in the implementation of tasks (this gap relates to the key competence of basing communication systems on modern information technologies) and understanding the need to create and maintain good relations with the environment (the gap concerns the key competence of cooperation in relational systems).

In order to minimise the identified attitude gaps, it is postulated actions should be taken that may contribute to shaping attitudes conducive to their minimisation. The actions shaping the attitudes of high-tech managers in line with their organisations' expectations should include:

• basing communication systems on modern information technologies – activities supporting the shaping of attitudes encouraging learning new things and strengthening involvement in the implementation of commissioned tasks,

- innovation shaping the attitudes of openness to the processes of creating and implementing new solutions as well as breaking patterns by questioning what is considered unchangeable by other participants in the organization,
- cooperation in relational systems shaping the attitudes of understanding the need to create and maintain good relations with contractors (customers and suppliers) and focusing on establishing appropriate relationships with participants in the organization,
- empowerment participating in training and courses strengthening resistance to stress in the workplace and the ability to look self-critically at the behaviour and actions taken by members of the organization,
- R&D management shaping the attitude of dissatisfaction with the current state by focusing on development and continuous improvement as well as awareness of personal responsibility for the development of the organization,
- teamwork shaping attitudes emphasising determination in pursuing the goals set and focusing on a high level of task implementation and success,
- entrepreneurship undertaking activities that strengthen self-esteem and emphasise the importance of the independence of managers in thinking and formulating opinions and judgements,
- knowledge management applying incentives encouraging learning and supporting attitudes of openness to other people and striving to ensure the success of the organization,
- creativity implementing organisational solutions supporting attitudes characterised by cognitive curiosity and the lack of fear of making a mistake or failing.

5. Conclusions

In modern enterprises, the key competences of managers are a particularly important resource. The constant striving to improve the key competences of managers in high-tech enterprises by shaping their attitudes in line with the organisations' expectations should be treated as a specific organisational challenge on which members of companies should focus their activities. These activities may contribute to increasing the efficiency and competitiveness of Polish enterprises in the high-tech sector. The research results show that the key competences of creativity, knowledge management and entrepreneurship are the most highly evaluated of the surveyed attitudes of managers (the lowest gap). A disturbing phenomenon is the relatively low assessment of the attitudes (a large gap) characterising the key competences of basing communication systems on modern information technologies, innovation and cooperation in relational systems. In terms of these key management competencies, the attitudes of

management personnel show the largest gap. The discrepancy between the assessments of these attitudes made by strategic managers and tactical and operational managers can be interpreted as a gap that requires taking priority and particularly intensive actions aimed at shaping the expected attitudes. The presented research results about the attitude gap are part of a wider research project aimed at identifying and assessing the level of key competences of managers employed in high-tech enterprises. As part of the research project, an attempt was also made to identify and evaluate the remaining components of key competences, that is, the skills and knowledge of managers in the high-tech sector.

Acknowledgements

This project has been financed by the Regional Initiative for Excellence programme of the Minister of Science and Higher Education of Poland, 2019-2022, grant no. 004/RID/2018/19, amounting to PLN 3,000,000.

References

- 1. Aronson, E., Wilson, T.D., Akert, R.M. (2000). *Social Psychology: Heart Mind*. Canada: Addison-Wesley Longman.
- 2. Becker, B.E., Mark, A.H., Urlich, D. (2002). *The HR Linking People Strategy and Performance*. Boston: Harvard Business Review Press.
- 3. Boyatzis, R.E. (1982). *The Component Manager. A Model for Effective Performance*. Canada: John Wiley & Sons, INC.
- 4. Cheetham, G., Chivers, G. (2005). *Professions, Competence and Informal Learning*. Cheltenham: Edward Elgar Publishing.
- Delobbe, N., Karnas, G., Vondenberghe, Ch. (2003). Développement Des Compétences Investissement Professionnel et Bien-Être Des Personnes. UCL Presses Universitaires de Louvain UCL.
- 6. Dessler, G. (2009). *A Framework for Human Resources Management*. New York: Upper Saddle River.
- 7. Dubois, D.D. (1993). Competency-Based Performance Improvement: A Strategy for Organizational Change. MA: HRD Press Inc.
- 8. Filipowicz, G. (2004). Zarządzanie kompetencjami zawodowymi [Managing Professional Competences]. Warszawa: PWN.

- 9. Frankfort-Nachmias, C., Nachmias, D. (1992). *Research Methods in the Social Sciences*. Indiana University: St. Martin's Press.
- 10. Friesen, N., Terry, A. (2004). Interaction for Lifelong Learning. *British Journal of Educational Technology*, 35 no. 6, 679-87. doi:10.1111/j.1467-8535.2004.00426.x.
- Gick, A., Tarczyńska, M. (1999). Motywowanie pracowników [Motivating Employees]. Warszawa: PWE.
- 12. GUS, (2022). Nauka i Technika w 2020 roku [Science and Technology in 2020]. Warszawa.
- Holly, R. (1985). Postawa (i hasła korespondujące) [Attitude (and Corresponding Slogans]. In: W. Szewczuk (Eds.), *Słownik psychologiczny [Psychological Dictionary]*. Warszawa: Wiedza Powszechna.
- Jabłoński, M. (2009). Zarządzanie wartością przedsiębiorstw o orientacji jakościowej a kapitał intelektualny [Value Management of Quality-oriented Enterprises and Intellectual Capital]. Sosnowiec: Oficyna Wydawnicza Humanitas.
- 15. Jahja, H., Kleiner, B.H. (1997). Competency-Based Pay in the Manufacturing and Service Sectors. *Ind. Manage.* 39(5).
- 16. Kuz'mina, E.V., P'yankova, N.G., Tret'yakova, N.V., Botsoeva, A.V. (2020). Using Data Analysis Methodology to Foster Professional Competencies in Business Informaticians. *European Journal of Contemporary Education*, 9(1), 54.
- 17. Lévy-Leboyer, C. (2009). La Gestion Des Compétences. Paris: Éditions d'Organisation Groupe Eyrolles.
- Martin, M. (2004). Poziom technologii małych firm technologicznych a bariery ich wzrostu [The Technological Level of Small Technology Companies and Obstacles to Their Development]. *Gospodarka Narodowa, nr 11-12.*
- 19. McClelland, D.C. (1973). Testing for Competence Rather Than for Intelligence. *American Psychologist*, 28.
- 20. Nordhaug, O., Gronhaug, K. (1994). Competencies as Resources in Firms. *International Journal of Human Resource Management, vol. 5 no. 1.*
- 21. Oleksyn, T. (2010). Zarządzanie kompetencjami. Teoria i praktyka [Competency Management: Theory and Practice]. Warszawa: Wolters Kluwer.
- 22. Oppenheim, A.N. (2001). *Questionnaire Design, Interviewing and Attitude Measurement*. New York: Basic Books, Inc.
- 23. Rankin, N. (2002). Raising Performance through People: The Ninth Competency Survey. *Competency and Emotional Intelligence, January.*
- 24. Ratajczak-Mrozek, M. (2010). Sieci biznesowe a przewaga konkurencyjna przedsiębiorstw zaawansowanych technologii na rynkach zagranicznych [Business Networks and the Competitive Advantage of Advanced Technology Enterprises on Foreign Markets]. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- 25. Rathus, S.A. (2011). *Psychology: Concepts and Connections*. California: Wadsworth Publishing Company.

- 26. Roszyk-Kowalska, G. (2018). Kompetencje kadry kierowniczej w przedsiębiorstwach wysokich technologii [Competences of management staff in high-tech enterprises]. Poznań: Wydawnictwo Uniwersytetu Ekonomicznego w Poznaniu.
- 27. Rybak, M. (2003). Zarządzanie kapitałem ludzkim a kluczowe kompetencje [Human Capital Management and Key Competences]. In: M. Rybak, *Kapitał ludzki a konkurencyjność przedsiębiorstw [Human Capital and the Competitiveness of Enterprises]*. Warszawa: Poltext.
- 28. Sall, R.E. (2004). *Strategies in Workers Compensation*. Washington: Rowman & Littlefield.
- 29. Spencer, L.M. Jr, Spencer, S.M. (1993). Competence at Work Models for Superior *Performance*. New York: John Wiley & Sons.
- 30. Stasiuk, K., Maison, D. (2017). *Psychologia konsumenta [Consumer Psychology]*. Warszawa: PWE.
- 31. Tate, W. (1995). *Managerial Competence: A Critical Guide to Methods and Materials*. Gower Publishing Ltd.
- 32. Thierry, D., Sauret, Ch., Monod, N. (1993). *La Gestion Prévisionnelle et Préventive Des Emplois et Des Compétences*. Nouvelle é. Paris: Éd. l'Harmattan.
- 33. Whiddett, S., Hollyforde, S. (2003). *Modele kompetencyjne w zarządzaniu zasobami ludzkimi [Competency Models in Human Resource Management]*. Oficyna Ekonomiczna.
- 34. Wood, R., Payne, T. (1998). *Competency Based Recruitment and Selection. A Practical Guide*. Chichester: John Wiley & Sons Inc.
- 35. Woodruffe, Ch. (2001). Development and Assessment Centres: Identifying and Assessing Competence (Developing Practice). *Chartered Institute of Personnel & Development, January 1, 2001.*
- 36. Wynne, B., Stringer, D. (1997). A Competency Based Approach to Training and *Development*. Boston: MA: Pitman Publishing.
- 37. Zimbardo, P.G., Leippe, M.R. (1991). *The Psychology of Attitude Change and Social Influence*. New York: McGraw-Hill Professional.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

REMOTE WORKPLACES OVER THE TIME OF COVID-19 IN POLAND AS A FORM OF ORGANISATIONAL SPACE

Janusz RYMANIAK

WSB University in Gdańsk, Department of Management; jrymaniak@wsb.gda.pl, ORCID: 0000-0002-0269-7492

Purpose: The aim of the study is to analyze and evaluate the massive expansion of organizational spaces resulting from the creation of remote workplaces during the COVID-19 period in employees' homes.

Design/methodology/approach: The work uses mixed methods with the use of the spatial trend of Work Design theoretical orientation. A spatial model of work stations was constructed and the correlation between the model and financing, time of use and the results of the tested variant of work organization was statistically verified.

Findings: The COVID-19 period is dominated by the transfer of tasks from stationary positions, which mainly have repetitive nature. This is matched by the adaptation of physical space and cyberspace (technology), with various levels of social space features of remote workplaces. Statistical verification shows strong correlations between the features of positions and the determinants of the use of remote work as a variant of work organization.

Research limitations/implications: Subjectivity of the analysis due to the use of mixed methods in the part of qualitative research. Future research should focus on (1) work in the context of multifunctionality of the home, (2) creating new work rules, e.g. new time-space patterns of work, and (3) developing criteria for creating remote workplaces at home.

Practical implications: The results of the study can be used as input data for the design of remote workplaces in organizations.

Originality/value: The work fills the research gap in the design of work forms, showing the need for a modular approach to the development of work systems.

Keywords: remote workplaces, work design, organisational space, COVID-19 pandemic, modularity.

Category of the paper: research paper.

1. Introduction

The main instruments used to fulfil the objectives of the "Europe 2020" strategy in scope of smart and sustainable growth include new ways of working (NWW), which are focused on proposals of working without geographical, temporal, and organisational restrictions (Pot et al, 2012, pp. 173-190). The research results demonstrate extensive distribution of teleworking throughout Europe, but – despite the considerable impulse of ICT development – it is uneven (Gschwind, Vargas 2019, pp. 36-75). Before the pandemic, Poland was a country demonstrating a low, 10% share of teleworking (Vargas-Llave, Weber, Avogaro, 2020), and 30% during the pandemic, which did not ranking change her the position in Europe (Sostero et al., 2020, pp. 21-22). The new conditions resulted in the nomadization of work. During the pandemic, companies, their offices and departments suddenly "depopulated", and instead modules of organizational space (workplaces) in employees' homes were created. A practical research problem of expanding organizational space has arisen.

2. Review of literature

Organisational space is still one of the categories, which are looking for their theoretical identities and are more the subject of exploration than the subject of exploitation. The main field of research is oriented towards the processes of understanding and experiencing everyday professional lives, their embodiments, rhythms, and limits, referring mainly to the triad concept of H. Levebre, i.e. to spatial practices, spatial representation, and representation space (Kingma, Dale, Wasserman, 2018, pp. 1-25; Pachura, 2016, pp. 52-55). A solution beyond the limits of Aristotle's "container" of various locations of activities in the direction of relations i.e. variables – was proposed, as well as those discursively created through strategies and practices specific to transnational corporations (Yeung, 2005, pp. 219-240). Another direction sees combination of the connected relations and the existing networks, which are subject to changes as continuously emerging spatial structures and mental maps in the mentalities of managers located, dispersed, and experienced in space and beyond (Törnroos, Halinen, Medlin, 2017, pp. 10-19). The shortage of specifics and organisational research led to references to medical consultations in deep hospital corridors or mobilisation of inmates as the dominating, descriptive, and often intuitive ways of using space (Kreiner, 2010, pp. 200-212). The contemplations in question constitute a generic specification (forced remote work) of the previous empirical research of organisational space (Pachura, 2021). The following research questions were posed:

2. What is the impact of expectations towards financing, application time, and results on the modules of remote workplaces?

3. Research methods

The research was conducted in scope of the project of the international REMOTE WORK IN ORGANISATIONAL AND SOCIAL DIMENSIONS pilot research, which is also being carried out in Spain and Lithuania (Rymaniak et al., 2021). The pilot research package uninvolved development of a separate qualitative and quantitative research questionnaire. The individual elements were subject to evaluation with the Likert 5-point scale where the point values are as follows: 1 = "definitely not", 2 = "probably not", 3 = "indifferent" ("neither yes or no"), 4 = "probably yes", 5 = "definitely yes". The results were converted to structural coefficients (5 points = 1).

The presented results concern the opinions of Polish employees. The research was conducted between 14.04 and 10.06.2020 on the sample of 467 positively verified questionnaires. The selected sample was random (CAWI technique) and purposive in order to obtain information from representatives of selected professional groups. The obtained sample cohesion result was high as the Cronbach's alpha coefficient reached 0.720 for workstations. The research involved correlation techniques (component and multiple, Pearson's) aimed to establish concomitance of effects.

A typical respondent in the studied sample was a woman (72%), in the age group 21-30 years (54%) and 31-40 years (31%), work experience 6-10 years (46%), higher education (68%), being a local government employee (58%). Thus, the research profile of the sample shows the point of view of working at home mainly from the perspective of female workers, i.e. organizers of home life.

4. Remote workplaces space model

The research results were presented in form of a spatial structural model (figure 1). The first block establishes the characteristics of the attribute space in question divided by location, assignments, and time. Allotment of a workplaces in space (PL1) is declared by over 75% of respondents, 36% as an exclusive element. Simultaneously, only 26% of respondents declare a positive impact of having work interact with other functions in the limited, multifunctional space at home (PL2). The evaluation of working space by location characteristics indicates that

one in four respondents are fully satisfied while one in three has conditions to have an exclusive workstation and three in four have potential for such exclusion. Only one in four respondents reported unsatisfactory home office conditions.

Assignments performed in scope of remote work see transition of the work distribution model from onsite workplaces. According to the research, 79% of the respondents perform the same assignments at home (T1) and 70% of the respondents perform their broadly understood scope (T2). Only 35% declare the full range due to the fact that remote work does not involve auxiliary organisational assignments due to the physical absence of employees from the organisation.

According to the time parameter analysis, 44% of the respondents work the same hours as under an onsite system (TB1) where only one in five employees spend more time on performance of assignments than in the workplace (TB2). Simultaneously, 57% declare obedience of the timetable effective in the workplace (TB3). The last two parameters, which cover 20-57% respondents, demonstrate the validity and significance of the actions of European Union authorities aimed at establishing the standards for flexible work through the R2D- Right to Disconnect (Vargas-Llave, Weber, Avogaro, 2020).

The second block establishes the parameters of cyberspace, which includes hardware, exclusivity, status, and distance to the workplace. Over 50% of respondents declare exclusive hardware (CS1) with information and communication comfort ensured for 75% of respondents (CS2). This means that half of the respondents had the spatial and technical conditions at home to perform their work with ease. Only one in eight employees saw working from home as elevation of the social status (CS3) a 44% of respondents pointed out that the factor of physical distance from the workplace is insignificant (CS4). The physical distance factor is concerning to managers preferring "onsite management" with physical contact with the employee (Rymaniak et al, 2021, p. 17). According to the research of this group, the respondents are expecting more temporary than permanent changes in work organisation such as breaks, downtime, hybrid work, etc. In relation to literature (Kuntz 2021, p. 188-215; Wang, Liu, Qian, Parker, 2021, p. 16-59), it was established that Polish employees place more value on material and structural support than human and management assistance (Rymaniak, Lis 2021, pp. 247-250).

The third group is composed of social space characteristics grouped into Family-Work and Work-Family relations. In scope of the family impact group, it was established that two-thirds of the respondents declare that their work takes precedence over their family organisation and life (FW1) and 30% of work-related events involve a family member (FW2). Furthermore, one-third of the respondents see working at home as a mental challenge (FW3). 66% of employees try to perform their assignments in nominal working hours only (WF1), which is confirmed in the similar scope of having work taking precedence over personal life. 52% of respondents declare obedience of time distribution into work and other (WF2) due to the fact that forced work at home makes it easier for 40% to implement the new working system (WF3).

9,9 13,3 7,3 7,1 9	3 2,81	6,6		14,5	100,0
24,0 19,9	22,5 13,3 33,2 24,4	31,0 10,1 25,3	35,1	21,2 36,4	80,0 EDECINITELY VES
38,3 32,3 38,3 19,3	21,8 26,3 ,8	25,3			DRORARLY VFC
12,2 43,7 43,7 43,7 43,7 43,7 43,7 43,7 43,7 43,7 43,7 43,6 43,6 43,6 41,1 14,6 47,1	17,6 ammunt 27,4 27,4 27,4 27,4 27,8 27,8 27,8 27,8 27,8 27,8 27,8 27,8	25,9 Minimum 21,4 Minimum 23,6	34,7	39,2	40,0 60,0
7,5 7,5 7,111,12 7,8 7,111,12,3 7,111,111,3 7,111,12,3 7,111,12,3 7,111,12,3 7,111,12,3 7,111,12,3 7,111,111,12,3 7,111,111,12,3 7,111,111,12,3 7,12,111,111,111,12,12,12,111,111,111,12,12		33,4 33,4 11,5,8 00000000	■ 6,2 ■NUMUNY 15,0 NUMUNT 9,0 13,6 NUV 8,4 NUV_ 9,4	13,9 13,9 10,3 NNY 10,3 NNY 4,3 J	20,0 % DRORABLY NOT
ADAPTATION 7,5 MIIII RIGOR 11,3 MIII DIVISION 5,6 MIIIIII MENTAUTY 5,6 MIIIIIII 10,9 MIIIIIII SUPERIORITY 4,5 MIIIIIIII	LOCATION 10,7 10,7 19,3 STATUS 19,3 COMFORT 3,0 WIMIN 10,9 WI EQUIPMENT 15,8	SCHEDULE I5,8 OVERTIME I3,5 STANDARD I3,5	TASK RANGE 6,2 MUNININ IDENTITY 13,6 MW 8,4 M	OVERLAPPING 13,9 SEPARATION 9,9 MIN	0,0 DIFFINITFIV NOT

Figure 1. Structure of spatial features of pandemic workplaces.

Source: research results

The obtained profile of research results indicates that there is considerable potential for allocating working space with a rather unfavourable impact of work on the existing system of functions and distribution of work at home, as well as an attempt to reproduce a stationary work system at home. Employers engage various practices to burden employees with work and establish performance deadlines while employees try to preserve standard working hours and eliminate the impact of ongoing and unpredictable "work disturbances" resulting from various problems at home. According to the comparison of data on space, hardware, and working hour exclusively, the level of efficient performance comes to approximately 50%. Other obligatory activities like the work of other household members, school classes, and raising children produce temporal and qualitative "turbulences". In this situation, transition to the "algorithmic management" system and teleconferences (Jaakson, Kallaste, 2010, pp. 196-209; Perin, 2002, p. 41) constitute the option of missing physical closeness and presence of superiors desired by employees.

5. Discussion of research findings

5.1. Financing and spatial aspects of remote workplaces

The aspects established as financing cover the costs of development and maintenance of home offices, preservation of operating order, and compensation for use of the space at home. According to statistical research (table 1), there is a considerable correlation between financing characteristics and workplaces. It is directly proportional to allocation of space at home for work and inversely proportional to the accumulation of home functions. Therefore, it can be stated that the expectations concern not only prices, but also the quality associated with isolation and comfort of performance (higher price for the employee having better working conditions).

Preservation of the operating order also demonstrates an important relation in the material space group with remote and onsite assignment identity characteristics and intensiveness of work. This means that employees pay attention to the practical aspects of hazards. Most jobs transferred during the time of COVID-19 to homes are repeatable and routine in nature. Employers may be facing the challenge of not only not disrupting the rhythm of work, but also ensuring operating order of numerous workstations distributed among places of residence (hardware, software, etc.).

The relation of financing with cyberspace characteristics appears on a smaller scale. The attribute of compensation demonstrates a relation with the characteristics of hardware and communication while creation of workstations demonstrates a relation with the status of the employee. This is confirmed by the legal regulations governing workstation equipment to be provided by the employer on one hand and demonstrates the potential for new sources of employee and conflict diversity on the other (Ortiz-Lozano, Martínez-Morán, Fernández-Muñoz, 2021).

The only impact non-relevant in establishment of statistic dependencies with the Work-Family characteristics is that of creation of workstations on creation of a dominating function at home. Other financing characteristics determine work superiority, "omnipresence at home" (involvement of household members in various aspects of work), and the need to eliminate mental barriers (work as a new challenge in occupation of space and relations at home).

Table 1.

Correlations between the features of financing, organization and results and the parameters of the organizational space of remote workplaces in the first year of the COVID-19 pandemic in Poland

s & items	•		NG	ORGANI		11120	ULTS
	equipment	service	compensation	periodicity	stability	efficiency	disconnect
MATERIAL SPACE							
Separation	0,215**	0,185**	0,192**	0,009	-0,029	-0,068	-0,034
Overlapping	-0,104*	-0,110*	-0,072	-0,442**	0,442**	0,442**	0,442**
dentity	0,069	0,120**	0,030	0,217**	0,290**	0,358**	0,022
Fask range	0,024	0,037	0,012	0,196**	0,250**	0,358**	0,026
Standard	-0,065	-,0,064	0,035	0,295**	0,259**	0,442**	0,087
Overtime	0,050	0,094**	0,067	-0,290**	-0,125**	-0,038	0,008
Schedule	-0,061	-0,064	-0,013	0,261**	0,187**	0,253**	0,096
CYBERSPACE							
Equipment	0,011	0,029	0,146**	-0,053	-0,032	0,030	0,138**
Comfort	-0,059	-0,069	-0,083*	0,232**	0,204**	0,348**	0,090*
Status	-0,143**	-0,072	0,029	0,021	0,217**	0,058	0,089**
Location	0,005	-0,012	-0,046	0,089*	0,170**	0,073	0,037
L SPACE							
Superiority	0,014	0,085*	0,154**	-0,207**	-0,055	-0,083	0,105*
Complicity	0,194**	0,118**	0,087*	-0,128**	-0,028	-0,137**	0,080
Mentality	0,125**	0,196**	0,251**	-0,260**	-0,186**	-0,322**	-0,063
Division	0,073	0,058	0,123**	-0,098*	-0,044	-0,198**	-0,062
Rigor	0,033	-0,083*	0,040	0,204**	0,170**	0,285**	0,119**
Adaptation	-0,111**	-0,089*	0,094*	0,213**	0,343**	0,384**	0,070
	Dverlapping dentity Cask range Standard Standard Overtime Schedule SPACE Equipment Comfort Status Location SPACE Superiority Complicity Mentality Division Rigor Adaptation	Dverlapping -0,104* dentity 0,069 Cask range 0,024 Standard -0,065 Overtime 0,050 Schedule -0,061 SPACE -0,061 SPACE -0,011 Comfort -0,059 Status -0,143** Jocation 0,005 SPACE	Overlapping -0,104* -0,110* dentity 0,069 0,120** Cask range 0,024 0,037 Standard -0,065 -,0,064 Overtime 0,050 0,094** Schedule -0,061 -0,064 Overtime 0,011 0,029 Schedule -0,059 -0,069 Gaupment 0,011 0,029 Comfort -0,059 -0,069 Status -0,143** -0,072 Jocation 0,005 -0,012 SPACE -0,014 0,085* Complicity 0,114** 0,118** Mentality 0,125** 0,196** Division 0,073 0,058 Gor 0,033 -0,083*	Dverlapping -0,104* -0,110* -0,072 dentity 0,069 0,120** 0,030 Cask range 0,024 0,037 0,012 Standard -0,065 -,0,064 0,035 Overtime 0,050 0,094** 0,067 Schedule -0,061 -0,064 -0,013 SPACE -0,069 -0,083* Equipment 0,011 0,029 0,146** Comfort -0,059 -0,069 -0,083* Status -0,143** -0,072 0,029 Jocation 0,005 -0,012 -0,046 SPACE	Overlapping -0,104* -0,110* -0,072 -0,442** dentity 0,069 0,120** 0,030 0,217** Cask range 0,024 0,037 0,012 0,196** Standard -0,065 -,0,064 0,035 0,295** Overtime 0,050 0,094** 0,067 -0,290** Overtime 0,061 -0,064 -0,013 0,261** Overtime 0,011 0,029 0,146** -0,053 Sendert -0,059 -0,069 -0,083* 0,232** Status -0,143** -0,072 0,029 0,021 Jocation 0,005 -0,012 -0,046 0,089* SPACE -0,014 0,085* 0,154** -0,207** Complicity 0,14 0,085* 0,154** -0,207** Complicity 0,14 0,085* 0,154** -0,207** Complicity 0,14 0,085* 0,154** -0,260** Overtision 0,073 </td <td>Overlapping -0,104* -0,110* -0,072 -0,442** 0,442** dentity 0,069 0,120** 0,030 0,217** 0,290** Cask range 0,024 0,037 0,012 0,196** 0,250** Standard -0,065 -,0,064 0,035 0,295** 0,259** Overtime 0,050 0,094** 0,067 -0,290** -0,125** Schedule -0,061 -0,064 -0,013 0,261** 0,187** SPACE </td> <td>Dverlapping -0,104* -0,110* -0,072 -0,442** 0,442** 0,442** dentity 0,069 0,120** 0,030 0,217** 0,290** 0,358** Cask range 0,024 0,037 0,012 0,196** 0,250** 0,358** Cask range 0,024 0,037 0,012 0,196** 0,259** 0,442** Overtime 0,050 0,094** 0,067 -0,290** 0,125** -0,038 Overtime 0,050 0,094** 0,067 -0,290** 0,125** -0,038 Schedule -0,061 -0,064 -0,013 0,261** 0,187** 0,253** SPACE -0,064 -0,013 0,261** 0,187** 0,253** Status -0,143** -0,072 0,029 0,021 0,217** 0,058 cocation 0,005 -0,012 -0,046 0,089* 0,170** 0,073 Complicity 0,014 0,085* 0,154** -0,207** -0,028</td>	Overlapping -0,104* -0,110* -0,072 -0,442** 0,442** dentity 0,069 0,120** 0,030 0,217** 0,290** Cask range 0,024 0,037 0,012 0,196** 0,250** Standard -0,065 -,0,064 0,035 0,295** 0,259** Overtime 0,050 0,094** 0,067 -0,290** -0,125** Schedule -0,061 -0,064 -0,013 0,261** 0,187** SPACE	Dverlapping -0,104* -0,110* -0,072 -0,442** 0,442** 0,442** dentity 0,069 0,120** 0,030 0,217** 0,290** 0,358** Cask range 0,024 0,037 0,012 0,196** 0,250** 0,358** Cask range 0,024 0,037 0,012 0,196** 0,259** 0,442** Overtime 0,050 0,094** 0,067 -0,290** 0,125** -0,038 Overtime 0,050 0,094** 0,067 -0,290** 0,125** -0,038 Schedule -0,061 -0,064 -0,013 0,261** 0,187** 0,253** SPACE -0,064 -0,013 0,261** 0,187** 0,253** Status -0,143** -0,072 0,029 0,021 0,217** 0,058 cocation 0,005 -0,012 -0,046 0,089* 0,170** 0,073 Complicity 0,014 0,085* 0,154** -0,207** -0,028

Notes: codes for groups of space dimensions components: PL – place; T – tasks; TB – time based; CS – cyberspace; FW – family-work; WF – work-family. Levels of significance ** p < 0.1; * p < 0.05. Statistically significant features are bolded.

Source: research results.

However, the strength of the relation indicates significance of mainly the expected compensation for mental barriers. The relations with Work-Family characteristics demonstrate a lesser scope of significance. In this group, financing is demonstrated by the full scope of impact on adaptation of the new home office system dictated by isolation (lockdown). Compensation is also expected for "distribution of working hours" (time divided into working and home time) and the impact of operating order on expected obedience of working hours. However, the strength of all of the aforementioned relations in this group is low.

Evaluation of the coexistence of financing with spatial characteristics demonstrates a high -72% - significance of relations with social space (including 89% with Family-Work characteristics) and an average significance of relations with material space (33%) and cyberspace, which covers 25% of statistically significant relations.

5.2. Temporality and spatial aspects of remote workplaces

The second element of the research saw verification of the impact of intervals established with the parameters of application of two organisational variations: temporality and stability. Both variations demonstrate statistical significance with all characteristics of material space with exception of allotment of workstations, which constitutes 86% of the researched relations. The only differences appear in significance (strength of the relation). The variation of temporality demonstrates a higher level of dependence with temporal characteristics (distribution, intensity, schedule), whereas the long-term (permanent) variation sees a higher significance being demonstrated by the characteristics of location and assignments (positive impact of overlapping work and home space, generic identity of assignments, scope of assignments).

Relations with cyberspace parameters do not demonstrate significant relations of both variations with exclusive allotment of hardware and the short-term variation with the employee's status. However, there is a significant relation with working comfort (defined as uninterrupted quality connection, access to databases, etc.) and "despatialization" of work, i.e. elimination of the obligation to work onsite (Taskin, 2010, pp. 61-76).

There is a diverse range in relations with social space. The temporal variation demonstrates statistical significance with all parameters. However, the permanent variation requires breaking through mental barriers in the Family-Work group, obedience of working hours, and adaptation of work to the home location in the Work-Family group. Therefore, the difference between the forced and sudden temporary variation during the COVID-19 period and the planned and prepared long-term variation is 50% in the quantity of the researched relation. However, it should be noted that a truly significant level of dependence concerns adaptation of work to the conditions at home.

5.3. Results and spatial aspects of remote workplaces

The research of results covered the organisational aspect, i.e. the level of performance efficiency at home, and the employee aspect concerning the employee's right to disconnect. The relations of efficiency with material space do not demonstrate a statistically significant relation with the exclusivity of the workstation and work intensity. The remaining characteristics concerning the location, assignments, and time demonstrate a strong and statistically significant level of the coexistence relation. This concerns 71% of the research relations, indicating the highest level in all of the research, i.e. strong dependence of the effects on the material space of working at home.

The research of relations with cyberspace demonstrates strong coexistence of efficiency on comfort, which is understood as substantive security of performance. The remaining characteristics are statistically insignificant. The relations with social space characteristics concern almost all relations (83%). The practically high level of efficiency does not require only assignment to the requirements of work of the organisation and rhythm of the household community.

The employee aspect concerns research of the employee's right to disconnect, which is the subject of interest of European legal regulations of the Work-life Balance Directive (2019/1158/EU). The researched characteristic demonstrates a statistically significant relation with the overlapping of workspace and other household functions. It demonstrates the greatest coexistence (75% of relations) with cyberspace characteristics where only the missing spatial relation with the workplace is insignificant. In scope of social space, it demonstrates a significant relation with the characteristics of subordination of household order to work and obedience of working hours. Together, this constitutes six statistically significant relations out of the 17 researched ones, i.e. 35% of the statistical relations.

6. Conclusions and research directions

Remote work in Poland has a historical tradition in the form of homework, which is legally regulated and is its substantive continuation (Sidor-Rzadkowska, 2021, p. 59; Spytek-Bandurska, 2015, p. 420). The essence of work is changing, as well as its conditions, forms and locations (Kopertyńska, 2021, pp. 29-42). In practice, Poland is in the group of countries of the "promotional approach" that does not interfere with the negative effects of using ICT (Vargas-Llave, Weber, Avogaro, 2020, p. 14).

Therefore, replacing the "free lending" of home space during the COVID-19 period with various, remote forms of work organization requires the identification of compensations, determining the duration and standards. A spatial model was adopted for the research, in which the positions are simple modules (Rymaniak, Nogalski, 2018, pp. 763-769), often composed of working hours for several hours a day, with integrally and functionally connected features of physical, social and cyberspace.

According to the research results, the profile of the researched modules indicates implementation of stationary work systems in a remote environment. The efficiency of various spatial dimensions indicates the average level of fulfilment at 50%, which results mainly from the obligation to harmonize numerous functions performed simultaneously in a limited space at home. The research indicates the expectations of employees in scope of financing, occupation of space at home by the organisation, and technical equipment, and compensation for creation of new "mental barriers" produced by working at home. The periodic variant sanctions the

temporariness, while the permanent variant shows the expectations of duplication, i.e. duplication of stationary, task division of labor. Respondents prefer the periodical variation, especially in social space. The research of efficiency grades indicates a significant impact of material and social space and – in scope of employee rights – the right to disconnection coexists on a statistical significance mainly with the aspects of cyberspace.

In future solutions, non-job factors should be taken into account. It was indicated that the willingness to continue teleworking depends to a large extent on three factors: the type (area) of activity, the employee's age and the general assessment of the experience of people involved in "remote" work (Georgescu et al., 2021, pp. 669-682). It should also be remembered that "going to work" is driven almost to the same extent by personal and social interests as by financial needs, alternative places to rest from work or home burdens, or by maintaining historically shaped orders and systems of paid (factory) and unpaid work at home (Perin, 2002, pp. 40-56). Further research must therefore also take into account cultural contexts. An important element is the creation of new work patterns, especially the space-time rhythms of work. The rhythms of individual (tele) work are increasingly dependent on coordination and compliance with the rhythms of others, which also makes it easier to overcome the lack of physical closeness and visual control (Thulin, Vilhelmson, 2021, pp. 1-20). This will create the next level of modern "domestication" of remote work.

References

- Georgescu (Crețan), G.C., Gherghina, R., Duca, I., Postole, M.A., Constantinescu, C.M. (2021). Determinants of Employees' Option for Preserving Teleworking After the COVID-19 Pandemic. *Amfiteatru Economic*, Vol. 23, No. 58, pp. 669-682 doi: 10.24818/EA/2021/58/669.
- Gschwind, L., Vargas, O. (2019). Telework and its effects in Europe, In: J.C. Messenger (Ed.), *Telework in the 21st Century. An Evolutionary Perspective* (pp. 36-75). Cheltenham-Northampton: Edward Elgar Publishing.
- 3. Jaakson, K., Kallaste, E. (2010). Beyond flexibility: reallocation of responsibilities in the case of telework. *New Technology, Work and Employment, Vol. 25, No. 3*, pp. 196-203.
- Kingma, S.F., Dale, K., Wasserman, V. (2018). Introduction: Henry Lefebvre and organisation studies. In: S.F. Kingma, K., Dale, V. Wasserman (Eds.), *Organisational Space and Beyond: The Significance of Henry Lefebvre for Organisation Studies* (pp. 1-24). Routledge Studies in Management, Organization and Society. New York: Routledge. Retrieved from https://doi.org/10.4324/9781315302430 10.02.2022.
- 5. Kopertyńska, M.W. (2020), Praca w nowych uwarunkowaniach funkcjonowania organizacji. In: M.W. Kopertyńska (ed.), *Zarządzanie pracą w zmieniających się*

uwarunkowaniach funkcjonowania organizacji (pp. 29-42). Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.

- Kreiner, K. (2010). Afterword. Organizational spaces: from 'matters of fact' to 'matters of concern'. In: A. van Marrewijk, D. Yanow (Eds.), *Organizational Spaces. Rematerializing the Workaday Work* (pp. 200-212). Cheltenham-Northampton: Edward Elgar.
- Kuntz, J.C. (2021). Resilience in times of global pandemic: Steering recovery and thriving trajectories. *Applied Psychology: An International Review, Vol.70, Iss. 1*, pp. 188- 215, doi: 10.1111/apps.12296.
- Ortiz-Lozano, J.M., Martínez-Morán, P.C., Fernández-Muñoz, I. (2021), Difficulties for Teleworking of Public Employees in the Spanish Public Administration. *Sustainability*, *13*, 8931. https://doi.org/10.3390/su13168931.
- 9. Pachura, P. (2016). *O przestrzeni w zarządzaniu. Studium metodologiczne*. Warszawa: PWN.
- 10. Pachura, P. (2021). *Trójprzestrzenie. Modelowanie teorii przestrzeni organizacji.* Warszawa: Scholar.
- Perin, C. (2002). Work, space and time on the threshold of a new century. In: P.J. Jackson, J.M. van der Wielen (Eds.), *Teleworking: international perspectives. From telecommuting to the virtual organization* (pp. 40-55). London-New York: Routledge. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=0041B02050EDD6AA1A2FBD 38428A4632?doi=10.1.1.468.5552&rep=rep1&type=pdf, 10.02.2022.
- Pot, F., Dhondt, S., de Korte, E., Oeij, P., Vaas, F. (2012). Workplace innovation in the Netherlands. In: I. Houtman (ed.), *Work Life in the Netherlands* (pp. 173-187). Hoofddorp: TNO Innovation for Live. Retrieved from http://dx.doi.org/10.1016/j.indmarman. 2016.06.008.
- Rymaniak, J., Lis, K. (2021). Praca zdalna w początkowym okresie pandemii świadomość zmian a relacje organizacyjne. In: W.J. Paluchowski, L. Bakiera (eds.), *Psychospołeczny obraz pierwszej fali pandemii COVID-19 w Polsce* (pp. 243-250). Poznań: Wydawnictwo Naukowe UAM.
- Rymaniak, J., Lis, K., Davidavičienė, V., Pérez-Pérez, M., Martínez-Sánchez, Á. (2021). From stationary to remote: Employee risks at pandemic migration of workplaces. *Sustainability, Vol. 13, No. 13, 7180.* doi: 10.3390/ su13137180.
- Rymaniak, J., Nogalski, B. (2018). Modularity in Seaport Management: Identification of the Research Problem. In: T. Ahram, W. Karwowski, R. Taiar (Eds.), *Human Systems Engineering and Design* (pp. 763-769). Cham: Springer Nature Switzerland AG. doi.org/10.1007/978-3-030-02053-8_116.
- 16. Sidor-Rządkowska, M. (2021). *Kształtowanie przestrzeni pracy. Praca w biurze, praca zdalna, coworking.* Warszawa: Wolters Kluwer.
- 17. Sostero, M., Milasi, S., Hurley, J., Fernandez-Macías, E., Bisello, M. (2020). *Teleworkability and the COVID-19 crisis: a new digital divide*? RC Working Papers Series

on Labour. *Education and Technology*, 5. Seville: European Commission. Retrieved from https://euagenda.eu/upload/publications/wpef20020.pdf, 10.02.2022.

- 18. Spytek-Bandurska, G. (2015). *Telepraca jako nietypowa forma zatrudnienia w Polsce. Aspekty prawne i społeczne*. Warszawa: Oficyna Wydawnicza ASPRA-JR.
- 19. Taskin, L. (2010). « La déspatialisation » Enjeu de gestion. *Revue française de gestion, Vol. 3, No. 202,* pp. 61-76. doi: 10.3166/rfg.202.61-76.
- 20. The Work-life Balance Directive16 (2019/1158/EU). Official Journal of the European Union L 188/79, 12.7.2019
- 21. Thulin, E., Vilhelmson, B. (2021). Pacesetters in contemporary telework: How smartphones and mediated presence reshape the time–space rhythms of daily work. *New Technology, Work and Employment, Special Issue*, pp.1-20. doi: org/10.1111/ntwe.12224.
- 22. Törnroos, J.-A., Halinen, A., Medlin, Ch.J. (2017). Dimensions of space in business network research, *Industrial Marketing Management*, Vol. 61. pp. 1-10.
- 23. Vargas-Llave, O., Weber, T., Avogaro, M. (2020). *Industrial relations Right to disconnect in the 27 EU Member States*. European Foundation for the Improvement of Living and Working Conditions (EUROFUND).
- 24. Wang, B., Liu, Y., Qian, J., Parker, S.K. (2021). Achieving Effective Remote Working During the COVID-19 Pandemic: A Work Design Perspective, *Applied Psychology: An International Review*, Vol. 70, Iss. 1, pp. 1-44. doi: 10.1111/apps.12290.
- 25. Yeung, H.W.-C. (2005). Organizational space: a new frontier in international business strategy? *Critical perspectives on international business Vol. 1, No. 4,* pp. 219-240. doi: 10.1108/17422040510629728.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

TRENDS AND CHALLENGES IN TALENT MANAGEMENT – MIND MAP

Monika SIPA

Czestochowa University of Technology, Częstochowa; monika.sipa@pcz.pl, ORCID 0000-0002-1634-9368

Purpose: The aim of the paper is to identify leading trends and challenges in talent management research through knowledge mapping.

Design/methodology/approach: The paper presents results of the analysis of bibliometric data of international literature, taking into account time horizon, frequency and problem scope. The main source of data was Web of Science (WoS) and Scopus data bases. Excel spreadsheet, software VOSviewer 1.6.18 and data analysis tools available in Web of Science and Scopus data bases were used to conduct the analysis. A total of 2141 publications on talent management indexed in Scopus data base between 2001 and 2022 were identified.

Findings: The main findings of the study are as follows: (i) research related to talent management has been developing quickly in the global academic community, especially over the last decade; (ii) pioneering subjects in this research comprise four representative areas concentrated on main key words such as: human resource management, information management, management and leadership; (iii) the latest trends in the research into the aspects of talent management mainly deal with the context of digital transformation, artificial intelligence, big data, business development, skills, job satisfaction, attention.

Research limitations/implications: The present study only concentrated on the leading trends in the area under study, with the analysis limited to data from Scopus data base. It would be recommendable to conduct further, in-depth studies using multiple data bases. As far as the research methodology is concerned, a more detailed analysis of citations could be prepared. It is worth analysing the number of paper downloads from the data base or the co-occurrence of bibliographic links or the relationships between authors or scientific centres.

Originality/value: The added value of the article is the answer to the questions, how has the academic research into talent management evolved over the last twenty years and what are the leading research areas and new trends in this area.

Keywords: talent management, bibliometrics, scientific mapping, co-occurrence analysis.

Category of the paper: Research paper.

1. Introduction

Talent management (TM) is a complex process of systematic attraction, identification, development, retention and use of people with high potential who are particularly valuable for an organisation (Lanvin, Evans, Rodriguez-Montemayor, 2017). Lewis and Heckman (2006) distinguish three different perspectives of talent management: the first one defines talent management as a set of typical practices, functions and actions in the area of human resources, such as recruitment, selection, development, career management and succession; the second one mainly focuses on the concept of talent pool, while the third perspective concentrates on talent - irrespective of organisational boundaries or specific job positions. The main strategy of talent management is seeking, defining and nurturing skills that will be needed to maintain future competitive advantage (Lanvin, Evans, Rodriguez-Montemayor, 2017).

Dynamic changes impact the reality, including the functioning of enterprises and economies. Automaton and digitalisation, which enable reduction of costs, productivity increase and innovation stimulation, combinations of information technologies, global networks and algorithms create new business and social models (Gorzeń-Mitka, 2019; Wyrwa, Barska, Jędrzejczak-Gas et al., 2020). Also the COVID-19 pandemic and lockdown, followed by employees' return to work in office, have led to change in the attitudes of employees and employers. One can see an evaluation of the demand for certain skills, competencies and knowledge which will enable entities to develop and be competitive. Accordingly, it is necessary to adopt new management tactics in which people and their talents become a strategic source of competitive and economic advantage. Under such conditions, entrepreneurial success requires new qualitative parameters, such as ability, perseverance to follow changes and knowledge of the surrounding world and business (Parkitna, 2020).

Managers indicate a clear relationship between the work of talent and the quality and financial performance of the projects run by them. The impact of talent on the shape and quality of the other human resources is also recognised (Pocztowski, 2016). Governments, enterprises as well as other organisations interested in talent management need quantitative tools informing about undertaken activities and supporting the design and implementation of appropriate policies, for example in the area of education, employment or migration.

The necessity of undertaking research on talent management is made more urgent by such factors as: concerns about loss, migration and reduced supply of talent due to changes on the labour market (Pocztowski, 2016). One should also add: increasing competitive requirements, concerning demographic trends, movement towards knowledge-based management, change in the attitude of individuals functioning on the labour market, change in the behaviour of individuals entering the labour market and changes in the approach to own career modelling (Listwan, 2005). All of these elements contribute to multifaceted view of talent management and unwavering interest in this subject among researchers.

Research into talent management is conducted at micro, mezo and macro levels, however that at the organisational level dominates. Little attention is given to research at individual level (e.g. King, 2016, Swailes, Blackburn, 2016) or at macro level (e.g. Khilji, Tarique, Schuler, 2015; Vaiman, Sparrow, Schuler et al., 2018). Discrepancies in the interpretation of and approach to the problem of talent management are noted by Al Arissa, Casciob and Paauwec, among others (2014). As indicated by Michaels, Handfield-Jones, Axelrod (2001), change in the approach to talent management is determined by the conditions in which enterprises function.

Given the multidimensionality of the subject of talent management, knowledge identification within the area of the examination of current trends in talent management is vital for further development of this area. The aim of this paper is to identify the leading research directions in and emerging challenges of talent management using various techniques of bibliometric analysis.

The analysis conducted in the study seeks to answers two research questions:

- RQ1: How has the perspective of academic research into talent management evolved over the last twenty years?
- RQ2: What are the leading research areas and new trends in talent management research?

The paper presents results of the analysis of bibliometric data of international literature, taking into account time horizon, frequency and problem scope. The main source of data was Web of Science (WoS) and Scopus data bases. The results of the studies were presented in the form of knowledge map (Xin, Wen Long, Hai, 2018). Excel spreadsheet, software VOSviewer 1.6.18 and data analysis tools available in Web of Science and Scopus data bases were used to conduct the analysis.

2. Data and methodology

The source of the initial data for the study was WoS and Scopus data bases. By using the searching mechanisms of these data bases, scientific publications containing the term "talent management" in the title, abstract or key words were identified.

The research method employed to assess publications on talent management was bibliometric analysis. It had been used by numerous researchers (Gudanowska, 2017; Gorzeń-Mitka,2020; Lobonţ, Purcariţa, Vatavu et al., 2021). Excel spreadsheet, software VOSviewer 1.6.18 and data analysis tools available in Web of Science and Scopus data bases were used to conduct the analysis. The analysis was performed based on bibliographical data retrieved on 5 April 2022.

The study was carried out in several stages:

- 1. Determining the number of publications related to the research area under study available in WoS and Scopus data bases, and assessing changes in their number over time.
- 2. Identifying the dominant subject areas to which the publications were classified based on Scopus data base.
- 3. Identifying the countries/regions and scientific centres and universities of key importance for the research area under study based on Scopus data base.
- 4. Identifying the publications of key importance for the research area under study based on Scopus data base.
- 5. Identifying research sub-areas based on the connections in the co-occurrence of key terms with the term "talent management" in Scopus data base using the VOSviewer computer programme.

For constructing and visualising bibliometric networks (scientific mapping), the software VOSviewer - Visualizing scientific landscapes, version 1.6.18, was used, which is available at http://www.vosviewer.com.

The software is a widely used tool in bibliometric studies, as it makes it easier to understand the field under study, delivering results in the form of bibliometric maps, providing information on the structure and network of authors, typology of journals, institutions, research centres or universities interested in a given area. Scientific mapping can be performed based on citations, bibliographic links or co-author relationships.

3. Analysis results

The analysis started with the filtration of Web of Science and Scopus data bases as well as analysis of time series reflecting the number of contained publications. The first publications addressing the subject under study were indexed in Scopus data base in 2001, and in Web of Science data base - in 2002. Therefore, the analysis covered the period 2001-2022. The number of papers containing references to the concept of talent management available in WOS data base was 1791, whereas in the case of Scopus data base, there were 2141 such publications (Figure 1). The results were sorted and partially aggregated.

The number of the publications indexed in Scopus and WoS data bases was small until 2005 and 2007 respectively. In the years that followed, a dynamic increase was visible in the number of indexed publications tackling the subject under study. Negative growth was only recorded in the years 2009, 2012 and 2020 for both of the data bases and for 2014 in the case of Scopus data base. The number of indexed publications exceeded 1000 after 17 years in Web of Science data base and after 16 years in Scopus data base.

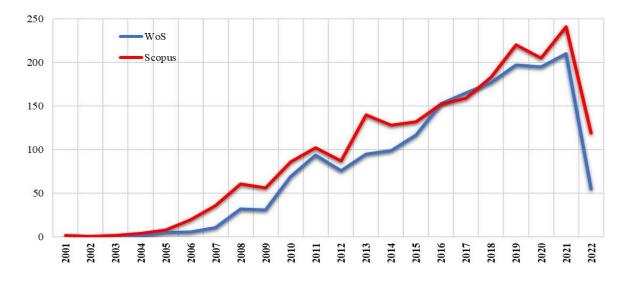


Figure 1. The number of publications dedicated to talent management in the period 2001-2022. Source: own work based on WoS and Scopus data bases.

Moreover, it should be noted that in the last decade, the number of publications indexed in Scopus data base regularly exceeded 100 studies per year, which contributed to the expansion of data base by another 1000 publications over the following 5 years. The dynamically increasing number of publications in both of the data bases indicates a constantly growing interest in the subject of talent management. As was already mentioned, in WoS data base, the first study on talent management was indexed in 2002. It was the publication by J.A. Thompsen entitled "Achieving return on critical talent in technology-intensive organizations." In Scopus data base, the first publications on this subject appeared in 2001. They included two entries: Clarke R.L (2001), "Talent management nurtures future healthcare leaders" and Brown, V. (2001) "Talent management: Admiring America's most admired companies."

Further analysis focused on data from Scopus data base due to a slightly larger number of publications contained in it (2141 publications versus 1791 in WoS data base). By performing data aggregation, publication record was analysed with respect to: subject areas to which publications were classified; nationality of the authors with the largest number of publications (geographical structure), and journals/publishing houses most frequently publishing studies on talent management; authors of most cited publications, and scientific centres represented by the most prolific researchers in terms of publications.

Scientific papers represented the vast majority of the publications on talent management available in Scopus data base. They accounted for 65.2% of all of the publications. The second most numerous type of publications was book chapters (11.4%), followed by conference papers (11.3%). Analysis of the subject areas to which the publications available in Scopus data base were classified leads to the conclusion that all of the identified publications mainly represented two areas: business, management and accountancy (41% of publications) and social sciences (15% publications). The other areas where the number of publications exceeded 100 papers

were: economics, econometrics and finances; information technology; engineering; psychology and studies of decision making. Figure 2 presents the details.

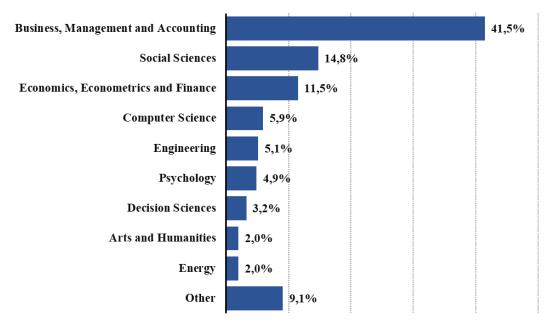


Figure 2. Main subject areas.

Source: own work based on WoS and Scopus data bases.

In terms of the source of publications, the leader in the number of publications on talent management indexed in Scopus data base was the journal "International Journal of Human Resource Management" with Impact Factor 5.546 (2020). It was followed by "Human Resource Management International Digest" with 55 publications, whereas the third position was occupied by "T and D" with 39 publications on TM. Table 1 presents a ranking of sources with the largest number of publications on the subject under study.

Table 1.

List of sources with the largest number of publications on the subject of TM

Item	Publication source	number
1	International Journal Of Human Resource Management	73
2	Human Resource Management International Digest	55
3	T and D	39
4	International Journal Of Contemporary Hospitality Management	31
5	Human Resource Management Review	30
6	Journal Of World Business	30
7	Industrial And Commercial Training	29
8	Employee Relations	26
9	Human Resource Management	21
10	Thunderbird International Business Review	21

Source: own work based on Scopus data base.

Scientific papers addressing TM are most often published by researchers from the following research centres: National University of Ireland Galway, KU Leuven and Pennsylvania State University. Analysis of the countries of origin of the authors with the largest number of

publications on talent management reveals a dominant role of English speaking countries. The first place is occupied by authors coming from the Unites States, followed by authors from the Great Britain. Other countries include: India, China and Australia. Table 2 presents a list of top ten countries and scientific centres from which researchers dealing with the subject of TM come.

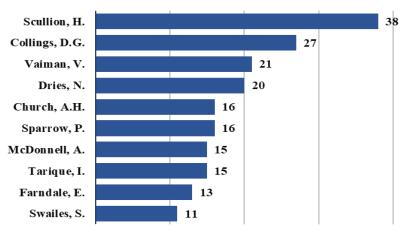
Table 2.

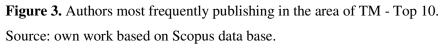
List of countries and scientific centres from which researchers dealing with the subject of TM come - Top 10

Item	Country/Region	Number	University	Number
1	United States	455	NUI Galway	34
2	Great Britain	327	KU Leuven	21
3	India	186	Pennsylvania State University	20
4	China	112	Saint Petersburg State University	19
5	Australia	96	Lancaster University Management School	19
6	Ireland	76	Tilburg University	18
7	Malaysia	76	DCU Business School	18
8	South Africa	68	North-West University	17
9	Germany	67	University of Limerick	16
10	Russia	63	Pace University	16

Source: own work based on Scopus data base.

The three most prolific researchers in terms of the number of publications, according to Scopus data base, are: Scullion H. (38 publications) and Collings D.G. (27 publications), who represent Irish universities, Vaiman V. (21 publications) from Lutheran University School of Management in the United States, and Dries N. (20 publications) from KU Leuven, Belgium. (Figure 3)





At the same time, it can be noted that among the authors of most cited publications are Scullion H., Collings D.G. and Dries N. Among the ten most cited publications dedicated to talent management, the top position, with 758 citations, was occupied by the paper by Collings, D.G. and Mellahi, K. entitled Strategic talent management: A review and research agenda, published in 2009 in "Human Resource Management Review". Table 3 presents a ranking of ten most cited publications in the field of talent management.

The last stage of the study of bibliometric data on talent management publications was analysis of word co-occurrence, which, as pointed out by Liu, Yin, Liu, Dunford (2015), is used to identify key research subjects in a research field or knowledge domain. For constructing and visualising bibliometric networks and scientific mapping, the VOSviewer visualisation software was applied, which is particularly useful when working with a large amount of data. It was used to group and assess research sub-areas.

Table 3.

Author	Title	Journal	Year	Number of citations	
Collings, D.G., Mellahi, K.	Strategic talent management: A review and research agenda	Human Resource Management Review	2009	758	
Lewis, R.E., Heckman, R.J.	Talent management: A critical review	Human Resource Management Review	2006	551	
Tarique, I., Schuler, R.S.	Global talent management: Literature review, integrative framework, and suggestions for further research	Journal of World Business	2010	448	
Gruman, J.A., Saks, A.M.	Performance management and employee engagement	Human Resource Management Review	2011	340	
Farndale, E., Scullion, H., Sparrow, P.	The role of the corporate HR function in global talent management	Journal of World Business	2010	326	
Bhatnagar, J.	Talent management strategy of employee engagement in Indian ITES employees: Key to retention	Employee Relations	2007	285	
Cappelli, P.	Talent management for the twenty- first century	Harvard Business Review	2008	264	
Gallardo-Gallardo, E., Dries, N., González-Cruz, T.F.	What is the meaning of 'talent' in the world of work?	Human Resource Management Review	2013	253	
Al Ariss, A., Cascio, W.F., Paauwe, J.	Talent management: Current theories and future research directions	Journal of World Business	2014	250	
Dries, N.	The psychology of talent management: A review and research agenda	Human Resource Management Review	2013	245	

Most cited publications on TM (top-10)

Source: own work based on Scopus data base.

The analysis involved preparing a knowledge map of research trends connected with talent management in the context of publications indexed in Scopus data base in the period 2001-2022. A file with saved records from Scopus data base was imported to the VOSviewer software. In the analysis of interrelations, "indexed key words" were used, as they reduce duplicates and similar terms (Zhang, Yu, Zheng et al., 2016). In order to present a clear visualisation, extraction of terms was performed with an indication of words that were repeated in bibliographical descriptions 5 times at the minimum. In addition, terms that were substantially unrelated to the research area under study, such as China, Vietnam, article, India, issue, review survey, were eliminated from the analysis. Taking into account the criteria above,

2311 terms (words/expressions, labels) were identified in the analysed case, of which 72 terms appeared 5 times at the minimum. The resulting map visualises current trends in talent management and presents detected connections in the context of time (Fig. 4).

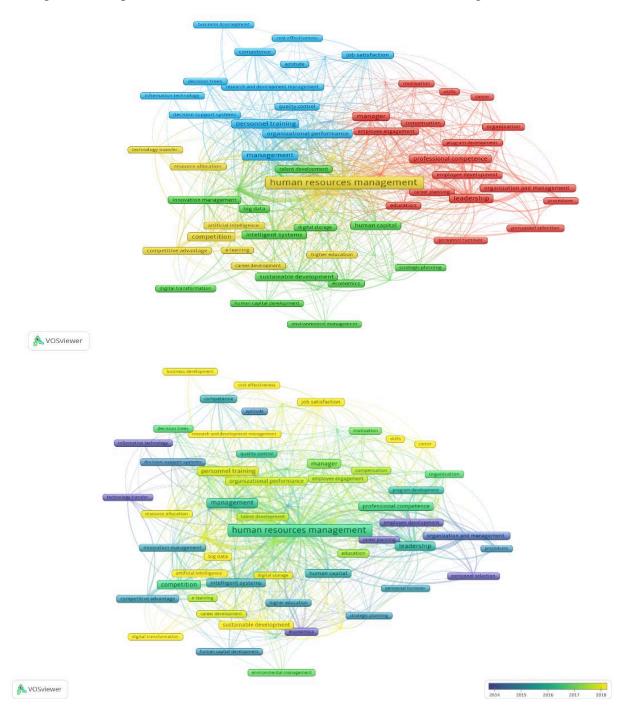


Figure 4. Maps of the intensity of co-occurrence of the connections between key words and connections detected in time.

Source: own work with the aid of the VOSviewer software, Scopus data base.

The analysed terms were grouped by presence and strength of interconnections creating the so-called clusters. Analysis of word co-occurrence and an attempt to determine clusters resulted in the distinction of four research clusters related to the subject of talent management.

Each cluster is marked in a different colour: red, blue, green or yellow. Connections were identified between pairs of analysed terms indicating co-occurrence of such terms in the text. The size of the elements (nodes and font) presented on the maps indicates the frequencies of the occurrence of a given term, whereas the connections between network nodes represent their co-occurrence in the analysed group of publications. The stronger the connection, the more often both of the terms appear in publications. The distance between the items in the visualisation is an approximate indication of their relationship in a co-occurrence network. Thus, the closer two items are to each other, the stronger the connections between them (van Eck, Waltman, 2019). The map of relationships created using the VOSviewer software is characterised by numerous connections, which makes the network quite dense - it consists of 72 items and 775 links, with its central part containing the most frequent key words. The subjects most strongly connected with others within the network were: human resource management, employee, information management.

The figures that follow (Fig. 5-8) present maps of the individual clusters and their connections detected in time. The first cluster classified in VOSviewer (Figure 5) is the most numerous group numbering 22 key words. It was marked in red.

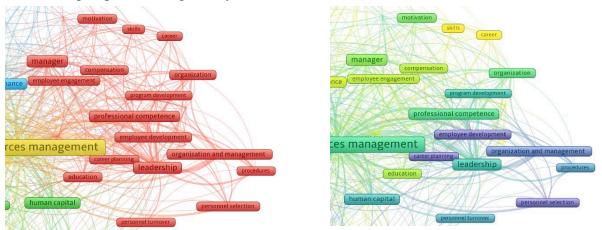
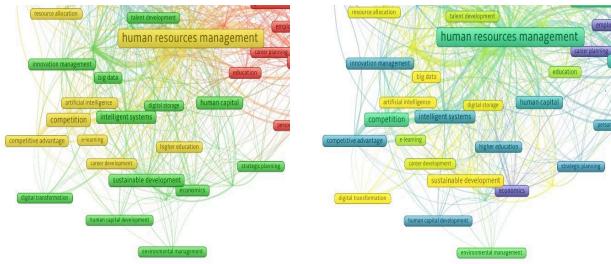


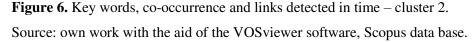
Figure 5. Key words, co-occurrence and relationships detected in time – cluster 1. Source: own work with the aid of the VOSviewer software, Scopus data base.

This cluster focuses on leadership and manager. These terms show the highest co-occurrence rates for the group. The most frequent and most interrelated component in the cluster was leadership with organisation and management and with professional competencies; the minimum strength of links was 9. The red cluster comprises publications addressing issues connected with procedures, employee development, education, selection, employee engagement and education. It also indicates relations with the problem of personnel turnover. The aspects of leadership in the context of career, skills and attention are a relatively new element in the cluster, which was presented on the map of connections detected in time.

Another cluster – the green one – focuses on "information management" in close connection with other key words (Fig. 6). The strongest and most interlinked relationship within this group relates to the following terms: "intelligent systems" (14 links), "big data" (6) and "innovation

management" (5). The scientific interests of the publications in this cluster also include subjects connected with talent management in the context of strategic management, human capital and human resources planning, sustainable development and talent development.





The subjects addressed in publications from this group mainly concentrate around information management, human capital and intelligent systems. The links detected in time indicate that the research on these subjects is still at quite an early stage. This is the youngest group in terms of the average year of publication: 2016.77. The cluster also contains links with the term "digital transformation", for which the average time of publication is the year 2020.

The third cluster – the blue one (Fig.7) – is connected with the aspects of management, in particular decision-making and personnel training. The biggest strength of links within the cluster refers to management, project management and personnel training. In addition, a significant portion of the research grouped in this cluster deals with decision-making support systems and employee retention, skills, competencies and job satisfaction. As far as the average time of publications is concerned, research related to business development has appeared in this group in recent years. It includes the oldest term - technology information.

The last cluster classified in VOSviewer was marked in yellow. This is the least numerous cluster containing 13 key words (Fig. 8). On the map of trends, the aspects of human resources management and employees are clearly shifted towards the centre of the map, which indicates their numerous and quite strong links with a lot of other subjects. These terms represent the most frequent and most interlinked component not only in the cluster alone but also in the whole network.

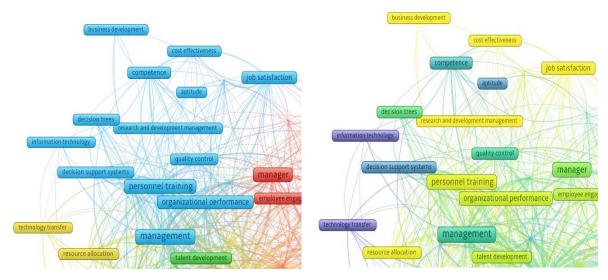


Figure 7. Key words, co-occurrence and links detected in time – cluster 3. Source: own work with the aid of the VOSviewer software, Scopus data base.

The yellow cluster comprises publications referring to the subjects connected with human resources management, knowledge management and competitive advantage development. The relationship between these terms and talent management seems quite obvious. Numerous authors stress that human resources management (Michaels, Handfield-Jones, Axelrod, 2001) and knowledge management are a key factor of competitiveness (Ragab, Arisha, 2013; Shubham, Shiwangi, Sanjay, Swati, 2021). We also observe an intense development and specialisation of talent management in the context of higher education, e-learning, artificial intelligence and social media.

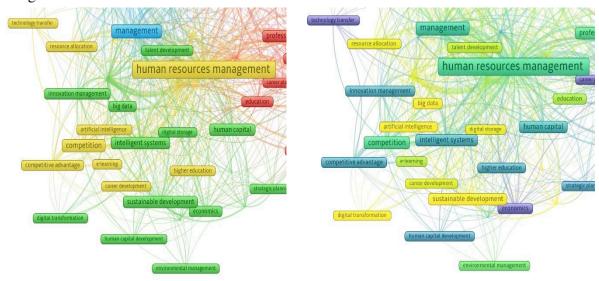


Figure 8. Key words, co-occurrence and links detected in time – cluster 4.

Source: own work with the aid of the VOSviewer software, Scopus data base.

The links detected in time demonstrated that most of the selected subjects have been analysed in the last decade. It can be concluded that research on these subjects has been intensely developing, since the relationship between the elements is quite strong. It should be stressed, however, that viewing talent management in the context of artificial intelligence is a relatively new approach (see the links detected in time). This may indicate that the research on these issues is at quite an early stage.

Conclusion

The present study shows the evolution of the research conducted in the field of talent management in the period 2001-2022. The analysis and identification of new trends in the research under study was based on a comprehensive literature review involving analysis of co-occurrence networks using the VOSviewer software. The main conclusions from the study are as follows:

- The number of publications indexed in the analysed data bases is systematically growing, which indicates an increasing interest in talent management among researchers.
- By constructing a network map for key word co-occurrence and analysing research activities in the area of talent management (TM), it was found that the border subjects in such research comprise four representative areas concentrated on the following main key words: human resources management, information management, management and leadership.
- The latest trends in TM research were identified, which referred to such subjects as digital transformation, artificial intelligence, big data, business development, skills, job satisfaction and need for attention.

The research presented in this publication may constitute a basis for further work in this area. The findings of the analysis can represent an important voice in the discussion on the evolution of the subject of talent management. Their aim was to identify selected challenges in an exploratory way. However, it should be stressed that the present study only concentrated on the leading trends in the area under study, with the analysis limited to data from Scopus data base. Moreover, the results are not universal due to the qualitative character of the study. It would be recommendable to conduct further, in-depth studies using multiple data bases. As far as the research methodology is concerned, a more detailed analysis of citations could be prepared. It is worth analysing the number of paper downloads from the data base or the co-occurrence of bibliographic links or the relationships between authors or scientific centres. Summing up the trends indicated in the study, it can be concluded that the subject of talent management continues to be a huge challenge for today's entities and economies, which represents an area of exploration for academic researchers.

References

- 1. Al Arissa, A., Casciob, W.F., Paauwec, J. (2014). Talent management: Current theories and future research directions. *Journal of World Business*, *Vol. 49*(2), pp. 173-179. Retrieved from https://doi.org/10.1016/j.jwb.2013.11.001, 10.03.2022.
- 2. Gorzen-Mitka, I. (2019). Interpretive Structural Modeling Approach to Analyze the Interaction Among Key Factors of Risk Management Process in SMEs: Polish Experience. *European Journal of Sustainable Development*, 8(1), pp. 339-349.
- Gorzeń-Mitka, I. (2020). The Latest Streams Of Research On Communication In Risk Management: A Large-Scale Literature Review Based On Co-Occurrence Data. Zeszyty Naukowe. Organizacja i Zarządzanie, Politechnika Śląska, z. 149, pp. 219-237.
- Gudanowska, A.E. (2017). A Map Of Current Research Trends Within Technology Management In The Light Of Selected Literature. *Management and Production Engineering Review, Vol. 8*, pp. 78-88, doi: 10.1515/mper-2017-0009.
- 5. Khilji, S.E., Tarique, I., Schuler, R.S. (2015). Incorporating the macro view in global talent management Hum. *Resource Management Review*, *25(3)*, pp. 236-248.
- 6. King, K. (2016). The talent deal and journey: understanding how employees respond to talent identification over time. *Employee Relat.*, *38(1)*, pp. 94-111.
- Lanvin, B., Evans, P., Rodriguez-Montemayor, E. (2017). The Global Talent Competitiveness Index. Talent and Technology. In: B. Lanvin, P. Evans (Eds.), *INSEAD: The Global Talent Competitiveness Index 2017.* France: Fontainebleau.
- 8. Lewis, R.E., Heckman, R.J. (2006). Talent management: A critical review. *Human Resource Management Review*, *16*(2), pp. 139-154.
- 9. Listwan, T. (2005). Zarządzanie talentami wyzwanie współczesnych organizacji. In: S. Borkowska (Ed.), *Zarządzanie talentami*. Warszawa: IPiSS.
- Liu, Z., Yin, Y., Liu, W., Dunford, M. (2015). Visualizing the intellectual structure and evolution of innovation systems research: a bibliometric analysis. *Scientometrics*, 103(1), pp. 135-158, doi:10.1007/s11192-014-1517-y.
- Lobonţ, O.R., Purcariţa, R., Vatavu, S., Costea, F. (2021). A Bibliometric Mapping of the Research Trends of Public Governance and Entrepreneurship Framework. *Postmodern Openings*, 12(1Sup1), pp. 35-53. Retrieved from https://doi.org/10.18662/po/12.1Sup1/ 270, 15.03.2022.
- 12. Michaels, E., Handfield-Jones, H., Axelrod, B. (2001). *War for talent*. Boston, MA: Harvard Business Press.
- 13. Parkitna, A. (2020), *Determinants of efficiency of a small business*. Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej.
- 14. Pocztowski, A. (ed.). (2016). *Zarządzanie talentami w organizacji*. Warszawa: Wolters Kluwer Polska SA.

- 15. Ragab, M.A.F., Arisha, A. (2013). Knowledge management and measurement: A critical review. *Journal of Knowledge Management*, Vol. 17, Iss. 6, pp.873-901.
- Shubham, D., Shiwangi, S., Sanjay, D., Swati, D. (2021). Antecedents of strategic thinking and its impact on competitive advantage. *Journal of Indian Business Research, Vol. 13, Iss. 4*, pp. 437-45816.
- 17. Swailes, S., Blackburn, M. (2016). Employee reactions to talent pool membership, *Employee Relations*, *38(1)*, pp. 94-111.
- Vaiman, V., Sparrow, P.R., Schuler, R., Collings, D. (Ed.). (2018). Macro Talent Management: A Global Perspective on Managing Talent in Developed Markets. London: Routledge.
- 19. Van Eck, N.J., Waltman, L. (2019). VOSviewer Manual. Manual for VOSviewer version 1.6.11. Universiteit Leiden, software documentation.
- 20. Wyrwa, J., Barska, A., Jędrzejczak-Gas, J., Siničáková, M. (2020). Industry 4.0 and Social Development in the Aspect of Sustainable Development: Relations in EC Countries Submitted. *European Research Studies Journal, Vol. XXIII, Iss. 4*, pp. 1068-1097. Retrieved from https://www.um.edu.mt/library/oar/bitstream/123456789/76037/1/Industry_4.0_and_ social_development_in_the_aspect_of_sustainable_development.pdf, 12.02.2022.
- 21. Xin, Z., Wen Long, Y., Hai, L.V. (2018). Visualization and analysis of mapping knowledge domain of road safety studies. *Accident Analysis and Prevention, Vol. 118*, pp. 131-145, doi: 10.1016/j.aap.2018.06.010.
- 22. Zhang, J., Yu, Q., Zheng, F., Long, Ch., Lu, Z., Duan, Z. (2016). Comparing keywords plus of WOS and author keywords: A case study of patient adherence research. *Journal of the Association for Information Science and Technology*, 67(4), pp. 967-972.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

DO REPRESENTATIVES OF DIFFERENT GENERATIONS IDENTIFY WITH THEIR STEREOTYPICAL CHARACTERISTICS?

Alicja SMOLBIK-JĘCZMIEŃ^{1*}, Patrycja PALEŃ-TONDEL²

¹ Wroclaw University of Economics and Business; alicja.smolbik-jeczmien@ue.wroc.pl, ORCID: 0000-0002-1441-5931 ² Wroclaw University of Economics and Business; patrycia palen tondel@ue wroc.pl

² Wroclaw University of Economics and Business; patrycja.palen-tondel@ue.wroc.pl, ORCID: 0000-0002-5133-7848 * Correspondence author

Purpose: This article will aim to show to what degree the representatives of the examined generations BB, X, Y and Z identify with their generation's stereotypical characteristics and indicate the fundamental differences concerning the values they prefer in the workplace.

Design/methodology/approach: The applied research method was a diagnostic survey using a questionnaire survey conducted employing the CAWI technique. The study was conducted between 25 October and 07 November 2020, on a sample of 1009 respondents from 4 generation groups (Baby Boomers, Z, Y and Z). The spatial scope of the research covered the entire territory of Poland, and the samples were selected according to population size.

Findings: Significant differences can be observed between the representatives of the surveyed generations regarding their subjective assessment of belonging to a given generation. Studied generations vary regarding preferred work values.

Practical implications: Identification and analysis of the fundamental values esteemed at the workplace by representatives of particular generations operating in the labor market, along with a subjective assessment of their belonging to a given generation, can significantly increase the employer's understanding of the needs, expectations, and motivations their employees.

Originality/value: The authors concluded that further research on age diversity in teams and organizations is still very much needed. First of all, the right approach to generational diversity can have a significant impact on organizational performance and employee engagement levels, and second of all, available research results in the literature are inconclusive.

Keywords: multigenerational, generation BB, X, Y and Z, labor market, work values.

Category of the paper: research paper.

1. Introduction

A large diversity of employees characterizes contemporary trends in the global labor market regarding culture, generation, knowledge, professional and life experience. The process of progressive ageing of the Polish society results in the simultaneous presence of four generations of employees on the labor market: Baby Boomers (BB), people born in the years 1945-1964, X - people born in the years 1965-1980, Y - people born in the years 1980-1995 and the youngest generation Z, born after 1995 (Smolbik-Jęczmień, 2019; Warwas et al., 2016)¹.

Various characteristics of the above-mentioned generational groups can be found in the field literature. However, it should be recalled that these are not homogeneous groups, and it is often possible to observe some differentiation also within particular generations (Lewicka, 2017; Lubrańska, 2016; Gadomska-Lila, 2015; Kołodziejczyk-Olczak, 2014; Rogozińska-Pawełczyk, 2014). Moreover, the assumptions existing in business practice regarding what is most valuable for particular generations, their system of values, their needs, and drivers are often unconfirmed in the dynamically changing conditions of the organization's functioning. Consequently, they should be continuously modified or even rejected - this mainly applies to bias and stereotypes, which can only do much harm (see more: Lipka, Waszczak, 2017). In order to competently manage generational diversity, managers should learn how to use the potential of different age groups cooperating in the labor market in the most effective manner.

In order to determine whether the research area on generational differences and preferred work values forms a coherent whole or whether there are some discrepancies and gaps, the authors conducted a literature review by searching the Web of Science database. Next, the search results were analyzed in terms of the number of publications per year and country. Based on this review, the authors concluded that further research on age diversity in teams and organizations is still very much needed. First of all, the right approach to generational diversity can have a significant impact on organizational performance and employee engagement levels, and second of all, available research results in the literature are inconclusive (Heger, 2007; Zingheim, Schuster, 2006; Constanza, Finklestein, 2015; Rogozińska-Pawelczyk, 2014; Smolbik-Jęczmień, 2017; Warwas et al., 2016).

In the field literature, generations are often referred to as an age group consisting of people born at approximately the same time (Marshall, 2006, p. 240). Thus, generations are formed by people born in the same decade, or representatives of the same birth year, assuming that successive generations, in demographic terms, appear on average every 20 years. It should be noted that the great acceleration of social changes has led to the fact that successive generations appear even at intervals of 10-15 years (William, 2020). In this case, generations are defined as an identifiable group (cohort) that is divided by years of birth, social location and significant

¹ Due to the limited scope of this paper, the authors have refrained from presenting the already well-known characteristics of the above generations.

life events at critical stages of development (Kupperschmidt, 2000, p. 66) or as a group of individuals who share common experiences of entering the system at the same time (Joshi et al., 2011; Parry, Urwin, 2011). Generational diversity may contribute to forming new age-related competencies and accumulating diverse knowledge and experience, which, in turn, may reduce the number of mistakes or increase problem-solving skills, which is particularly important under conditions of high uncertainty and volatility of the environment (Smolbik-Jęczmień, 2019; Gadomska-Lila, 2015). However, in terms of potential threats, age differentiation may lead to significant differences in preferred values in the workplace, which may adversely affect the cohesion of multigenerational teams and the development of cooperation and collaboration between employees.

Methods

The applied research method was a diagnostic survey using a questionnaire survey conducted employing the CAWI technique. The study was conducted between 25 October and 07 November 2020 on a sample of 1009 respondents from 4 generation groups (Baby Boomers, Z, Y and Z). The spatial scope of the research covered the entire territory of Poland, and the samples were selected according to population size.

Generation Y was the most represented generation in the study with 404 people (40%), followed by generation X with 374 people (37.1%), the representatives of the oldest generation BB with 130 people (12.9%) and 101 people from generation Z (10%).

Having diagnosed the research gap, the authors formulated the following hypotheses:

- H.1 There are significant differences among the representatives of the studied generationsBB, X, Y and Z regarding identification with the values preferred in a given generational group and
- H.2 There are significant differences among the representatives of the studied generations regarding their preferred values in the workplace².

² More on the differences in values esteemed at work among the surveyed representatives of generations coexisting in the Polish labour market: Employer Value Proposition (EVP) from the perspective of representatives of coexisting generations in the Polish labour market - reflections from the research (Paleń-Tondel, Smolbik-Jęczmień, 2021).

Results

First, hypothesis H.1 concerning the subjective assessment of their generation affiliation by the surveyed respondents was verified. For this purpose, descriptions of particular generations BB, X, Y and Z (the so-called stereotypical characteristics of generations) were prepared. Then, the respondents were asked to choose the description they most identified with (not specifying to which generation the description belongs).

According to the research, most respondents identified with the description of generation X - as much as 38.3%. Then 25% of the respondents identified with the description of the Z generation, and 22.2% identified with the description of the Baby Boomers generation. Finally, the smallest number of respondents - 14.6% - chose generation Y's description as the most appropriate for their characteristics (Figure 1).

In the next step, the respondents were asked to make a subjective assessment of their belonging to particular generations (as the subjective feeling about their generation affiliation does not always coincide with their birth date). According to the research, 17.4% of the respondents feel subjectively toward the X generation, followed by the Y generation - 12.5%. Next, the respondents declared their affiliation to generation Z at the level of 5.3%, while the smallest group are those who subjectively assessed their affiliation to the BB generation - only 3.3%.

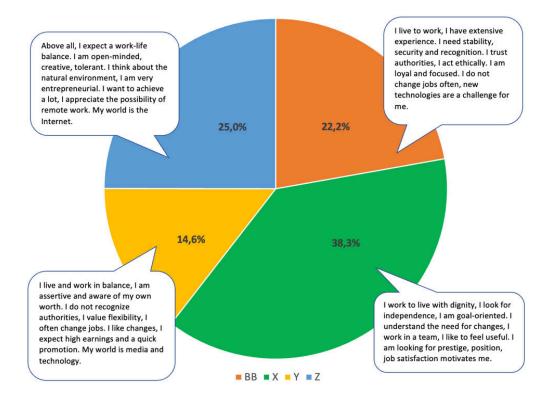
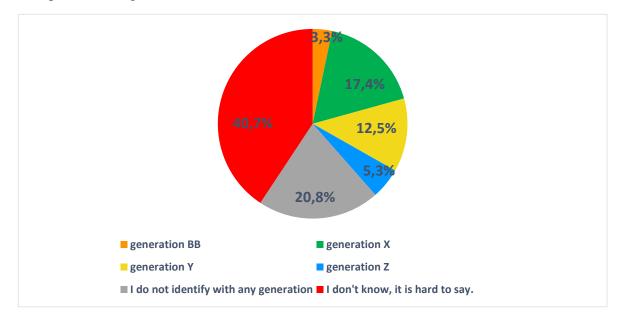
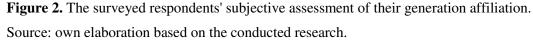


Figure 1. Identification of the surveyed respondents with the descriptions of individual generations. Source: own elaboration based on the conducted research.

Finally, it should be noted that as many as 40.7% of the respondents had difficulties with a subjective assessment of their generation affiliation, and 20.8% of the respondents stated that they do not identify with any generation. Altogether, they constitute a large group of 61.5% of all respondents (Figure 2).





It is worth emphasizing an extensive internal differentiation within individual generations. Generation X most strongly identified their subjective generation affiliation with 56.3% by age. However, 27.3% of them feel they belong to the Y generation, and 9.4% identify with the oldest BB generation. Generation Z ranks second regarding the subjective assessment of their generation affiliation, amounting to 37% by age. At the same time, as many as 34.8% of them subjectively identify with generation Y, and 23.9% with generation X. Generation Y is the third generation with the highest subjective assessment of their generation affiliation, 34.5% by age. Here, too, one can observe considerable variation within the generation. As many as 48.3% of these individuals feel belonging to the X generation, and 10.3% to the youngest generation Z. The oldest generation BB holds the last position in this comparison. Only 17.7% of its representatives identify with their generation. However, as much as 37.5% subjectively assess they belong to the Y generation and 22.5% to the Z and X generations (Figure 3).

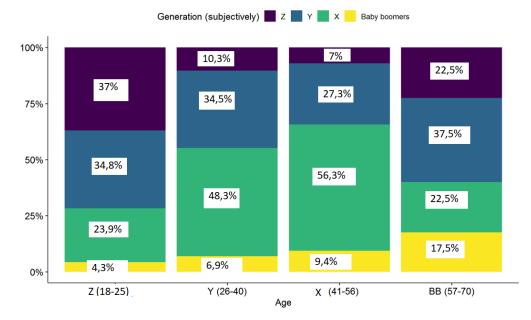


Figure 3. Differentiation of subjective assessment of generation affiliation within generations. Source: own elaboration based on the conducted research.

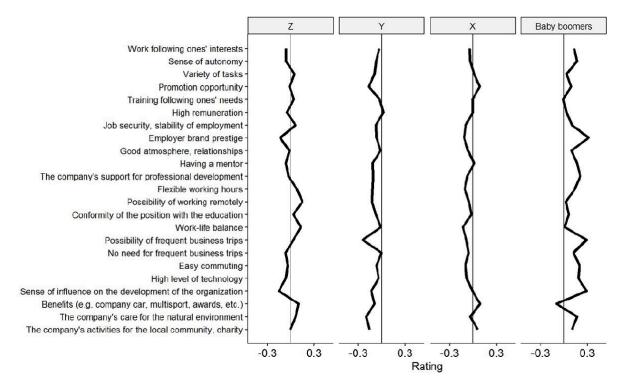
Due to those points, one should not be guided by age as the only criterion for belonging to particular generations. It is also worth diagnosing which generation individual employees feel they belong to.

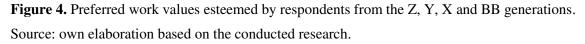
Next, the second hypothesis was verified – 'There are significant differences among the representatives of the studied generations regarding their preferred values in the workplace'. For this purpose, a set of 23 values esteemed in the workplace was analyzed, namely: work following interests, a sense of autonomy, variety of tasks, the possibility of promotion, training following one's own needs, high salary, job security, job stability, employer brand prestige, good atmosphere, relationships, having a mentor, company support in professional development, the flexibility of working time, possibility of remote work, compliance of the position with education, work-life balance, the possibility of frequent trips, no need to travel, easy commuting, high level of technology, sense of influence on organization development, benefits (e.g. car, multisport, awards), the company's care for the natural environment and the company's activities for the local community, charity activities³. The obtained data were subjected to statistical analysis (mean, standard deviation, Student's t-test). Subsequently, each of the 23 values esteemed in the workplace was analyzed (P1-P 23 variables), where their importance was evidenced by the rating given by the respondents according to the Likert scale from 1 - not important to 5 - very important. The following assumptions were made in the analysis of the research results: the mean numbers of the variables were calculated and subtracted from the original numbers, which allowed to simplify the interpretation as follows.

³ The set of 23 work values esteemed in the workplace was created in collaboration with five experts (including two HRM managers, one HR Business Partner, 1 owner of a successful recruitment agency and 1 business coach) (see further Paleń-Tondel, Smolbik-Jęczmień, 2021).

If the obtained number of the tested value is 0, the weight of the value for a given generation is the same as the average for Poland. If the number is greater than 0, the weight of the given value is greater than the average for Poland.

As the research shows, a significant differentiation of the weights of values preferred at work among the surveyed generations can be noticed. Thus, the highest ratings of values esteemed in the workplace can be found for the oldest generation (Baby Boomers), to whom almost all values (except for benefits and work-life balance) achieve ratings above the average in Poland. Representatives of this generation attach great importance to the prestige of the employer's brand, the compatibility of the position with education, the company's support for professional development and the company's care for the environment. On the other hand, generation Y and partially X representatives assessed almost all 23 values significantly below the average (except for the possibility of promotion, remuneration, obtaining benefits and charity activities, which were slightly above the national average for generation X) (Figure 4).





Another finding of the study is that for generation Y, the sense of autonomy and possibility of promotion is less critical compared to the highest importance of the salary level and similar to the national average importance of work-life balance. On the other hand, the preferences of the values esteemed at work by the youngest generation Z largely coincide with the average in Poland. However, they attach more importance to work-life balance, benefits, remote work and flexible working time, task variety and training tailored to their needs. Therefore, the second hypothesis was confirmed.

The weights of values esteemed in the workplace are also interesting among the respondents who did not identify with any generation (20.8% of all respondents). The highest rank among values esteemed in the workplace in this group was obtained by a good atmosphere at work - slightly above the national average. In contrast, high salaries and ensuring a work-life balance were assessed at the level of average values for Poland (Figure 5).

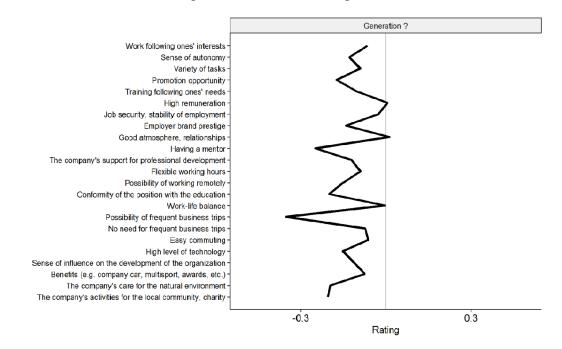


Figure 5. Preferred workplace values esteemed by respondents who did not identify with any generation Source: own elaboration based on the conducted research.

About other values appreciated in the workplace, they are significantly below the average for Poland. The aspects of work least valued by this group of respondents are frequent business trips, having a mentor, the possibility of remote working and promotion, charitable activities and the company's care for the natural environment.

Discussion

It is worth quoting the research results on values esteemed in the workplace by representatives of generations coexisting in the labor market, published in the Randstad Employer Brand Report in 2021 (Report, 2021). According to the data presented, the BB generation needs attractive remuneration and benefits (80%) and employment stability (76%). Employment stability is equally important for the X and Y generations (70%) and the least important for the Z (60%). It is noteworthy that the representatives of all surveyed generations attach relatively high importance to maintaining the balance between private and professional life (from 58% to 60%). Compared to the other generations, generation Z highly

473

values a pleasant atmosphere at work (78%) and the possibility of professional development (74%). According to the report, the importance of professional development has increased significantly compared to last year, and this is true for all age groups (Y - 72%; X - 60% and BB - 54%).

Summary

As a result of the conducted research, significant differences can be observed between the representatives of the surveyed generations regarding their subjective assessment of belonging to a given generation (representatives of generation X - 56.3%, generation Z - 37%, generation Y - 34.5%, and the smallest number of only 17.5% for the oldest BB generation). What is significant, as many as 40.7% of the respondents had difficulties with subjective assessment of their generation affiliation, and 20.8% of the respondents stated they did not identify with any generation.

However, despite differences in the degree of identification of the examined generations' representatives with values preferred in a given generation group, one may observe a relatively traditional approach to values they appreciate in the workplace. For example, among the representatives of the BB generation, these are such values as the amount of remuneration, compliance of the position with education or a sense of autonomy. For generation X, first of all, the possibility of remote work; for Y, the most important values are benefits and the possibility of promotion. Finally, the youngest generation expects flexible working time and a guarantee of work-life balance.

Identification and analysis of the fundamental values esteemed at the workplace by representatives of particular generations operating in the labor market, along with a subjective assessment of their belonging to a given generation, can significantly increase the employer's understanding of the needs, expectations, and motivations their employees. It will also improve communication and cooperation in a team and strengthen generational solidarity. As a result, those processes should improve employee retention, build their commitment, and achieve general organizational success. As this poses a major challenge both for managers leading multigenerational teams and for the members of those teams, the authors hope that the studies conducted will enrich the research on similarities and differences between generations present in the current labor market, and the results obtained will be helpful in understanding the general trends in this area.

Acknowledgments

The project is financed by the Ministry of Science and Higher Education in Poland under the program "Regional Initiative of Excellence" 2019-2022 project number 015/RID/2018/19 total funding amount 10 721 040,00 PLN.

References

- Costanza, D., Finkelstein, L. (2015). Generationally Based Differences in the Workplace: Is There a There There? *Industrial and Organizational Psychology*, 8(3), 308-323. doi:10.1017/iop.2015.15.
- 2. Gadomska-Lila, K. (2015). Pokolenie Y wyzwaniem dla zarządzania zasobami ludzkimi. *Zarządzanie Zasobami Ludzkimi, 1(102),* 25-39.
- 3. Heger, B.K. (2007). Linking the employment value proposition (EVP) to employee engagement and business outcomes: Preliminary findings from a linkage research pilot study. *Organisational Development Journal*, 25, 121-132.
- 4. Joshi, A., Dencker, J.C., Franz, G. (2011). Generations in organizations. *Research in Organizational Behavior*, *31*, 177-205.
- 5. Kołodziejczyk-Olczak, I. (2014). *Zarządzanie pracownikami w dojrzałym wieku. Wyzwania i problemy.* Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 6. Kupperschmidt, B.R. (2000). Multigenerational employees: strategies for effective management. *The health care manager, 19,* 65-76.
- Lewicka, D., (2017). Przywiązanie organizacyjne w zróżnicowanych pokoleniowo grupach pracowników. *Zarządzanie Zasobami Ludzkimi*, 3-4(116-117) "Zarządzanie różnorodnością w świetle wyzwań współczesnego rynku pracy" (Managing Diversity in Light of the Challenges of the Contemporary Labor Market)), pp. 67-86.
- 8. Lipka, A., Waszczak, S. (2017). Funkcjonowanie kreatywnych zespołów w kontekście sterotypizacji generacyjnej jako ryzyko w obszarze HR. Warszawa: CeDeWu.
- Lubrańska, A. (2016). Wartości cenione w pracy zawodowej óżnice międzypokoleniowe. Zarządzanie Zasobami Ludzkimi, 3-4(110-111) "Zarządzanie różnorodnością (Diversity management), pp. 81-94.
- 10. Marshall, T. (ed.) (2006). Słownik socjologii i nauk społecznych. Warszawa: PWN.
- Palen-Tondel, P., Smolbik-Jeczmien, A. (2021). Looking for a Fulcrum Are Preferred Work Values Different for Four Generation Cohorts Co-existing in the Labour Market of Poland? *European Research Studies Journal, Vol. XXIV, Iss. 3*, 102-119.

- 12. Parry, E., Urwin, P. (2011). Generational Differences in Work Values: A Review of Theory and Evidence. *International Journal of Management Reviews, 13.*
- 13. Randstad, (2021). Raport krajowy: Randstad Employer Brand.
- 14. Rogozińska-Pawełczyk, A. (2014). *Pokolenia na rynku pracy*. Łódź: Wydawnictwo Uniwerystetu Łódzkiego.
- 15. Smolbik-Jęczmień, A. (2017). *Kształtowanie własnej kariery zawodowej w kontekście wielopokoleniowości*. Wrocław: Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu.
- 16. Smolbik-Jęczmień, A. (2019). Różnorodność pracowników w wymiarze wielopokoleniowości. In: S. Przytuła (Ed.), Zarządzanie różnorodnością pracowników. Perspektywa globalnej mobilności i migracji (pp. 95-113). Warszawa: PWN.
- Warwas, I., Wiktorowicz, J., Kuba M., Staszewska, E., Woszczyk, P., Stankiewicz, A., Kliombka-Jarzyna J., (2016). Pokolenia – co się zmienia? *Kompendium zarządzania multigeneracyjnego*. Warszawa: Oficyna Wolters Kluwer.
- Williams, G. (2020). Management Millennialism: Designing the New Generation of Employee, Work, Employment and Society, 34(3), 371-387, doi.org/10.1177/ 0950017019836891.
- 19. Zingheim, P.K., Schuster, J.R. (2006). Career directions for total rewards professionals. *Compensation & Benefits Review*, 38(3), 18-23.

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

COUNTERPRODUCTIVE BEHAVIOR AND JOB SATISFACTION – BASED ON THE STUDY OF POLISH EMPLOYEES

Barbara A. SYPNIEWSKA

University of Economics and Human Sciences, Warsaw; b.sypniewska@vizja.pl, ORCID: 0000-0001-8846-1183

Purpose: The purpose of this paper is to examine the issue of CWB and job satisfaction. It identifies the relationship between CWB and job satisfaction.

Design/methodology/approach: The study involved 1051 employees of small, medium, and large Polish companies. The theoretical part describes the issues related to counterproductive behavior (CWB) and job satisfaction. The empirical part presents the results of the study on the relationship between these variables. Job satisfaction was measured using the Job Satisfaction Scale (Zalewska, 2001, 2003), consisting of 5 statements regarding the evaluation of the work sphere. CWB was measured using the Counterproductive Work Behavior Checklist (CWB-C) by Spector et al. (2006).

Findings: The study revealed: (a) a negative correlation of CWB with job satisfaction; (b) a positive correlation between job tenure and some dimensions and overall CWB index; (c) a positive relationship between job form and position and CWB.

Research limitations/implications: Among the limitations it should be noted that since all the variables were measured in the same questionnaire, the results may have been influenced by systematic errors due to variances in the common method. In order to overcome this problem (Podsakoff et al., 2012), future research should/could take into account other sources of exploration, such as supervisors' opinions as well as systematic observations. Moreover, the study was based on self-report measures for all variables. Although CWB self-report surveys and job satisfaction may be less prone to halo errors (Fox et al., 2012), it is still possible that some of these results were influenced by errors related to showing your best side, although the survey was anonymous. The studied sample, although quite large, cannot be considered representative of the general population of Polish workers. Future research should seek to recreate and elucidate the association with larger and more diverse samples.

Practical implications: The research presented has several important implications for organizations. Organizations should focus on job satisfaction as an indicator of success in creating workplaces conducive to improved well-being, engagement, and performance. If organizations can anticipate counterproductive behaviors and implement effective interventions and prevention programs they can save significant financial resources.

Organizations that want to eliminate CWB and increase their productivity should pay more attention to addressing organizational constraints, resolving interpersonal issues, and increasing job satisfaction among their employees.

Originality/value: The article deals with a relatively rarely discussed topic in the Polish literature. Topics that are very topical, useful not only for other researchers but also for practitioners. Given the costs and consequences associated with counterproductive behaviors, it can be argued that a management priority should be how to recognize these behaviors and what corrective and proactive actions to take. The results of this study provide a framework for understanding aberrant behaviors and better ways to minimize their occurrence in the workplace.

Category of the paper: Research paper.

Keywords: counterproductive behaviors, job satisfaction, job tenure, employees, management.

1. Introduction

There is a growing interest among many researchers in the issue of workplace behavior of employees (Gruys, Sackett, 2003).

In the literature, these behaviors are defined as, for example, workplace violence, deviancy (Robinson, Bennett, 1995), retaliation (Skarlicki, Folger, 1997), revenge (Bies et al., 1997), bullying, emotional cruelty (Keashly, 1998), mobbing (Zapf, Einarsen, 2005) theft, sabotage (Ambrose et al., 2002), rudeness (Andersson, Pearson, 1999), revenge (Bies, Tripp, 2005).

Counterproductive work behavior (CWB) embedded in the above concepts and the discovery of possible predictors of these behaviors is of particular interest to researchers. Additional studies may increase the understanding of why employees engage in CWB. Some studies have focused on the main effects of stressors and personality (Hershocovis et al., 2007).

Other studies have focused on examining the relationship between CWB and job satisfaction. Much empirical evidence (Dalal, 2005; Judge et al., 2006) revealed that job satisfaction negatively correlated with CWB directed at both the individual and the organization (Mount et al., 2006). In the study presented here, it was hypothesized that job satisfaction has a direct relationship with CWB, such that those who are dissatisfied with their jobs are more likely to engage in CWB that harm the organization and individuals.

2. Theoretical framework

A review of the literature indicates that generally satisfied employees tend to focus on their work and may have a low tendency to engage in counterproductive, deviant behaviors (Sims, 2002). In addition, employees who are satisfied with their job and organization are less likely to violate ethical rules within the organization and less likely to act to the detriment of the

organization. Similarly, it has been found that individuals with high job satisfaction will have positive perceptions so that they will not engage in CWB.

2.1. Counterproductive behaviors

CWBs are often contrasted with organizational citizenship behaviors (OCB), which belong to the positive stream in organizational research (Glinska-Neweś, Lis, 2016). CWB are believed to include voluntary actions that harm the organization, customers, co-workers, and supervisors (Spector, Fox, 2005; Spector, 2011; Spector et al., 2006, 2010). CWB can result in financial, personal, and organizational costs (DeShong et al., 2015). Research on CWB has focused on personality determinants (Bowling, Eschleman, 2010; O'Boyle et al., 2012) and organizational environmental factors (Ones, Dilchert, 2013). Other researchers suggest that these two sets of factors interact with each other (Penney et al., 2011).

One of the most popular models of CWB is the one proposed by Spector et al. (2006). It consists of the following five dimensions:

- 1. Abuse against others physical and psychological aggression directed against coworkers, for example, threats, disparaging comments, ignoring others.
- 2. Production deviance purposeful deviation from or neglect of the standard in fulfilling one's responsibilities.
- 3. Sabotage purposefully destroying or damaging the organization's property.
- 4. Theft stealing the organization's and/or coworkers' property, together with a potential aggressive reaction intended to harm the organization.
- 5. Withdrawal limiting time spent at work to levels below the required norm, for example, through unexcused absences, leaving work early, taking breaks above the allowed time limit, or late arrivals.

This model was empirically verified in numerous studies. These have used most of the aforementioned variables, eliminating the "sensitive" or specific (not suitable for each workplace) ones (Glińska-Neweś, 2017).

2.2. Job satisfaction

Job satisfaction is an individualized evaluation of work and includes "the meanings that employees attribute to their work activities" (Kalleberg, 2011, p. 154). The literature points to countless documented benefits of job satisfaction (Johns, 2006).

In the literature, the concepts of job satisfaction and job contentment are often interchangeable. Without going into the differences in the scientific meaning of these terms, it is assumed that job satisfaction, like the concept of job contentment, is "...a pleasant or positive emotional state resulting from an evaluation of one's job or work experience" (Locke, 1976, p. 1304).

Job satisfaction acts as a motivational force that influences an individual's behavior, while a dissatisfied employee is more often an unhappy person.

Researchers cite, among others, the job itself, payment system, promotion, supervisor, attitude of managers, supervisors, co-workers as indicators of employee satisfaction (Supriyanto et al., 2020).

Analyzing the research conducted in the area of job satisfaction, one can notice its diversity. Research is conducted to identify the overall level of satisfaction and individual factors that influence job satisfaction. In her research, Sypniewska (2014, 2017) asked respondents to indicate the ranks of the factors included in the cafeteria that influence their job satisfaction: work atmosphere, salary, promotion opportunities, job content, relationships with supervisor, with co-workers, organization culture, employment stability, and so on.

3. Research model

A systematic literature review methodology (Czakon, 2011) was used to conceptualize the study model. First, using the above methodology, the database and collection of publications were identified and selected. Finally, the publication database was developed, and then bibliometric and content analyses of selected materials were performed using EBSCO and Science Direct databases. Scientific publications containing the phrases *counterproductive behavior* and *job satisfaction* were searched. Publications from peer-reviewed articles written in English were used as the criterion of eligibility. In total, the search resulted in 160 articles. As a result of narrowing the literature review, 120 articles were used for the article.

The presented issues based on the systematic literature review have become the basis for the hypotheses. The authors have focused on the individual employee level of analyses. This results in the main research objective of the article, identification of the relationship between CWB and job satisfaction.

The following research hypotheses were formulated:

H1: CWB negatively correlate with job satisfaction.

H2: Job tenure positively correlates with theft, abuse against others, and withdrawal.

H3: There is a positive relationship between job tenure and CWB and job satisfaction.

4. Methodology of the research/sample characteristic/research tools

A quantitative questionnaire survey was conducted on a sample of 1051 people in 2019. The respondents were selected through non-random sampling. The criterion for selection of respondents was determined by the size of firms according to the criterion of number of employees (micro, small, medium, and large enterprises). As a criterion the authors adopted the structure of companies in the population of enterprises in Poland. Employees of companies that took part in the study constitute a group of 1051 people.

Job satisfaction was measured using the Job Satisfaction Scale (Zalewska, 2001, 2003), consisting of 5 statements regarding the evaluation of the work sphere.

CWB was measured using the Counterproductive Work Behavior Checklist (CWB-C) by Spector et al. (2006). It consists of 32 items. Responses were given on a 5-point scale (never, 1-2 times, 1-2 times per week, 1-2 times per month, every day). This is a shortened version of the measure recommended by Spector et al. The 32 items were divided into five categories: abuse against others, production deviance and sabotage, theft, and withdrawal. A strength of the CWB-C is that its subscales are clearly defined and can be treated as separate. Specific behaviors are classified into one category and do not appear in others. The CWB-C is available in many languages, including English, German, and Spanish (Szostek, 2019).

A total of 1051 people participated in the survey, of which 68.2% were female and 31.8% were male. Most respondents were aged 20-29 years (64.4%). Most (43.3%) respondents were employed in large enterprises (over 250 employees). Most respondents had been employed for up to three years (64.7%), those with three to 10 years were 27.1%, and those with more than 10 years of service were 7.3%.

Data analysis - first, descriptive statistics were calculated for the analyzed variables. Relationships between job satisfaction and intensity of CWB and between job tenure and job satisfaction and intensity of CWB were analyzed using correlation analysis. The relationships between the form of employment and position of the respondents and job satisfaction and the intensity of CWB were analyzed using analysis of variance

5. Research results

In the preliminary analysis descriptive statistics were calculated. Table 1 presents descriptive statistics for analyzed variables, namely: mean values, standard deviations, minimum and maximum values, measures of skewness and kurtosis and Cronbach's alpha reliability coefficients.

Table 1.

Descriptive statistics for analyzed variables

Variables	Μ	SD	min	max	S	K	α
Theft	6.42	2.96	4	21	.77	.55	.87
Abuse against others (AAO)	21.72	9.50	14	73	.49	.16	.95
Sabotage	3.71	1.73	1	15	.18	.02	.78
Withdrawal	7.24	3.10	3	20	.08	.81	.76
Production deviance	4.14	1.99	1	15	.24	.24	.79
Counterproductive behaviors overall	43.19	17.28	2	139	.44	.16	.96
Job Satisfaction	21.20	7.39	3	35	30	69	.91

M – mean value; SD – standard deviation; min – minimum value; max – maximum value; S – skewness; K – kurtosis; α - Cronbach's reliability coefficient.

The values of skewness and kurtosis did not exceed the range from -1.0 to 1.0. Therefore, parametric statistical tests were used in the subsequent analysis.

Correlation analysis

Job satisfaction and counterproductive behaviors (H1)

Table 2 shows r Pearson's correlation coefficients between job satisfaction with the severity of CWB.

Table 2.

Correlation coefficients between job satisfaction with severity of CWB.

	Job Sa	tisfaction
Variables	r	р
Theft	112	.001
Abuse against others (AAO)	134	.001
Sabotage	091	.003
Withdrawal	116	.001
Production deviance	158	.001
Counterproductive behaviors overall	143	.001

r - values of r Pearson's correlation coefficients; p - statistical significance.

Statistically significant but weak negative correlations were found between job satisfaction and all indicators of severity of CWB.

Job tenure and job satisfaction and counterproductive behaviors (H2, H3)

Table 3 shows the ρ Spearman correlation coefficients between the job tenure of the subjects and the severity of CWB and job satisfaction.

Table 3.

Correlation coefficients between the seniority of the subjects and the severity of CWB and job satisfaction

	Job	Job tenure	
Variables	ρ	р	
Theft	.124	.001	
Abuse against others (AAO)	.142	.001	
Sabotage	.030	.330	
Withdrawal	.074	.017	
Production deviance	.039	.207	
Counterproductive behaviors overall	.122	.001	
Job Satisfaction	001	.987	

 ρ - values of ρ Spearman correlation coefficients; p - statistical significance.

Statistically significant positive correlations were obtained between the job tenure of the subjects and scores on the theft, AAO, and withdrawal scales. It was also found that job seniority correlated positively with overall severity of CWB. No statistically significant correlation was found between job tenure and job satisfaction.

6. Discussion and conclusion

Consistent with H1, the results of the study indicate negative correlations between job satisfaction and all indicators of the severity of CWB. This means that employees who are dissatisfied with their jobs are more likely to engage in behaviors that harm the organization. The results of this study are consistent with the literature on the relationship between job satisfaction and CWB (Czarnota-Bojarska, 2015). The study may also contribute to predicting employee behaviors that harm the organization and/or individuals.

Employees who are more satisfied with their work, on the other hand, are more likely to "pay back" the organization with a relatively active and focused state to achieve the company's goal through their work (e.g., higher levels of engagement) and lower levels of behavior that harms the organization.

Dissatisfied employees may engage in CWB as a means of retaliating against employers for creating a hostile work environment. Another possibility is that because job satisfaction includes an emotional component it may influence willingness to engage in CWB. This prediction is consistent with previous theory suggesting that emotions are a direct cause of behavior (Miles et al., 2002; Spector, Fox, 2002) and social psychology research suggesting that negative affect contributes to aggressive behavior.

The results of the presented study indicate that there is a positive correlation of job tenure with the overall intensity of CWB (H3). This means that the longer the job tenure, the higher the intensity of CWB. When interpreting the results, it should be emphasized that longer job tenure also means greater familiarity with the company. More observed negative phenomena, which consequently lead to CWB. On the other hand, the results indicated no relationship between job satisfaction and job tenure (H3). This means that there are people in the study group who experience job satisfaction or lack of job satisfaction regardless of job tenure. Thus, job tenure is not a determinant of job satisfaction. It can be concluded that although individuals are satisfied (or not) they may engage in CWB because by working in the company for a long time due to observation of negative phenomena and/or behaviors in retaliation they engage in CWB.

The results of the study also indicated that job tenure positively correlates with CWB in terms of scores on the theft, abuse against others (AAO) and withdrawal.

Individuals who engage in actions to the detriment of the organization, for example, stealing and/or avoiding work, may view such actions as legitimate fringe benefits, as a legitimate way to address a problem, such as exploitation, or as restoring a sense of equality and fairness (Kelloway et al., 2010). Similarly, this is also the case with actions concerning the abuse of others. Individuals with a high level of job tenure may respond in this way to situations of conflict, inequality, discrimination, and so on. Although such actions are not related to job satisfaction, individuals with longer job tenure may engage in CWB in accordance with retaliation theory.

There remains the issue of remorse, and the question can be asked as to how employees eliminate it. According to the theory of employee anomie, which also refers to actions that harm the organization, such individuals may make social excuses in groups or internal rationalization by means of statements such as: everyone does it, no one loses out on it, it didn't happen to a poor person (Kosewski, 2008; Sypniewska, 2017, 2020).

Previous research has shown that abuse against others by a supervisor causes employees to engage in CWB and decreases employee satisfaction (Mitchell & Ambrose, 2007). According to reciprocity theory, individuals who are targets of negative acts will respond by engaging in negative acts against the abuser/supervisor. However, supervisor abuse is expected to cause subordinates to engage in behaviors directed at harming the organization only to the extent that subordinates make organization-directed attributions-that is, they attribute the supervisor's abuse to the organization (Bowling, Beehr, 2006).

In contrast, through supervisors' honesty, employees can promote positive norms about relationships and commitment. Supervisors' honest and socially congruent behaviors encourage subordinates to reciprocate with favorable work behaviors (Korsgaard et al., 2010; Omar et al., 2011).

Given the costs and consequences associated with CWB, it can be argued that a management priority should be how to recognize these behaviors and what corrective and proactive actions to take. The results of this study provide a framework for understanding aberrant behaviors and better ways to minimize their occurrence in the workplace.

References

- 1. Ambrose, M.L., Seabright, M.A., Schminke, M. (2002). Sabotage in the workplace: The role of organizational injustice. *Organizational Behavior and Human Decision Processes*, 89, 947-965.
- 2. Andersson, L.M., Pearson, C.M. (1999). Tit-for-tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, *24*, 452-471.
- 3. Bies, R.J., Tripp, T.M. (2005). The study of revenge in the workplace: Conceptual, ideological, and empirical issues. In: P.E. Spector, S. Fox (Eds.), *Counter-productive work behavior: Investigation of actors and targets* (pp. 65-105). Washington, DC: APA Books.
- 4. Bies, R.J., Tripp, T.M., Kramer, R.M. (1997). At the breaking point: Cognitive and social dynamics of revenge in organizations. In: R.A. Giacalone, J. Greenberg (Eds.), *Antisocial behavior in organizations* (pp. 18-36). Thousand Oaks, CA: Sage.
- 5. Bowling, N.A., Eschleman, K.J. (2010). Employee personality as a moderator of the relationships between work stressors and counterproductive work behavior. *Journal of Occupational Health Psychology*, *12*, 91-103.
- 6. Bowling, N.A., Beehr, T.A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology*, *91*, 998-1012.
- 7. Czakon, W. (2011). Metodyka systematycznego przeglądu literatury [Methodology of systematic literature review]. *Przegląd Organizacji*, *3*, 57-61.
- Czarnota-Bojarska, J. (2015). Counterproductive work behavior and job satisfaction: A surprisingly rocky relationship. *Journal of Management and Organization*, 21(4), 460-470.
- 9. Dalal, R.S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology*, *90*, 1241-1255.
- DeShong, H., Grant, D., Mullins-Sweatt, S. (2015). Comparing models of counterproductive workplace behaviors: The Five-Factor Model and the Dark Triad. *Personality and Individual Differences*, 74, 55-60.
- Fox, S., Spector, P.E., Goh, A., Bruursema, K., Kessler, S.R. (2012). The dewiant citizen: Measuring potential positive relations between counterproductive vork behaviour and organizational citizenship behavior. *Journal of Occupational and Organizational Psychology*, 85, 199-220.
- 12. Glińska-Neweś, A. (2017). *Pozytywne relacje interpersonalne w zarządzaniu* [Positive interpersonal relationships in management]. Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika.
- 13. Glińska-Neweś, A., Lis, A. (2016). Paradoks współwystępowania organizacyjnych zachowań obywatelskich i kontrproduktywnych [The paradox of the co-occurence of

organizational citizenship behaviors and counterproductive work behaviors]. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu*, 422, 265-274.

- 14. Gruys, M.L., Sackett, P.R. (2003). Investigating the dimensionality of counterproductive work behavior. *International Journal of Selection and Assessment*, *11(1)*, 30-42.
- Hershcovis, M.S., Turner, N., Barling, J., Arnold, K.A., Dupre, K.E., Inness, M. et al. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology*, 92, 228-238.
- 16. Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, *31*, 386-408.
- 17. Judge, T.A., Scott, B.A., Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: Test of a multi-level model. *Journal of Applied Psychology*, *91*, 126-138.
- 18. Kalleberg, A.L. (2011). Good jobs. Bad jobs: the rise of polarized and precarious employment systems in the United States, 1970s to 2000s. New York: Russell Sage Foundation.
- 19. Keashly, L. (1998). Emotional abuse in the workplace: Conceptual and empirical issues. *Journal of Emotional Abuse*, *1*(*1*), 85-117.
- 20. Kelloway, E., Francis, L., Prosser, M., Cameron, J. (2010). Counterproductive work behavior as protest. *Human Resource Management Review*, 20, 18-25.
- 21. Korsgaard, M.A., Meglino, B.M., Lester, S.W., Jeong, S.S. (2010). Paying you back or paying me forward: understanding rewarded and unrewarded organizational citizenship behavior. *Journal of applied psychology*, *95*(2), 277-290.
- 22. Kosewski, M. (2008). *Wartość, godność i władza* [Value, dignity and power]. Warszawa: VizjaPress.
- 23. Locke, E.A. (1976). The nature and causes of job satisfaction. In: M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago: Rand McNally.
- 24. Miles, D.E., Borman, W.E., Spector, P.E., Fox, S. (2002). Building an integrative model of extra role work behaviors: A comparison of counterproductive work behavior with organizational citizenship behavior. *International Journal of Selection and Assessment*, *10*, 51-57.
- 25. Mitchell, M.S., Ambrose, M.L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology*, 92, 1159-1168.
- 26. Mount, M., Ilies, R., Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59, 591-622.
- 27. O'Boyle, E.H., Forsyth, D.R., Banks, G.C., McDaniel, M.A. (2012). A meta-analysis of the Dark Triad and work behavior. A social exchange perspective. *Journal of Applied Psychology*, 97, 557-579.

- 28. Omar, F., Halim, F., Zainah, A., Farhadi, H., Nasir, R., Khairudin, R. (2011). Stress and job satisfaction as antecedents of workplace dewiant behavior. Deviant Behavior. *World Applied Sciences*, *12*, 46-51.
- Ones, D., Dilchert, S. (2013). Counterproductive work behaviors: Concepts, measurement, and nomological network. In: K. Geisinger, B. Bracken, J. Carlson, J. Hansen, N. Kuncel, S. Reise, M. Rodriguez (Eds.), *APA handbook of testing and assessment in psychology* (pp. 643-659). American Psychological Association.
- 30. Penney, L.M., Hunter, E.M., Perry, S.J. (2011). Personality and counterproductive work behavior. Using conservation of resources theory to narrow the profile of deviant employees. *Journal of Occupational and Organizational Psychology*, 84, 58-77.
- Podsakoff, P., MacKenzie, S.B., Podsakoff, N.P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology*, 63, 539-569.
- 32. Robinson, S.L., Bennett, R.J. (1995). A typology of dewiant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal*, 38, 555-572.
- 33. Sims, R.L. (2002). Ethical rule breaking by employees: A test of social bonding theory. *Journal of Business Ethics*, 40(2), 101-109.
- 34. Skarlicki, D.P., Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82, 434-443.
- 35. Spector, P. (2011). The relationship of personality to counterproductive work behavior (CWB): An integration of perspectives. *Human Resource Management Review*, *21*, 342-352.
- 36. Spector, P.E., Bauer, J.A., Fox, S. (2010). Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: Do we know what we think we know? *Journal of Applied Psychology*, *95(4)*, 781-790.
- 37. Spector, P., Fox, S., Penney, L., Bruursema, K., Goh, A., Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? *Journal of Vocational Behavior*, *68*(*3*), 446-460.
- 38. Spector, P.E., Fox, S. (2002). An Emotion-Centered Model of Voluntary Work Behavior: Some parallels between counterproductive work behavior (CWB) and organizational citizenship behavior (OCB). *Human Resources Management Review*, 12, 269-292.
- 39. Spector, P.E., Fox, S. (2005) The Stressor-Emotion Model of Counterproductive Work Behavior (CWB). In: S. Fox, S. P.E. Spector (eds.), *Counterproductive Workplace Behavior: Investigations of actors and targets* (pp. 151-175). Washington, DC: APA.
- 40. Supriyanto, A.S., Ekowati, V.M., Maghfuroh, U. (2020). Do Organizational Citizenship Behavior and Work Satisfaction Mediate the Relationship between Spiritual Leadership and Employee Performance? *Management Science Letters*, *vol. 5*, pp. 1107-1114.
- 41. Sypniewska, B. (2014). Evaluation of Factors Influencing Job Satisfaction. *Contemporary Economics*, *8*, *1*, 57-72.

- 42. Sypniewska, B. (2017). Work Anomie in an Organisation. *International Journal of Contemporary Management*, *16*, *2*, 235-265.
- 43. Sypniewska, B. (2020). Counterproductive Work Behavior and Organizational Citizenship Behavior. *Advances in Cognitive Psychology*, *16*, *4*, 321-328.
- 44. Szostek, D. (2019). Kontrproduktywne zachowania organizacyjne w kontekście jakości relacji interpersonalnych w zespołach pracowniczych [Counterproductive work behaviors in the context of interpersonal relationship quality in workplace teams]. Wydawnictwo Naukowe Uniwersytetu Mikołaja Kopernika.
- 45. Zalewska, A. (2001). Arkusz opisu pracy. O. Neubergera i M. Allerbeck adaptacja do warunków polskich [Job description sheet. O. Neuberger and M. Allerbeck adaptation to Polish conditions]. *Studia Psychologiczne*, *39*(*1*), 197-218.
- 46. Zalewska, A. (2003). Skala Satysfakcji z Pracy pomiar poznawczego aspektu ogólnego zadowolenia z pracy [Job Satisfaction Scale measuring the cognitive aspect of overall job satisfaction]. *Acta Universitatis Lodziensis, Folia Psychologica*, *7*, 49-61.
- 47. Zapf, D., Einarsen, S. (2005). Mobbing at work: Escalated conflicts in organizations. In: P.E. Spector, S. Fox (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 237-270). Washington, DC, US: American Psychological Association.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

PERSONAL BRAND AS A TOOL FOR SHAPING ORGANIZATIONAL CULTURE

Agnieszka WALCZAK-SKAŁECKA

Department of Management, Lublin University of Technology; a.skalecka@pollub.pl, ORCID: 0000-0002-1386-2158

Purpose: The objective of the article is to discuss the results of the study concerning the set of characteristics of the individual that are considered important in personal brand building, and which can be seen as a personal capital that can be brought to an organizational culture.

Design/methodology/approach: The review of literature was conducted in order to identify the set of characteristics of the individual who takes action in the personal brand building and to establish the relationship between the personal brand building process and the organizational culture. The empirical study employed the survey method with the use of a questionnaire. The study examined a representative sample of a thousand Polish Internet users in May 2021.

Findings: Taking action in the personal brand building can be viewed as a diagnostic tool when attracting employees, managing human capital and shaping the organizational culture. The results of the study suggest that there is a set of characteristics of the individual, attitudes and values that are considered important in building a personal brand, and people bring this personal capital to the organization along with their personal brands.

Research limitations/implications: Further research is needed to take into account the impact of the selected individual characteristics on shaping an entrepreneurial organization and its organizational culture, as well as the methods and possible scope of shaping these elements.

Originality/value: The results of the analysis and theoretical considerations discussed in this article complement existing research concerning the use of personal brand concept in shaping organizational culture.

Keywords: personal brand, human capital management, shaping organizational culture.

Category of the paper: Research paper.

1. Introduction

The concept of the personal brand, which has been developing since the turn of the century (Peters, 1997), has become an integral part of the practice of the economic life. Personal branding activities are undertaken by people representing different professional groups and at different stages of career development. It cannot be arbitrarily recognized that a personal brand

is a concept for everyone and constitutes an answer to all pressing questions in the field of career management or communication of the individual with key recipients. However, such an approach can be found in certain personal branding guides (Rampersad, 2010). The author of the present article emphasizes that everyone owns a brand, although not everyone consciously builds it. Such a statement can be interpreted in a variety of ways, depending on the adopted definition of the brand. The level of intensity of activities undertaken in the framework of personal brand building depends, among others, on the cultural and social capital the individual possesses. The intensity of such activities is also diversified depending on the type of professional group. This distinguishes the level of creativity of the performed tasks and the possibility of making independent decisions and focusing on achieving personal results (Walczak-Skałecka, Mieszajkina, 2021). Similar conclusions can be drawn concerning the importance of cultural and social capital in relation to the effectiveness of the personal brand in increasing employability (Khedher, 2019). The personal brand concept usually emerges in the context of managing one's own career or business, which is natural, if only because of its roots (Peters, 1997). Therefore, the analysis frequently encompasses the activities of people dealing with e.g. sport, science, politics, art, operation of a business, creating content, or services provided in person (Scheidt, Gelhard, Henseler, 2020).

Undoubtedly, there are numerous reasons for the rapid increase in the interest concerning the application of the personal brand concept. Probably, the most important of these can be traced back to the source of the concept itself, namely to the profound social changes that led to the emergence of the culture of individualism (Berger, 1986; Taylor, 1986). Clearly, this is not a phenomenon that affects all communities in the world equally. However, such distinctions are not crucial for the considerations herein. The culture of individualism is one of the characteristics of societies of late modernity, where, in the process of socialization, a strong responsibility for shaping their own lives and personal autonomy is instilled in individuals from an early age. Among other reasons for the increase of interest in the personal brand concept, one can also mention a change in the type of relationship between the employee and the employer, and the development of technology owing to which basically anyone can obtain information about everyone today (Sidor-Rządkowska, 2016). The first of the reasons is also linked to broader changes in the labor market. At present, both employees and employers are much more accustomed to changes that sometimes arise from the needs for development, and sometimes from necessity of other kind. However, the career path less and less frequently leads through the ladder of a single company. Additionally, enterprises tend to depart from operating in one specific way over the years without changing internal structures, processes and modes of organization. The technology, which underlies the second cause, also has a significant impact on the labor market and the way companies operate, both in terms of internal processes and actions aimed at markets and entire societies. Referring even only to the aspect related to the communication of professional activity of the individual, it is clearly visible how important it is today to take skillful actions online. On such grounds, the personal brand with

accompanying instruments becomes a concept not only useful, but perhaps even fundamental, at least in some professional circles. Therefore, it is worth examining other means of exploiting the concept that has already become a fixture in the economic practice.

2. Diversity of perspectives

As research shows (Walczak-Skałecka, Mieszajkina, 2021), people pursuing professions requiring high creativity, dependent on individual performance, and at the same time, characterized by a wide range of decision-making, are more active in personal brand building. Such professions include designers, artists, lawyers, doctors, marketers, managers, entrepreneurs, scientists, psychologists, psychotherapists, coaches, and trainers. Although similar in some respects, these groups are also highly diverse. Some of them encompass liberal professions, professions of public trust, while others are related to business and the management of various types of resources. What personal brands seem to share today are the factors influencing their perception, including personality, authenticity, differentiation and visibility (Scheidt et al., 2020).

2.1. Perspective of liberal professions

The professional activity of liberal professionals is probably the most natural field of exploiting the personal brand concept. When examining the fields of activity which are analyzed in the context of personal brand building the most, it becomes clear that the following groups appear the most frequently: athletes, professors, politicians, visual artists (e.g. painters, sculptors), actors, musicians, comedians, models, medical staff, CEOs, entrepreneurs, consultants, journalists, authors, influencers, bloggers (Scheidt et al., 2020). One of the reasons behind it may be the availability of information necessary to conduct analyses, and the fact that people pursuing such professions seek to and need to reach wide groups of recipients. It may also happen naturally through the professional activity itself and via the performance of functions related to the activity, e.g. actors promoting a production they starred in.

The representatives of liberal professions base their work on professional education and can largely decide upon how to perform the work themselves. As a consequence, it is their personal knowledge, creativity and responsibility that form the basis of their activity. These people can and frequently are hired as employees. However, they can also **successfully** run a business or operate in another form of self-employment, thus it merely constitutes a secondary issue in the discussion. However, what is important is the basis that constitutes the starting point for building their career: knowledge, creativity, responsibility. Evidently, there exist more of these factors. The author of the article merely seeks to indicate that their specific situation stems from the need to use personal resources in all fields of activities related to the professional activity, including communication with various groups of stakeholders.

2.2. Perspective of the entrepreneur – employer and the founder of the organization

Today, the personal brand of the entrepreneur has become a particularly vital component and tool for shaping the brand of the organization. From the point of view of an entrepreneur – employer, building a personal brand, in addition to objectives related to acquiring business partners and clients, has another extremely important goal which coincides with the approach practiced as *employer branding*. This concept, much like *personal branding*, emerged towards the end of the twentieth century (Ambler, Barrow, 1996). Employer branding denotes all activities undertaken by the organization with the view of addressing current and potential employees, aimed at creating the image of a good employer, and at the same time, consistent with business goals of the organization (Kozłowski, 2016). Additionally, there are authors who argue that the purposefulness and awareness of actions undertaken on the part of the organization are insignificant because the image of the employer is formed through the aggregate of activities and communication, and not exclusively via those undertaken with a specific intent (Mayo, 2001). On the one hand, present challenges of employers are related to the acquisition of employees possessing specific skills and knowledge, or at least predispositions, which can be subsequently developed. On the other hand, they are associated with maintaining the motivation of the team and retaining employees in the organization (Davies, Mete, Whelan, 2018). And all this in a world full of uncertainty both in the context of business risk and psychological and existential dilemmas of individuals (Giddens, 2012). Multifaceted building of an entrepreneur's personal brand has the potential to attract suitable job applicants, among others by shaping and communicating a specific organizational culture, regardless of the organization's size. Values constitute the interface between the personal brand of the employer (founder or the organization's manager) and the organization's brand itself. The values, in turn, are not only an important factor in shaping the organizational culture. They are also one of the criteria taken into account in the recruitment process, both on the part of employees and employers (Grzesiuk, Wawer, 2018).

Examples of brands such as Virgin or Apple are significant in this respect. Their organizational culture is inextricably linked to the philosophy and vision of the world presented by their founders. Smaller companies have even more extensive capabilities in this regard due to the greater power of direct influence and involvement of the owner. However, the power of recognizability of smaller enterprises is definitely lower. Nonetheless, social media or the Internet in general, as well as the ability to scrutinize virtually everyone by such means, make the personal brands of founders or leaders of enterprises a multifaceted asset that directly affects the perception of the organization (Bendisch, Larsen, Trueman, 2013; Nanton , Dicks, 2015; Rosenberg, 2015).

2.3. Perspective of the manager of the enterprise or its part

In the case of people managing an enterprise or its part (branch, department or team), a personal brand has a similar significance as in the case of the personal brand of the founder of the organization and the entrepreneur – employer. The difference between them is that the reach of their personal brands may be more limited (less recognizability due to other groups of key stakeholders). Therefore, in the context of contributing, more or less consciously, to building the employer's organization's brand, while taking care of their own personal brand, managers at various levels provide both themselves and the organization with greater chances for cooperating with valuable employees, and attracting them to the organization through their activities and communication. The second aspect of building a personal brand by managers at various levels of hierarchy is the impact of their personal brands on the perception of the organization's brand and the willingness to cooperate expressed by business partners or clients. The third concerns their own development and career management.

At this point, it is worth devoting attention to practices included in *employer branding*, namely *employee advocacy*. Practices and activities identified under this concept can be exploited by managers in a conscious way. However, they are based on natural socio-organizational behaviors. As a consequence, *employee advocacy* consists in voluntarily promoting or defending the employer (Men, 2014) in relation to all stakeholder groups – both internal and external (Thelen, 2020). Those who understand the relationship between their own personal brand and the brand of the organization fare much better as far as communication with colleagues is concerned (Williams, 2014; after Mollaei, Siadat, Hoveida, Rizaneh, 2021). This, in turn, may lead to a more efficient performance of the role of the employer's brand ambassador, which employees in such a situation can do autonomously, due to the permeation of value systems represented by the organization's brand, the manager's personal brand and the employee's personal brand.

2.4. Employee perspective

Building a personal brand becomes a vital part of career management primarily because it increases the impact of the individual upon the ability to pursue and maintain their preferred employment. As a consequence, it can build a competitive advantage in the labor market and lead to career development in the direction and character considered by the individual to be the most rewarding (Evans, 2017; Horton, 2011). Therefore, it seems that the concept of a personal brand is a natural consequence of the feedback loop between broadly understood marketing and social life, which affect each other by forcing further changes (Giza-Poleszczuk, 2017).

Conscious career shaping with a focus on personal brand building can commence with a deep analysis of one's own assets, taking into account their critical evaluation. In the next steps, the individual can analyze trends in the labor market in relation to resources at one's disposal and check potential career paths, and set goals in different time perspectives. What remains after that is the continuous development of skills, knowledge, communication competences and the brand itself. This process (Figure 1) is closely related to the self-awareness and activity of the individual in various fields.

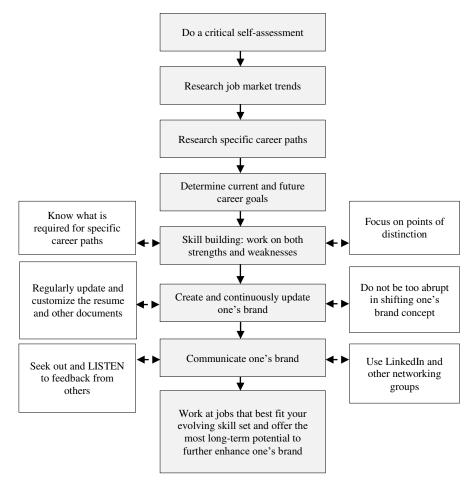


Figure 1. Self-Branding and Career Planning (at any stage in one's career). Source: Evans, 2017.

2.5. Perspective of a person starting a professional career

People embarking upon their professional career face numerous challenges. However, in the modern reality (especially) young people have the opportunity to work on their brand long before they start their professional career. They also have unprecedented opportunities to shape their own path, which does not have to be related to the any specific organization, i.e. self-employment opportunities. Examples can be found, inter alia, among young Internet content creators, for whom activity, e.g. on YouTube, does not have to be initially related to professional plans and rather focuses on hobbies. Over time, the nature of such an activity can change and turn into a thriving business. However, in both cases we can already talk about activities that will affect the perception of the individual by various groups in the surrounding environment, including potential employers, business partners or clients. Young people show different attitudes towards pursuing paid work and consciously shaping their career from its onset. Studies involving graduates of various faculties aged 23 to 27, diversified in terms of

gender and the fact of having a job, showed that there is a positive relationship between active personal brand building and employment. This activity was studied in six dimensions: cultural capital, social capital, verbal self-presentation, mediated self-presentation, authenticity and appearance (Khedher, 2019).

3. Personal brand vs. organizational culture

Defining organizational culture is a difficult task. What seems the most important to the author of the present article in light of current considerations is that (1) organizational culture is a system of common beliefs and values, developing in the organization and guiding the behaviors of its members (Schein, 2010), (2) acknowledgment that organizational culture is of procedural nature and is characterized by internal dynamics, thus it can be understood as a learned product of group experience based on values (Sulkowski, 2002), (3) apart from integrative, perceptive, adaptive functions, and functions of assigning identity and stimulating organizational changes (Sikorski, 1990), it can also play the role of managing social potential. The author considers the latter context as one of the fundamental factors for the success of the organization in the world of late modernity. This is because changes in the organizational culture resulting from conscious and deliberate management are nothing more than 'focus on changing attitudes and beliefs shared by employees; strengthening attitudes, values and beliefs that reinforce expected reactions, while weakening attitudes and beliefs that are useless' (Panasiewicz, 2013, p. 7). The quote refers to one of the chief ideas discussed in In Search of *Excellence*, co-authored by Tom Peters (Peters, Waterman, 1982) considered to be the greatest promoter of the personal brand concept.

3.1. Procedural nature of organizational culture

Organizational culture must be considered as a kind of multi-component and multi-layered system that organically undergoes various types of turbulence and transformations. These layers, which, starting from the basic cultural assumptions related to the five problems of human existence (Kluckhohn, Strodtbeck, 1961; after Gadomska-Lila, 2011), also reflect the process of shaping the culture of the organization. What is important and what constitutes perhaps the greatest challenge in the conscious and deliberate shaping of the organizational culture is access to individual layers. Symbols (linguistic, behavioral and physical artifacts) are relatively easily accessible, noticeable and tangible. However, in order to obtain a full understanding of their meaning and potential consequences their use entails, one must examine deeper layers. This is because they always involve interpretation, which in turn may require time, openness and perseverance on the part of both managers and the team. The interpretation of an external observer without becoming familiar with deeper levels of a given culture may be

faulty. Norms and values function in both the unconscious and conscious spheres. They are more durable than the symbols themselves. On the other hand, they are more difficult to observe. Fundamental assumptions, which are durable and difficult to change, constitute the source of culture (Schein, 2010).

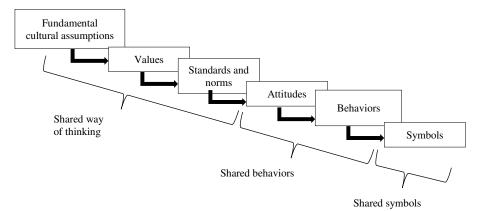


Figure 2. Sequence of cultural components. Source: Gadomska-Lila, 2011

Among the factors that influence these changes are people. This pertains not only to those at the highest levels of management, but to all employees. 'Employees constitute and shape this culture, building and modifying a set of views, values and hidden assumptions shared within the company. All these processes take place simply during everyday cooperation' (Panasiewicz, 2013, p. 25).

Values are one of the most important factors influencing both the development, way of building, activity and communication of personal brands, as they are, among others, what underpins the cultural capital an individual owns and expands. Values are also one of the fundamental elements of shaping the organizational culture, regardless of whether this process takes place in a manner planned and controlled by the organization's managers. Values thus become a kind of a platform by means of which people at all levels of the organizational hierarchy are able to communicate. The degree to which employees identify with the values of a given organization has a huge impact on their commitment and loyalty (Rzemieniak, Wawer, 2021), which in turn translates into the way the organization operates and into the experience that employees, managers, clients and other stakeholder groups share.

Man is a carrier of all elements of the process of organizational culture building. Many of these components were shaped on the basis of the individual's experiences throughout his life. Such a baggage is brought to the organization by the individual. Over time, when the culture crystallizes, the potential for its change by one person or several people is reduced. All the more, one of the critical points of conscious building and managing organizational culture is the moment of selecting employees whose profile corresponds to the preferred organizational culture.

3.2. Features, values and attitudes important in the process of personal brand building in light of empirical research

The review of literature inspired the attempt to determine whether there exists a universal set of values, attitudes and features characteristic for people taking active actions in personal brand building. Clearly, this is not an easy task and requires multi-stage research conducted by means of a variety of methods. The presented results are therefore only the beginning of the process which may lead to the profile of a candidate becoming outlined in terms of the personal brand. The establishment of such a universal bundle of values, attitudes and features would open the way to a more accurate assessment of what an employee contributes to the organizational culture of the enterprise.

The study was conducted on a representative sample of 1000 Polish Internet users. Gender distribution was even (499 men and 501 women). Age distribution was as follows: 13% – respondents aged 18-24, 24% – those aged 25-34, 26% – 35-44, 17% – 45-54, 14% – 55-64, and 7% – 65 and above. The survey method CAWI with the use of a questionnaire was employed in order to verify the hypotheses. An original survey questionnaire was employed as the research tool.

The results presented below should be treated as a starting point for further research. However, a few interesting observations are worth pointing out. Among 35 different statements, the respondents indicated that the following features are the most important in the process of personal brand building: professionalism, creativity, consistency, perseverance, reliability, commitment, responsibility, ability to cooperate, respect for others, (person) building trust, intelligence, wisdom, diligence, personal culture. These features were indicated as *significant* or *very significant* by 81% to 85% of the respondents (Figure 3). On the one hand, the range is quite extensive. On the other, it seems to have some internal coherence. The feature which, with the above set of criteria, obtained the lowest index is the focus on finance (55%). At the same time, it was the only statement that scored below 60% of the total indications labeled *significant* or *very significant* (Table 1). Considering the fact that the personal brand concept is based, among others, on increasing the chances for a financially satisfactory job or career, this seems to be quite an interesting result.

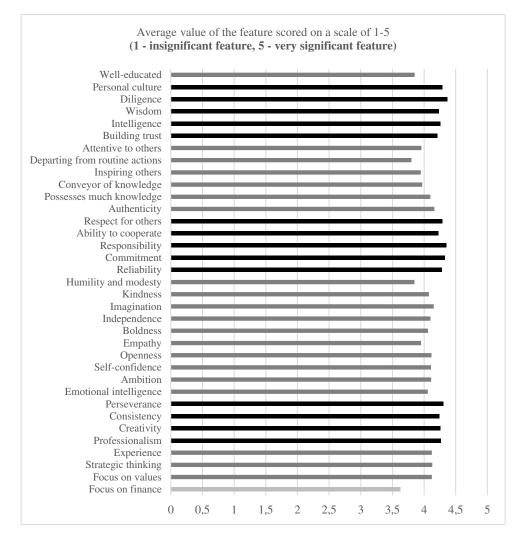


Figure 1. Assessment of the significance of individual features in the personal brand building process in the opinion of Polish Internet users.

Source: own study.

Another interesting observation that can be made on the basis of the present results is the equally high percentage of responses labeled *insignificant* and *of low significance* in the case of the focus on finance, humility and modesty, and good education. Humility and modesty may not be considered important in the personal brand building process, for example due to the fact that a personal brand, apart from many other activities, must take targeted actions in terms of communicating its own value to individual groups of recipients. However, such an assumption needs to be verified in further research.

Table 1.

Assessment of the significance of individual features in the personal brand building process in the opinion of Polish Internet users – average values, percentage of responses in specific ranges

Feature, attitude	Average value for the feature	Percentage of indications labeled significant and very significant	Percentage of indications labeled insignificant and of low significance
Focus on finance	3.629	55%	8%
Focus on values	4.122	77%	4%
Strategic thinking	4.13	76%	3%
Experience	4.123	76%	3%
Professionalism	4.27	81%	3%
Creativity	4.261	82%	4%
Consistency	4.242	82%	4%
Perseverance	4.308	82%	3%
Emotional intelligence	4.058	75%	4%
Ambition	4.111	77%	4%
Self-confidence	4.109	77%	4%
Openness	4.118	76%	4%
Empathy	3.954	69%	6%
Boldness	4.062	75%	4%
Independence	4.101	77%	4%
Imagination	4.153	79%	4%
Kindness	4.078	75%	5%
Humility and modesty	3.847	64%	8%
Reliability	4.287	82%	3%
Commitment	4.326	84%	2%
Responsibility	4.353	84%	3%
Ability to cooperate	4.226	81%	3%
Respect for others	4.291	83%	4%
Authenticity	4.162	79%	3%
Possesses much knowledge	4.099	77%	4%
Conveyor of knowledge	3.97	73%	6%
Inspiring others	3.949	70%	6%
Departing from routine actions	3.801	63%	7%
Attentive to others	3.959	71%	5%
Building trust	4.214	81%	3%
Intelligence	4.261	82%	3%
Wisdom	4.239	81%	3%
Diligence	4.367	85%	3%
Personal culture	4.291	83%	4%
Well-educated	3.852	64%	8%

Source: own study.

At this stage, these results should not be generalized. However, they can be treated as an indication of the direction in which the model of values, attitudes and features related to active personal branding may develop.

4. Conclusions and avenues for further research

The present results of empirical research constitute an interesting starting point for further research. The author intends to identify the features, attitudes and beliefs that underlie the effectiveness of personal brand building activities and support the shaping of the organizational culture of enterprises and other entities. The benefits of a personal brand for conscious career management have already been confirmed. Still, this concept has untapped potential in terms of shaping an entrepreneurial organization and its culture. This is particularly important for the capability of developing the innovation of the organization and its performance. Entrepreneurship culture is conducive to increasing the effectiveness of operation in the conditions of high uncertainty and a crisis of confidence (Mieszajkina, 2018). Therefore, exploiting the potential of a personal brand in building a competitive advantage is an interesting approach which requires further interdisciplinary research.

References

- 1. Ambler, T., Barrow, S. (1996). The employer brand. *Journal of Brand Management*, *Vol. 4, Iss. 3*, 185-206, doi: 10.1057/bm.1996.42.
- Bendisch, F., Larsen, G., Trueman, M. (2013). Fame and fortune: A conceptual model of CEO brands. *European Journal of Marketing*, Vol. 47, Iss. 3, No. 4, pp. 596-614, doi: 10.1108/03090561311297472.
- 3. Berger, P.L. (1986). *The Capitalist Revolution: Fifty Propositions About Prosperity, Equality, and Liberty.* New York: Basic Books.
- 4. Davies, G., Mete, M., Whelan, S. (2018). When employer brand image aids employee satisfaction and engagement. *Journal of Organizational Effectiveness: People and Performance, Vol. 5, Iss. 1*, pp. 64-80, doi: 10.1108/JOEPP-03-2017-0028.
- Evans, J.R. (2017). Branding in Perspective: Self-Branding for Professional Success. Retrieved from: https://www.researchgate.net/profile/Joel-Evans-2/publication/312192830 _Branding_in_Perspective_Self-Branding_for_Professional_Success/links/ 58758c1b08aebf17d3b3f9cd/Branding-in-Perspective-Self-Branding-for-Professional-Success.pdf, 12.04.2022.
- 6. Gadomska-Lila, K. (2011). Wzory kulturowe w organizacji. *Master of Business Administration, Vol. 1, Iss. 116*, pp. 54-62.
- 7. Giddens, A. (2012). Modernity and Self-Identity [Nowoczesność i tożsamość. "Ja" i społeczeństwo w epoce późnej nowoczesności]. Warsaw: PWN.

- 8. Giza-Poleszczuk, A. (2017). *Uczeń czarnoksiężnika, czyli społeczna historia marketingu*. Warsaw: Wydawnictwo Uniwersytetu Warszawskiego.
- 9. Grzesiuk, K., Wawer, M. (2018). Employer branding through social media: The case of largest polish companies. *10th International Scientific Conference Business and Management*, doi: 10.3846/bm.2018.42.
- 10. Horton, T. (2011). Branded for success. T+D, Vol. 65, Iss. 8, pp. 72-73.
- 11. Khedher, M. (2019). Conceptualizing and researching personal branding effects on the employability. *Journal of Brand Management*, *Vol. 26, Iss. 2*, pp. 99-109, doi: 10.1057/s41262-018-0117-1.
- 12. Kluckhohn, F.R., Strodtbeck, F.L. (1961). *Variations in Value Orientations*. Evanston Elmsford: Row, Peterson and Co.
- 13. Kozłowski, M. (2016). *Employer branding. Budowanie wizerunku pracodawcy krok po kroku*. Warsaw: Wolters Kluwer Polska.
- 14. Mayo, A. (2001). The Human Value of the Enterprise: Valuing PEOPLE as Assets: Monitoring, Measuring, Managing. London-Boston: Nicholas Brealey Publishing.
- Men, L.R. (2014). Why Leadership Matters to Internal Communication: Linking Transformational Leadership, Symmetrical Communication, and Employee Outcomes, *Journal of Public Relations Research*, Vol. 26, Iss. 3, pp. 256-279, doi: 10.1080/1062726X.2014.908719.
- 16. Mieszajkina, E. (2018). Zarządzanie przedsiębiorcze w małych firmach. Lublin: Wydawnictwo Politechniki Lubelskiej.
- Mollaei, R., Siadat, S.A., Hoveida, R., Rizaneh, J. (2021). Designing a Model of Personal Branding for Employees With an Emphasis on Organizational Training: The Case of the Administrative Staff of the Judiciary of the Islamic Republic of Iran. *Iranian Journal of Management Studies*, Vol. 14, Iss. 4, pp. 699-720.
- Nanton, N., Dicks, J.W. (2015). Purpose and power of the CEO brand. In: M. Fetscherin, (Ed.), *CEO Branding: Theory and Practice* (pp. 21-29). London: Routledge.
- 19. Panasiewicz, L. (2013). Ukryta przewaga: Kultura organizacyjna jako czynnik sukcesu współczesnych przedsiębiorstw. Lublin: Wydawnictwo Politechniki Lubelskiej.
- 20. Peters, T. (1997). The brand called You, *Fast Company*. Retrieved from https://www.fastcompany.com/28905/brand-called-you, 18.03.2022.
- 21. Peters, T., Waterman, R. (1982). *In Search of Excellence*. New York: HarperCollins Publisher Inc.
- 22. Rampersad, H.K. (2010). Ty Marka inna niż wszystkie. Gliwice: Helion.
- 23. Rosenberg, B. (2015). CEO brand development. In: M. Fetscherin (Ed.), *CEO Branding: Theory and Practice* (pp. 31-50). London: Routledge.
- Rzemieniak, M., Wawer, M. (2021). Employer Branding in the Context of the Company's Sustainable Development Strategy from the Perspective of Gender Diversity of Generation Z. Sustainability, Vol. 13, Iss. 2, No. 828, doi: 10.3390/su13020828.

- 25. Scheidt, S., Gelhard, C., Henseler, J. (2020). Old Practice, but Young Research Field: A Systematic Bibliographic Review of Personal Branding. *Frontiers in Psychology*, *Vol. 11, Iss. 1809*, pp. 1-18, doi: 10.3389/fpsyg.2020.01809.
- 26. Schein, E.H. (2010). *Organizational Culture and Leadership*. San Fransisco: Jossey-Bass, John Wiley & Sons.
- 27. Sidor-Rządkowska, M. (2016). Personal branding wyzwanie dla zarządzania kapitałem ludzkim we współczesnych organizacjach. *Edukacja ekonomistów i Menedżerów, Vol. 2, Iss. 40*, pp. 13-27.
- 28. Sikorski, C. (1990). *Kultura organizacyjna w instytucji*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 29. Sułkowski, Ł. (2002). Kulturowa zmienność organizacji. Warsaw: PWE.
- 30. Taylor, C. (2002). The Ethics of Authenticity [Etyka autentyczności]. Cracow: Znak.
- 31. Thelen, P.D. (2020). Internal communicators' understanding of the definition and importance of employee advocacy. *Public Relations Review*, *Vol. 46, Iss. 4, No. 101946*, doi: 10.1016/j.pubrev.2020.101946.
- 32. Walczak-Skałecka, A., Mieszajkina, E. (2021). The Influence of Start-up Capital on Building a Personal Brand. *European Research Studies Journal, Vol. XXIV, Special Issue 2*, pp. 706-715, doi: 10.35808/ersj/2305.
- 33. Williams, B.B. (2014). Personal brand & the branding process: From hype to actual benefits for human resources and talent management leaders (Doctoral dissertation). University of Pennsylvania.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

INTERACTIVITY, PROACTIVITY, COMMUNITY – THE PILLARS OF ONBOARDING. TEST TOOL PROPOSAL

Krzysztof WĄSEK^{1*}, Przemysław ZBIEROWSKI²

¹University of Economics in Katowice; krzysztof.wasek@ue.katowice.pl, ORCID: 0000-0003-1059-436X ²University of Economics in Katowice; przemyslaw.zbierowski@ue.katowice.pl, ORCID: 0000-0001-6144-1940 * Correspondence author

Purpose: The main objective of this paper is to present the pillars of onboarding programmes created on the basis of literature studies and interviews with human resource management practitioners. In addition, the presentation of a proposal for a research tool to measure the levels of implementation of the pillars' assumptions, which was developed on the basis of the author's research procedure, was taken as the specific objective of the paper.

Design/methodology/approach: In order to identify the pillars of onboarding, a literature review was carried out. This review was carried out using databases such as ProQuest, EBSCOhost and Google Scholar. The analysis covered a total of more than 100 peer-reviewed scientific papers. In this phase, the three pillars of onboarding were identified. As a next step, the authors decided to conduct research interviews with 23 mid- and senior-level HR professionals who carry out or coordinate onboarding programs.

Findings: The result of the procedure described in the point above are three pillars of onboarding, which were selected through literature studies and interviews with human resource management practitioners dealing with onboarding programs. These onboarding pillars can form the basis of a research tool that can be used to measure the level of interactivity, proactivity and community of individual onboarding programs.

Research limitations/implications: The limitation of the described research progress is the relatively small number of interviews with experts in the field of human resources management. The number of interviews was dictated by the availability of practitioners, as well as the willingness to participate in one of the stages of the research procedure.

Practical implications: The developed research tool can be used to measure the level of interactivity, proactivity and community of onboarding programs. Thanks to the comprehensive approach to the most important components of the onboarding pillars, it will be possible to determine to what extent the onboarding program used meets the basic assumptions. The created tool can be used both by scientists and managers who create onboarding programs based on the presented pillars. Additionally, said tool can also be used to improve existing implementation programs.

Social implications: According to the authors of the publication, the created tool will definitely help to adjust or improve implementation programs for new employees, which will definitely affect the speed of adaptation in a new workplace and will translate into faster readiness to properly fulfill professional duties.

Originality/value: A peculiar novelty created by the authors is the concept of a research tool for measuring the three pillars of onboarding. The results of the publication are directed to managers dealing with implementation programs and employees who are in the process of implementation.

Keywords: onboarding, adaptation, socialization, pillars of onboarding.

Category of the paper: research paper.

1. Introduction

Recruiting talented employees is an essential part of the success of any organisation. It becomes all the more important in a situation where competition for qualified employees is fierce (Edwards, 2009). High employee turnover rates make the deployment process a very important and significant problem for many organisations (Semenza, Harden, Koury, 2020, p. 109). Deployment therefore becomes one of the key elements of development for both employer and and employees (Karambelkar, Bhattacharya, 2017, p. 5). Onboarding programmes are an increasingly appreciated tool due to the fact that employers are committing more and more resources and energy to the recruitment processes of their best employees. As a result as a result, organisations are designing better and better onboarding programmes to ensure that newly hired employees are ready to function fully in their positions as soon as possible (Becker, Bish, 2019). As onboarding programmes are increasingly challenged, attention is being paid to redesigning legacy programmes and refocusing on the original values (Stewart, Jones, Vallas, 2021). The current state of onboarding research mainly focuses on the levels of implementation an employee can achieve after completing the programme (Bauer, 2010, p. 2). Therefore, it is reasonable to undertake a procedure to create pillars of onboarding programmes based on which effective implementation programmes can be created. The aforementioned area represents a research gap, the filling of which is one of the objectives of the described procedure. The realisation of the described assumptions will bring many benefits to those creating new onboarding programmes as well as those wishing to make changes to their existing onboarding programme.

2. Onboarding

The process of recruiting and selecting employees consumes a very large amount of time, capital and energy that needs to be put into activities aimed at attracting the best candidates for a vacancy. Once the recruitment and selection of candidates has been completed, it is worth preparing an onboarding process that allows the employee to be as prepared as possible to carry

out his or her job tasks and responsibilities effectively (Becker, Bish, 2019). Onboarding is a process that helps an employee enter a new work environment, through which he or she learns about his or her job responsibilities and becomes part of a team (Adler, Castro, 2019, pp. 106-120). The goal of onboarding is to introduce new employees to existing processes, policies, values and practices while fostering a positive onboarding experience (Klein, Polin, 2012, pp. 267-280). Onboarding programmes may differ in terms of formalisation, content discussed or duration (Adler, Castro, 2019, pp. 106-120) while their main purpose and objectives always boil down to familiarising the employee with the organisation, general principles, as well as job responsibilities (Skeats, 1991, p. 16). The implementation of onboarding programmes in online form, which has been and partly still takes place in many organisations due to the COVID-19 pandemic, has changed the way information is communicated (Pabian, Ochwat, Kwiatkowska, 2021 pp. 6-33). It is now very common to use online forms and videos through which the new employee gets to know the organisation (Morrison, 2021, pp. 203-206). In the face of new forms of knowledge transfer about the organisation, the importance of team building, social bonding, and integration of candidates often from different backgrounds has definitely increased (Stewart, Jones, Vallas, 2021).

3. Pillars of onboarding

The title pillars are essential elements in the design of any onboarding programme. They have been selected on the basis of the analysis of the literature on the subject. It should be noted that they constitute a set of desirable and correct principles, which are mentioned by authors of research studies in the scope of onboarding programmes and HR practitioners. These onboarding pillars include: the interactivity of onboarding programmes, the proactivity of the activities undertaken by onboarding programmes and the community involved in introducing a new employee to an organisation.

The first of these is interactivity. In the era of the COVID-19 pandemic and the widespread use of remote working, the interactivity of HR processes is becoming increasingly popular. Currently, the millennial generation is the most active in the labour market, which also puts a lot of emphasis on creating interactive solutions valued by the aforementioned generation. Similarly, J. Ferri-Red (2013) also notes, mentioning that younger generations much prefer to assimilate knowledge and information from videos, interactive sites, smartphones or other formats of an interactive nature. Furthermore, he points to the creation of interactive content as one of the tips for preparing onboarding programmes. In conclusion, the author emphasises that interactive solutions have a far greater impact on younger generations (Ferri-Red, 2013, pp. 32-33). Furthermore, it is noteworthy that the coronavirus pandemic has increased the

demand for the use of interactive tools and accelerated developments in the area of modern forms of employee onboarding (HR Trends Report 2020/2021).

The second pillar of onboarding that emerged during the desk study is proactivity. The aforementioned pillar plays a key role in the smooth and comprehensive introduction of the employee to the organisation. The literature highlights in many cases the importance of a proactive attitude of managers and those conducting onboarding programmes for new hires (Jeske, Olson, 2021 p. 69). K. Dekas (2013) emphasises that managers who have a proactive approach to knowledge sharing, encourage coaching and so-called 'job shadowing' increase the chances of a successful onboarding programme (Dekas, 2013). Confirming the above thesis, the findings of A.M. Saks et al. (2011) also indicate that proactive relationship-oriented behaviour also becomes particularly important from the perspective of onboarding programmes (Saks, Gruman, Cooper-Thomas, 2011, pp. 36-46).

The third of the title pillars is the onboarding community. This aspect brings together all the people involved in the onboarding process, their competences or skills used during the implementation programmes. Bradt and Vonnegut (2009) emphasise the special role that mentors and buddies play in the onboarding process (Bradt, Vonnegut, 2009). Similarly, other authors (Bhakta, Medina, 2021; Caldwell, Peters, 2018; Karambelkar, Bhattacharya, 2017) also state the same, highlighting the fact that the assignment of a mentor during onboarding is an excellent idea to support individualised forms of implementation. Mentors are an extremely valuable and helpful source of information and support for new employees (McKimm, Jollie, Hatter, 2007). The second group of people who take an active part in carrying out onboarding programmes are the so-called 'buddies' - buddies. These individuals can be described as the official friends of the new hires. It is to the buddies that the new employees can address any questions they have about the job, its organisation and socialisation issues. The new employee's relationship with the so-called buddy is decidedly different from a mentoring relationship, as the buddy's tasks focus largely on helping the new person to so-called socialise, i.e. to get to know the new organisation also from the side of the staff who work there (Nelson, Sperl, 2004). J. Graybill et al. (2013) include mentors and buddies as essential components of any onboarding programme (Graybill, Cerpenter, Offord, Bolt, Shaffer, 2013, pp. 212). It is important to emphasise that the availability of people who form the social pillar of onboarding programmes and the relationship that the employee establishes with the organisation are very positive developments that help reduce the stress that accompanies a new employee. In addition, the onboarding community helps to solve problems and difficulties that may also arise in the later stages of working for the organisation.

In the text, the Harvard referencing citation style should be used (Smith, 2017) or (Smith, Bradley, 2017). In the case of more than three authors, write the surname of the first of them and add the abbreviation "et al." (Bradley et al., 2017).

The emergence of the pillars described led the authors to develop a proposal for a research tool to measure the assumptions of the onboarding pillars described in the previous section. The first stage in the development of the research tool was to identify relevant elements that could be categorised into the three onboarding pillars of proactivity, interactivity and community. In order to gather the relevant elements that make up the different pillars of onboarding, a literature review was conducted. This review was carried out using databases such as ProQuest, EBSCOhost and Google Scholar. The analysis covered a total of more than 100 peer-reviewed scientific papers. In this phase, the three pillars of onboarding were identified. Data was collected by systematically entering all activities representing the individual onboarding pillars into a spreadsheet. Following the literature review described above, the authors of the study decided to supplement the results with information from those involved in employee onboarding. Therefore, as a next step, the authors decided to conduct research interviews with 23 mid- and senior-level HR professionals who carry out or coordinate onboarding programmes. The number of interviews was dictated by the availability of practitioners, as well as their willingness to participate in one stage of the research proceedings. The companies the respondents represented overwhelmingly included companies from the service, manufacturing and retail sectors. Most of the experts came from large and mediumsized enterprises located in southern Poland. During the interviews, the experts were asked which activities they would categorise as particular pillars of onboarding. The interviews made it possible to collect a large amount of data on the activities that, according to the respondents, characterise the different pillars of onboarding programmes. The collected data were transferred to a spreadsheet allowing the grouping of activities and the identification of those that occurred most frequently, both in the literature and in the and expert interviews. By collating the results from the two stages of the research procedure, it was possible to compare the most frequent activities, which were assigned to the three pillars of onboarding. The activities that were repeatedly mentioned by the experts and those that were revealed during the literature review were taken into account when creating the research tool proposal. A very large number of activities from the above sources overlapped which confirmed the validity of their selection. The result of the work described above is a research tool that covers the 3 pillars of onboarding: proactivity, interactivity and community.

Under the first pillar, which is proactivity, a total of 10 statements were developed. These statements address issues related to proactive actions by the employer, leading to the full effectiveness in the professional area that a new employee should achieve. They are reproduced below to give an overview of the subject matter:

- 1. During onboarding, I was ensured that I was actively involved in the implementation activities.
- 2. During the implementation, it was presented how important my role will be in the organization.
- 3. The onboarding programme allowed to learn the aspects necessary to start work properly.
- 4. The content of the implementation programme was prepared in such a way that, once it was completed, the duties would start correctly.
- 5. Onboarding included active and engaging ways of implementation.
- 6. During the implementation process, I was given the appropriate amount of time necessary to properly assimilate the content.
- 7. The presenter encouraged questions.
- 8. The implementer made sure that the content communicated was understood.
- 9. The implementation schedule took into account the possibilities for absorbing new knowledge.
- 10. Adequate time has been provided during implementation for asking questions and clarification of ambiguities.

The second pillar of onboarding, under which a total of 11 statements were developed, is interactivity. In this area, the questions specifically address: feedback on the onboarding programme, the tools used during onboarding, the sources used during the employee's onboarding and the relationships that were built during the adaptation programme. The statements exploring the level of interactivity are presented below:

- 1. During onboarding, feedback was collected on the various stages of implementation.
- 2. Tailored the onboarding programme to my own needs and implementation preferences.
- 3. Interactive tools were used during the onboarding process.
- 4. Online evaluation surveys were conducted during implementation.
- 5. During onboarding, knowledge was transferred through interactive information sources.
- 6. Each new employee was given access to an adequate amount of information available throughout the implementation about the company and its operations.
- 7. During the onboarding process, a good relationship was nurtured between the implementer and the one being implemented.
- 8. During onboarding, progress and the degree of assimilation of information were analysed.
- 9. The implementer asked questions about the clarity of messages and information.

- 10. The implementer informed about the possibility of repeating an issue or returning to unclear and problematic issues.
- 11. During the implementation I felt I built a strong relationship with the implementing person.

The last of the onboarding pillars presented is the community pillar. In this case, as in the first onboarding pillar presented, a total of 10 statements were developed. The content of these statements examines, among other things: the level of support provided during the implementation programme, the number of people supporting and supervisors of the onboarding process, as well as the frequency of contact between those involved in the onboarding process and new employees. Below are the statements developed for the community pillar:

- 1. In the onboarding process, a mentor/mentee/buddy was assigned to guide me through the implementation process.
- 2. Those carrying out the implementation were well prepared for their role.
- 3. Those carrying out the implementation were characterised by a high degree of commitment in their duties.
- 4. The frequency of contact with the implementers was sufficient to get to know the organisation and its functioning.
- 5. During onboarding, I was given the support and assistance I needed.
- 6. During implementation, remote contact with those carrying out the implementation was provided.
- 7. The implementer, believed in me and my skills.
- 8. I received a lot of valuable working tips from the people involved in the implementation process.
- 9. New friendships were made through the onboarding process.
- 10. The people carrying out the implementation process even after it was completed provided assistance and good advice.

5. Summary

In conclusion, the pillars of onboarding identified during the literature analysis and interviews with HR practitioners could form the basis of a research tool. This tool could be used to measure the level of interactivity, proactivity and community of individual onboarding programmes. By comprehensively capturing the most important components of the repeatedly mentioned pillars, it will be possible to determine to what extent the onboarding programme in place fulfils the basic assumptions. For the survey instrument created on the basis of the statements presented above, the authors of the publication propose to use a seven-point Likert

scale, thanks to which the respondent will be able to indicate to what extent they agree with the statements forming the pillars of onboarding. The data obtained can then be analysed and the onboarding pillars can be removed if they do not fit into the whole or do not contribute to the construction of the tool. Once the procedure involved in building the tool has been followed, the sequence of questions presented can form an important part of the development of onboarding programmes. The tool created can be used by both researchers and managers who develop onboarding programmes, based on the presented pillars. Additionally, the tool mentioned, can also be used to improve existing onboarding programmes.

This article is the result of work carried out under grant 2017/27/B/HS4/02172 funded by the National Science Centre.

References

- 1. Adler, A.B., Castro, C.A. (2019). Transitions: a theoretical model for occupational health and wellbeing. *Occupational Health Science, Vol. 3, No. 2.*
- 2. Bauer, T.N. (2010). *Onboarding new employees: Maximizing success*. SHRM Foundation's Effective Practice Guidelines Series.
- 3. Becker, K., Bish, A. (2019). A framework for understanding the role of unlearning in onboarding. *Human Resource Management Review, Vol. 31, No. 1.*
- 4. Bhakta, K., Medina, M.S. (2021). Preboarding, orientation, and onboarding of new pharmacy faculty during a global pandemic. *American Journal of Pharmaceutical Education, Vol. 85, No. 3.*
- 5. Bradt, G.B., Vonnegut, M. (2009). Onboarding: How to Get Your New Employees up to Speed in Half the Time. *People and Strategy, Vol. 33, No. 2.*
- 6. Caldwell, C., Peters, R. (2018). New employee onboarding psychological contracts and ethical perspectives. *Journal of Management Development, Vol. 37, No. 1.*
- 7. Dekas, K. (2013). Nooglers to Googlers: applying science and measurement to new hire onboarding. *Society for Industrial and Organizational Psychology*.
- 8. Edwards, G. (2009). The benefits of great onboarding. Personnel Today, Vol. 22.
- 9. Ferri-Reed, J. (2013). Onboarding Strategies to Supercharge Millennial Employees. *The Journal for Quality and Participation, Vol. 36, No. 2.*
- 10. Graybill, J., Cerpenter, M., Offord, J., Piorun, M., Shaffer, G. (2013). Employee onboarding: identification of best practices in ACRL libraries. *Library Management, Vol. 34, No. 3.*
- 11. Grow Powered by Studio Wiedzy (2021). *Raport Trendy HR* 2020/2021, https://www.hrnews.pl/TrendyHR2020/RaportTrendy2020_21.pdf.

- 12. Jeske, D., Olson, D., Onboarding new hires: recognising mutual learning opportunities. *Journal of Work-Applied Management, Vol. 14, No. 1.*
- 13. Karambelkar, M., Bhattacharya, S. (2017). Onboarding is a change Applying change management model ADKAR to onboarding. *Human Resource Management International Digest, Vol. 25, No. 7.*
- Klein, H.J., Polin, B. (2012). Are organizations on board with best practices onboarding? In: C.R. Wanberg (Ed.), *The Oxford Handbook of Socialization*. New York: Oxford University Press.
- McKimm, J., Jollie, C., Hatter, M., *Mentoring: theory and practice*, http://www.richardswanson.com/textbookresources/wpcontent/uploads/2013/08/TBADr8-Mentoring-Theory-and-Practice-J-McKim-et-al-2007.pdf, 7.04.2022.
- 16. Morrison, L. (2021). Virtual improvement: advising and onboarding during a pandemic. *Honors in Practice, Vol. 17.*
- 17. Nelson, N., Sperl, C., *The buddy system and new hire orientation*, www.shrm.org/Research/Articles/Articles/Pages/CMS_009146.aspx, 17.02.2022.
- 18. Pabian, A.M., Ochwat, M., Kwiatkowska, C. "Raport Rekrutacja i selekcja pracowników w dobie pandemii" na zlecenie Stowarzyszenia Biznes – Nauka – Samorząd "Pro Silesia" oraz EUROPE DIRECT Śląskie, https://us.edu.pl/wp-content/uploads/pliki/Raport-Rekrutacja-i-selekcja-pracowników-w-dobie-pandemii.pdf, 6.04.2022.
- 19. Saks, A.M., Gruman, J.A., Cooper-Thomas, H.D. (2011). The neglected role of proactive behavior and outcomes in newcomer socialization. *Journal of Vocational Behavior*, *Vol.* 79.
- 20. Semenza, L.J., Harden, T., Koury, R. (2020). Survey on onboarding practices in Carnegie research institutions. *Library Management, Vol. 42, No. 1/2.*
- 21. Skeats, J. (1991). Successful Induction: How to Get the Most from Your Employees. London: Kogan Page.
- 22. Stewart, J., Jones, J., Vallas, S., *How employee onboarding will change in a post-pandemic hybrid workplace*, https://www.willistowerswatson.com/en-CA/Insights/2021/03/how-employee-onboarding-will-change-in-a-post-pandemic-hybrid-workplace, 6.04.2022.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

THE FORMATION OF STUDENT LEADERSHIP COMPETENCE AT SELECTED MILITARY ACADEMIES IN THE WORLD

Arkadiusz WIERZBIC^{1*}, Agnieszka TAUROGIŃSKA-STICH²

¹ Wroclaw University of Economics; arkadiusz.wierzbic@ue.wroc.pl, ORCID: 0000-0003-0118-4123 ² The General Tadeusz Kościuszko Military University of Land Forces, agnieszka.tauroginska-stich@awl.edu.pl, ORCID: 0000-0002-1734-3398 * Correspondence outbor

 \ast Correspondence author

Purpose: The purpose of the article is to identify directions for the most important educational activities to influence the desired development of military students' leadership competencies and their adaptation to the requirements of service.

Design/methodology/approach: The article uses a qualitative analysis of training practices and competence development and training programs at selected academies of the ground forces, in the US Military Academy (USMA) at West Point, the Teresian Military Academy of Austria, in the Tresia Military Academy of the Federal Ministry of Defense (TM).) and the Hellenic military academy, Evelpidon (S.S.E).

Findings: Analysis of the processes of shaping leadership competences military students at USMA in the USA, TM in Austria and S.S.E in Greece - showed that USMA academies in the USA and TM in Austria use multi-faceted models of shaping leadership competencies. They transform knowledge into action and required behavior, and verify student achievement levels. These academies adjust students' competences to future professional positions.

Research limitations/implications: Military academies are organizations embedded in the military security system. This greatly limits the freedom of research and requires familiarity with both the environment being studied and the procedures for handling it.

Practical implications: Using the analysis to improve Polish professional military education. Introduce a program that would include targeted development of leadership competencies. The benefit could be an increased guarantee of a high standard of command in the Polish Armed Forces. The idea is to design a competency model that allows for service fit and facilitates adaptation to the officer profession.

Social implications: Alignment of education standards and cooperation in military leadership development with other NATO alliance countries and the European Union provides the benefit of consciously sharing responsibility for the military security of the region and the world. It enables targeted international training to maintain high levels of command and readiness.

Originality/value: The paper is addressed to representatives of professional military higher education. It presents multifaceted models of cadet leadership training. Indicates the possibilities of introducing a competence system for the professional adaptation of officers. Inspires and indicates directions for improving military education systems in a non-linear, fragile, incomprehensible and turbulent world.

Keywords: Leadership, competence, military education, military graduate. **Category of the paper:** Case study, Literature review.

1. Introduction

For armed forces to effectively achieve their goals and objectives in an unstable geoeconomic and geopolitical environment, they need leader-commanders who are successful at all levels of command, i.e. collective, operational and strategic (Adair, 2007, p. 57). As Kozerawski D.S. (2002, p. 5) notes, officers, whose preparation is determined by the educational method, have a decisive impact on the functioning and image of the army. In most countries of the world, a fundamental role in the development of future military leaders is played by professional military education (PME), in terms of which cadets gain operational experience, learn how to develop on their own and can observe proper command patterns, which is currently considered the most effective leadership learning (Ryan, Hinds, Steele, 2012, pp. 39-42).

The education of future officers is embedded in the tradition of military history. The biographies of those recognised as outstanding commanders confirm that effectiveness on the battlefield and the greatest victories were achieved by comprehensively educated military leaders. This refers not only to tactics and military art in the broadest sense, but to careful and multidirectional education. Examples include the education of Alexander the Great by Aristotle, Xenophon with Socrates (c. 430 BC – c. 355 BC), or Tadeusz Kościuszko, whose leadership talent, knowledge and skills were verified and confirmed by victorious battles. Research on historically known battles, war campaigns and contemporary command systems in action indicates that there are a number of factors affecting the outcome of a battle. It usually mentions the potential of fighting forces, the type of weapons and equipment, matériel etc. Undoubtedly, however, an important criterion for victory in armed combat is always the level of training of privates and the tactical, operational, strategic and leadership skills and education of their commanders (non-commissioned officers and officers).

Educating future officers is a challenging and continuing undertaking for any army. The entities fully responsible for the training of young officers in professional military education include specialised military academies, which deliver educational programmes in line with their areas of purpose. The primary task of the academy is to match the competence of future officers with the duties, roles and functions they will perform in their first duty positions (Michaluk, Kacała, 2013, p. 148). The preparation of commanders – military leaders with the right competence resources – requires fitting in with the current pace of scientific and technological, social and economic and political changes. Above all, however, this process should correspond to the forms of warfare that is currently waged in the world (cf. Bartosiak,

Budzisz, Świdziński, 2022). One of the most important challenges that modern states face, i.e. maintaining national security and supranational security within the scope of the NATO and EU communities (Mariański, Włodarczyk, 2009), is the reason for this approach. Maintaining security, i.e. one of the most highly prized values, requires the formation of policies and the development of management methods (Spustek, Paluch, 2017), which will take into account the appropriately aligned competence of military leaders.

Within the NATO alliance and the EU, attempts are being made to harmonise standards for the formation of leadership competence. Examples include the international Military Academic Forum – iMAF and the European Initiative for the Exchange of Military Young Officers. Each year, as part of the forum, an analysis of educational curricula is carried out, experiences of leadership competence development are exchanged and work is undertaken to establish educational standards (including leadership competence formation) for military students and young officers in the context of new educational challenges for the security of the international environment. iMAF is a project initiated by representatives of Austria's Theresian Military Academy together with the Czech University of Defence, Polish Military University of Land Forces in Wrocław, Hungarian National University of Public Service and Romanian "Nicolae Balcescu" Land Forces Academy. This international discussion forum, which currently has 22 partners, was born out of a desire to create and deepen culture, security and defence by ensuring the highest possible level of educational standards (https://www.wojsko-polskie.pl/...).

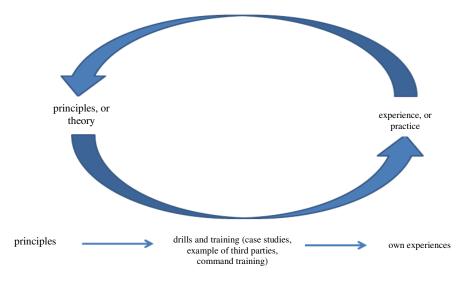
To gain a more in-depth understanding of the ways in which leadership skills are developed in the military education process, the authors of this study performed a case study analysis of the formation of leadership competence in selected land forces academies, i.e. the American -USMA, the Austrian - TM and the Greek - S.S.E. The objective of the analysis was, among other things, the willingness to learn from others by reviewing different patterns of leadership competence formation and to learn about the patterns of activities shaping future officers and educational military experiences between allied countries, making it much easier to set the course for change. This is particularly true of the use of selective imitation, where only some of the solutions that the leader in a given industry uses are implemented and the leader incorporates their own diverse methods and forms, e.g. diagnosing and shaping competence using the Assessment/Development Centre method.

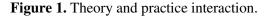
2. Training in professional military education – general principles

The training process in professional military education is dual in nature. It is conditioned by alternating theoretical learning of general academic and general military issues and practical aspects of command. The essence of this approach is the opportunity to learn in or very close to the working environment. The dual system assumes that at least 50 per cent of the learning time will be devoted to gaining experience in real working positions and a real working environment (Kabaj, 2010, p. 38). This requires military academies to undertake activities involved in the preparation of officers for command in specific types of armed forces.

Working out ways and creating learning opportunities at military academies aim to ensure both competence improvement and comprehensive competence matching for the future role of military commanders. The intention is to prepare them for the efficient use of acquired competence in the collective command process (Adair, 2007, p. 57). In this case, what matters is mainly the effectiveness of the military academy graduate in their first duty position in terms of military specialisation and command. Graduates are mainly expected to be adept in the command of people, which consists of problem-solving, effective communication (including debate skills, self-presentation), acquiring and maintaining a high level of self-motivation. In addition, the ability to build a high level of trust and appropriate moral cohesiveness within the team together with a good understanding of the individual needs of team members is required. As pointed out by M. Van Creveled (2020, p. 19), the nature of command is closely linked to moral forces, without which it is also impossible to speak of leadership. In this context, military leadership is absolutely linked to the development of the commander's automated moral habits.

The complex nature of officers' tasks in defence systems of armed forces around the world means that training models in military academies are geared, in most cases, towards a very meticulous combination of theory and practice, as shown in Figure 1.





Source: Authors' own elaboration based on Adair, J. (2007, p. 97).

The two opposites of teaching, namely theoretical education and competence formation, concern the acquisition of general knowledge, which is only realised in specific professional roles. Military students initially study to develop conceptual understanding, which is key to mastering content in their field of study. In the process of forming leadership competence,

general academic education constitutes an important development aspect that builds leadership awareness. Teaching and transferring theoretical knowledge (mandatory, recommended and complementary), its possession and free verbalisation positively affects leadership learning and the effective development of leadership competence. A solid theoretical basis provides a transition to the next stage of leadership formation that involves practice and experience. Vocational practical training enables the acquisition of procedural knowledge in order to achieve the ability to perform executive and cognitive (mental) activities (Nęcka, Orzechowski, Szymura, 2013, pp. 136-138). These skills are achieved through drills and training. They are developed during repeated activities that expand the possibilities of achieving the relevant results, resulting in a transformation of the content of thinking and a change in the attitudes of those taking part in drills and training (Skibińska, 2004, p. 15). As noted by Debska E. (2012, p. 28), training can be regarded as one of the basic forms of adult education with a high degree of effectiveness in matching competence to the job, as exemplified by higher military education.

3. Forming leadership competence in the American, Austrian and Greek land forces academies

An attempt to provide an insight into the ways in which leadership competence is shaped in selected land forces academies with different histories, political past and geographical locations seems very useful for mainly comparative, practical and developmental purposes. This is particularly relevant when the present analysis can be used to improve purposeful and effective competence alignment for the profession of officer – military leader.

The United States Military Academy (USMA) at West Point has a multifaceted model for educating future land forces officers. Its basis is the mission of the academy, i.e. to educate, train and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of Duty, Honour, Country and prepared for a career of professional excellence and service to the Nation as an officer in the United States Army. (www.westpoint.edu/military).

The formation of leadership competence of USMA cadets is guided by the golden rule, which commits to personal development and the creation of interpersonal relationships based on high morale and ethics. The training programme for future commanders is a multifaceted process of competence diagnosis and improvement (Academic Program Goals, (www.courses.westpoint.edu). It is designed so that cadets develop leadership competence by learning "how to think" rather than "what to think". Cadets gradually master theoretical, military and tactical knowledge, which is combined with the formation of desired competence. They gain a sound knowledge of military culture and the place of commanders in the functioning of the armed forces. They master communication skills (communicating through

commands, leading discussions), building interpersonal relationships and motivational skills. Cadets form their own awareness of the role of an officer by learning, among other things, how to cooperate effectively when in military service. In addition, they develop the foundations of critical thinking and acquire problem-solving skills in different environments (administrative, military, civilian). Cadets learn to make decisions and to motivate and inspire subordinates to exert themselves mentally and physically. The leadership competence development programme also includes elements of working through and resolving conflicts and mistakes by cadets themselves, practising command and applying the principles of 360-degree feedback assessment.

The basis for preparation for leadership is education, which consists of active learning, guided by the Thayer Method (Kowalik, 2007, pp. 169-170). This method requires cadets to undergo systematic self-learning (Szerej-Glińska, 2017, pp. 32-34). It assumes balancing the content of the sciences, social sciences and humanities, with a particular focus on the philosophy of ethics. This programme allows knowledge to be acquired according to the cadets' intellectual abilities, with an important element of education being the verification of the acquired knowledge on a daily basis. The effectiveness of the Thayer method is due to the relatively small number of participants (15-18 people), ongoing feedback and the selection of academics who are very well-prepared for the task.

Teaching staff play a leading role in the formation of leadership competence of US cadets. It includes civilian and military practitioners recognised as the best with a high level of knowledge, experience and leadership behaviour. They include distinguished academics, members of the Council on Foreign Relations, Fulbright grantees, and members of one of America's most prestigious leadership and public service programmes – the White House Fellows (www.class-white-house-fellows). As part of the culture of the academy, teachers are expected to inspire by their own example, to challenge, to engage, to enable community action. Their job is to promote mutual, two-way respect between teachers, academy employees and cadets, respect for the delivery of the mission statement and the character development of future commanders – leaders (westpoint.edu/ academics/dean).

An important element of leadership competence formation at the USMA is a multidisciplinary practical training course entitled: Military Leadership. During the training, students benefit from carefully selected sets of useful practical ideas, which are prepared on the basis of purposefully selected scientific concepts, theories and knowledge. Drills in the training course include shaping character and one's own leadership style, stress resilience, authoritybuilding skills and the appropriate ethical use of power and its influence (https://www.westpoint.edu/academics/dean/strategic-documents). In addition, cadets prepare their own "Commander–Leader Portfolio" containing information on leadership competence self-improvement. In terms of self-reflection and self-assessment of leadership abilities ("Reflection Leader"), cadets create a personal development plan and a professed philosophy of their own leadership style, which they put in writing in a portfolio and present orally in training sessions. Further, a functioning academic student forum, the "Gold and Black Leadership Forum", provides the opportunity for constant contact with outstanding leaders who can serve as role models for cadets. As military leaders, the USMA graduates are motivated and fully aware of their professional role. They understand the dynamics of small group and team interaction.

Military leadership plays a critical role in the Austrian model of military education, primarily because of the military neutrality adopted by Austria. In addition to military training, the Theresian academy focuses on exceptionally thorough training in the formation of leadership competence, including building interpersonal relationships, applying command and intercultural communication styles etc. This leadership model is intended to enable the acquisition of the competence necessary to build good and strong relations on the international front. Theoretical classes that mainly cover law, political science, economics, philosophy, sociology, pedagogy, psychology, as well as training and practice meticulously prepare cadets to serve as a candidate.

The goals of the educational programme in the United States Military Academy (USMA) at West Point are expressed in the competence characteristics of the future officer (military leader), who is expected to be: a social, moral, civic and effective leader who establishes a safe, positive command climate where everyone thrives while achieving tangible results.

At the Theresian Military Academy of the Federal Ministry of Defence (TM) in Austria, military leadership training focuses on the formation of leadership competence through the development of cadets' personal resources (cf. Gell, 2011, p. 20). The premise of the academy is that its students should achieve increasingly higher leadership skills step by step and while being fully aware of them. The idea is that they should be prepared to make decisions in morally ambiguous situations, under great mental pressure and when they are very fatigued – both at peace and war.

Committed to ensuring a very high level of education for the future Austrian officers' elite, the academy makes education effectiveness dependent on its own capabilities, programmes, professionalism, ethics and the achievements of its teaching and research staff, as well as on the capabilities of the candidates. During the academy admission process, all candidates undergo a meticulous test for aptitude and leadership skills, and the evaluation is always made after a seven-month NCO course.

The actual process of improving leadership competence in the TM starts with the intellectual preparation of students through lectures. Cadets learn the basics of management, command, self-leadership, military decision-making, logic, philosophy, pedagogy etc. The theoretical knowledge is then put into practice, in a workshop setting, during tactical drills and simulation games, where the aim is for cadets to acquire the skills of commanding a unit, a platoon (up to 50 soldiers), namely the skills of ethical and logical communication, positive motivation and building trust in a team, (www.miles.ac.at/milak).

An important assumption of learning is to determine the improvement of areas in line with cadets' abilities, in which they could reach a competent level of mastery (personalised learning). This refers to acquiring the ability to make autonomous and independent decisions, solve problems, filter, search for and integrate information and develop critical thinking skills including the intellectual capacity to maintain high motivation (www.miles.ac.at/milak/sites).

Leadership skills are also being developed through the use of the "Steel Beasts" simulation system. Through an electronic visualisation system, students communicate information, make decisions and take command. In a word, they perform tasks according to standard command procedures and objectives. What is more, the system allows the creation of unusual battlefield scenarios that can be used to train leadership skills in unconventional ways. Cadets have the opportunity to apply the skills they have learnt during leadership training, which takes place on training grounds under conditions similar to real military service. During simulated attacks, they take command, give orders and perform other complex tasks. The training is designed to enable them to use the command and defence procedure during an attack: from preparing information about the situation they are in and passing it on to subordinates, to giving the orders necessary to plan operational defensive action. When under attack, participants have to follow direct battlefield security procedures (i.e. reconnaissance, security, marching, surveillance and psychological warfare). On the one hand, they have to deal with command and coordination of activities such as radio communications and, on the other, with planning the use of logistical support (critical munitions and medical supplies). Acquiring crisis communication and psychological warfare skills is vital to develop leadership competence. Those responsible for cadet training know full well that real experience and skills gained during drills increase confidence in the practical application of training material when in military service (www.miles.ac.at/milak).

The leadership competence development programme in the Austrian TM is oriented towards the objectives expressed in the competence characteristics of the future officer. They are expected to be: "a capable officer and a person of integrity" with the complete personality of a military leader who is: A leader – officer who is moral, emotionally balanced, committed and effective with highly developed social and communication skills, prepared for international cooperation (www.miles.ac.at/milak).

In the Hellenic military academy, i.e. the Evelpidon (S.S.E), the training of military leaders is focused on the formation of command competence through general academic and military sciences, the development of soldierly competence, fitness, learning to take care of your mental health and on development in terms of cultural sciences and ethical reasoning. In the course of the educational process, cadets learn the psychological aspects of the functioning of individuals and society as well as the functioning of contemporary management (Department of Military Education, 2015-2016).

Cadets develop during additional theoretical, practical and laboratory classes. The introduction to the hierarchical Greek military culture and becoming aware of the role of the officer constitute an important part of the development of cadets. This is implemented by activities taking place both at the academy and compulsory activities outside the academy. Military students will learn about the formations of Greek special units (both naval and land) and the local communicies (inhabitants and their customs). In doing so, they shape communication competence and the necessary skills for military leaders to work together within and outside military teams.

The Hellenic academy directs practical military training in the field to strengthen fitness and interaction when in military service. Acquiring the ability to take care of your health and physical development are intended to strengthen the physical prowess of cadets, which makes it possible to build the authority of the future officer. The academy assumes that the development of habits to strengthen physical endurance has an impact on the natural inclination to be competitive, which is understood as acquiring the competence of a fit soldier who is an exemplary commander (sse.army.gr/el/content/sholi). In this case, fitness is the basis for coping with stress on the battlefield, the skilful mastery of which is an important part of cadet competence formation. To fill in any learning gaps, extracurricular activities are regularly organised for those who were forced to miss them due to other obligations or reasons. Cadets are also required to undertake social, cultural and political activities as part of their educational programme (all cadets without exception). These principles are intended to give Greek cadets a basis for professional tasks, further academic development, performing the officer's mission and to affect moral reasoning. Greek cadets also participate in international leadership competence formation courses, which are also held at their academy, where they are exposed to state-of-the-art approaches to leadership competence formation for future commanders (Hellenic Army Academy, 2021, pp. 6-9).

The educational programme of cadets in the S.S.E is focused on the achievement of commanding educational objectives in line with the current philosophy of educating military warriors: "ambassadors of officer morality and the cultivation of the traditions of the Greek armed forces" (sse.army.gr/.2019). Cadet leadership development is based on maintaining a high level of discipline, ethical functioning when serving as a candidate, participation in cultural and international courses to shape competence in action.

The Hellenic academy ensures that its graduate is a person with a well-formed awareness of the professional responsibilities of a soldier – an officer who exemplifies military virtues and maintains extraordinary military discipline. The principles of the training programme are expressed in the competence characteristics of the future officer, who is expected to be an ambassador of officer morality and the cultivation of the traditions of the Greek armed forces (sse.army.gr/.2019).

The conducted analysis of military higher education made it possible to summarise, from the point of view of the armed forces, the key educational objectives and tasks in the formation of the leadership competence of military students, as shown in Table 1.

Table 1.

Summary of key objectives and tasks of leadership competence formation processes at selected military academies

		T	
NAME OF THE	United States Military	Theresianische	Military School
ACADEMY/COUNTRY	Academy –	Militärakademie –	"Evelpidon" –
ACADEMI/COUNTRY	USMA, USA	TM, Austria	SSE, Greece
NATURE OF	Multidirectional Universal.	Multidirectional.	Universal. Academic.
NATURE OF	Academic. General	Universal. Academic.	General military.
EDUCATION	military	General military.	
1. OBJECTIVES A	ND TASKS OF THE LEADE	· · · · · ·	RMATION PROCESS
USMA – USA	 character of an ethical mi (intellectual, physical, mora Achieving a high level of con TASKS: 1. Education (balancing sci 2. Matching competence to awareness of the officer 3. Diagnosis of leadership degree feedback assessm 4. Ensure the leading role competence). 5. Improving leadership con • Active learning, car people, systematic feedback). • Self-learning- "Cor of self-improvemen • Personal developin and ethical behavior • Multidisciplinary, it (development of ch authority-building s • Developing skills together as a militar • "Reflection Leader' a personal developin style, which they pun sessions; • Development of commands, leading • Development of self- exert mental, intelle • Development of co conflicts, mistakes); • Learning decision-r 	competence (predisposition to nent). e of teaching and research mpetence: rried out using the Thayer me e self-study, verification o mmander–Leader Portfolio" – tt activities in leadership comp ment for ethical action, ur; terative practical training entit haracter, personal leadership skills, ethical use of power and in building interpersonal ry team; ' – self-reflection and self-ass ment plan and a philosophy it in writing in a portfolio and communication skills (co discussions); f-motivation and motivation s ectual, physical effort; critical thinking (solving an ;	ontinuous development or their own generation. ice. nanities). military leader, building o command, use of 360- staff (high quality of ethod (small teams of 14 f knowledge, ongoing - personal authentication petence; upholding morality eled: Military Leadership style, stress resilience, d its influence); relationships, working sessment, the creation of of their own leadership present orally in training ommunicating through skills, inspiring others to ad analysing problems,

Cont. table 1.

TM – Austria	 OBJECTIVES: To prepare elite military commanders with high personal culture, personality and character suitable for a military leader who are capable of building good and strong relationships on the international stage and multicultural cooperation. Achieving a high level of competence matching for military service, the starting point of which is social competence, ethical reasoning, intelligence and emotional balance. TASKS: Education (balancing science, social sciences and humanities). 1. A thorough and reliable adaptation to the conditions of military service and the officer's role. 2. In-depth diagnosis of leadership competence (predisposition to command). 3. Maintaining high-quality teaching and training through highly qualified teaching and research staff. 4. Improving leadership competence: In-depth diagnosis of leadership predispositions and abilities; Training, drills, repetitive, practical multidirectional military-focused training; Very high level of psycho-physical-emotional development for decisionmaking in morally ambiguous situations; Professionalism, ethics and great achievements of teaching and research staff; Development of behaviour and critical thinking; Teaching logical communication, motivating themselves and others; Building trust within a team; Improving independent decision-making, problem-solving, filtering, searching for and integrating information;
SSE – Greece	 OBJECTIVES: To prepare a fully responsible officer-commander who exemplifies military virtues, mental and physical health. Highly disciplined "Ambassador of officer morality" and the cultivation of the traditions of the Greek armed forces. TASKS 1. Command-focused training; 2. Improving leadership competence: Training according to the philosophy of shaping military warriors, Learning to maintain a high level of discipline, ethical reasoning and taking action; Cultural development (theatre, classical literature, museums); Learning health-oriented behaviours and developing motivation to learn and serve; Developing fitness and nurturing emotional balance and mental health; Field-based, multidirectional practical military training; International courses for shaping command competence in action.

Source: Author's own elaboration.

4. Conclusions

The analysis of the processes of formation of leadership competence in military students that take place at land force academies – USMA in the USA, TM in Austria and S.S.E in Greece – showed that, by the nature of education, these processes have similar principles. All academies aim to develop leadership behaviours and attitudes, but differ in the methods

used and the ways in which competence is developed. The USMA in the USA and TM in Austria have high standards in this area. Both academies follow a multi-faceted model of leadership competence formation, which is designed to enable students to achieve a high degree of mastery of the leadership skills required for effective and efficient leadership. The academies closely combine theoretical learning with practical training. They share knowledge based on which cadets' intellectual abilities are revealed, which are then practically transformed into individual and group leadership skills and behaviours. Unlike the American and Austrian academies, the Greek SSE academy is less experienced in modern forms and methods of leadership teaching for its cadets by organising, among other things, international improvement courses (http://www.emilyo.eu/exchange_experience...).

The presented comparisons of cases of shaping leadership competence in land forces academies provide models that can be used to create one's own educational solutions for the needs of the Polish Armed Forces. An example of this could following the USMA military academy in the application of the Thayer active learning method or military leadership courses in action. Using Austrian methods to develop communication and teach multiculturalism and compulsory cultural participation in imitation of the Greek academy. Imitating certain training and educational solutions is particularly beneficial in order to obtain guarantees of a high standard of security in the unstable conditions of modern international functioning. In the authors' view, it is practically possible to use this analysis to improve the Polish educational programme, which would include the targeted development of leadership competence. The idea is to design a competence model that would facilitate adaptation to the profession of the officer – the military leader.

In recent years, targeted education especially in broad leadership skills has become a completely natural – or even compulsory – part of the preparation of future military leaders in higher education institutions, almost all over the world. In particular, this applies to armies such as the one in Poland, which is a member of the NATO alliance, as well as selected European Union countries, which share responsibility for security and thus combine efforts to improve, among other things, the leadership competence of future officers in the educational process.

References

- 1. Academic Program Goals, https://courses.westpoint.edu/static/index.htm, 7 August 2021).
- 2. Adair, J. (2007). *Rozwijanie umiejętności przywódczych*. Warsaw" Wolters Kluwer Business.

- 3. Bartosiak, J., Budzisz, M., Świdziński, A., (2022), *Armia nowego wzoru*. Styczeń 2022, Zona Zero, Warsaw.
- 4. Gell, H. (2011). Führungskräfteauswahl. Berlin: Pro Business.
- 5. Helenic Millitary Academy (2021). International Spring Semester 2022. Athens.
- 6. http://www.miles.ac.at/milak/sites/index.Php, 10 November 2017, 10 May 2021.
- 7. https://sse.army.gr/.2019, 10 August 2019.
- 8. https://www.westpoint.edu/academics/dean/strategic-documents, 24 April 2022.
- 9. https://www.whitehouse.gov/get-involved/fellows/, 11 November 2017, 9 August 2021.
- 10. Kabaj, M. (2010). System kształcenia zawodowego i kierunki jego doskonalenia w warunkach integracji i wzrostu konkurencyjności. Diagnoza i elementy programu szerszego wdrożenia dualnego systemu kształcenia w Polsce. Warsaw: Związek Rzemiosła Polskiego.
- 11. Kowalik, T.K. (2007). Działalność dydaktyczno-wychowawcza Akademii Sił Lądowych Stanów Zjednoczonych w West Point w latach 1802-2002. Warsaw.
- 12. Kozerawski, D.S. (2002). Kształcenie kandydatów na zawodowych oficerów wojsk zmechanizowanych WP w latach 1967-1989. Wrocław: WSOWLąd.
- 13. Mariański, A., Włodarczyk, M. (2009). Zarządzanie bezpieczeństwem narodowym. *Przedsiębiorczość i Zarządzanie, vol. X, iss. 3.* Sułkowski Ł., Mariański A. (eds.). Łódź.
- 14. Nęcka, E., Orzechowski, J., Szymura, B. (2013). Psychologia poznawcza. Warsaw: PWN.
- 15. Ryan, M., Hinds, J.P., Steele, D. (2012). *Army Leader Development and Leadership*. Kansas, USA: Military Review.
- 16. Skibińska, E. (2004). Trening jako forma kształcenia dorosłych: nierozpoznany przez andragogikę obszar. Rocznik Andragogiczny, Materiały z XVII Forum Pedagogów "Człowiek na edukacyjnej fali. Współczesne konteksty edukacji dorosłych. Wrocław-Brzeg.
- 17. Szerzej-Glińska, P. (2017). Amerykańska Lekcja. Wywiad z pchor. WAT, słuchaczem USMA w West Point, USA. *Polska Zbrojna, no. 11*.
- 18. Van Creveled, M. (2020). *Dowodzenie na wojnie. Od Aleksandra do Szarona*. Warsaw: Tetragon.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

MANAGEMENT OF ERGONOMIC INTERVENTIONS IN INDUSTRY 4.0

Kamil WRÓBEL

Poznan University of Technology; kamil.wrobel@put.poznan.pl, ORCID: 0000-0002-5883-5567

Purpose: The cognitive goal of the article is to quantify various states of variables influencing the worker's burden in the assembly process. On the other hand, the utilitarian goal is to assess the significance of variables for the application of artificial neural networks methods in supporting IE management.

Design/methodology/approach: The article deals with the management of ergonomic interventions in industry 4.0. The main tasks during the assembly process were defined on the example of the window production analysis. The application of the method of registering human load indicators to manage the states of variables in the chain of operation of the assembly process was justified. The study analyzed 16 states of variables such as noise, work pace, forced body position, movement, and the location of information and control elements of the IT system. During the bench tests, postural load, heart rate and NASA-TLX assessment were performed. In the preliminary and final studies, metric data was collected, cognitive-motor skills and work fatigue were assessed. The obtained results were quantified using a quantitative comparative method.

Findings: The article verifies the approach of measuring the individual workload of an employee for shaping working conditions in the context of assembly works. For the examined example, the weights of the system variables for the inference of artificial intelligence were determined in detail.

Research limitations/implications: The main limitation of the study is the research sample. Although the concept departs from statistical research, from the point of view of science, it is reasonable to look for the correlation of the burden on individual user groups, e.g. the elderly, people with disabilities. It is also important to further measure the synergy of individual variables.

Originality/value: The novelty of the article is the idea of EI management in the aspect of industry 4.0 through operational shaping and tactical state variables affecting the individual workload of an employee with the use of methods of artificial neural networks. For this purpose, a conceptual method of determining the workload of an employee was presented. The work is addressed to theorists and practitioners responsible for designing and organizing working conditions.

Keywords: human resources management, ergonomic interventions, industry 4.0, fuzzy cognitive maps, measuring employee workload.

Category of the paper: Research paper.

1. Introduction

1.1. Ergonomic interventions in Industry 4.0

Ergonomic interventions (EI) in industry 4.0 (P4.0) are activities and solutions aimed at increasing the quality of human-machine-environment interaction (HME) and consisting in (Wróbel, Hoffmann, Czarnecki, 2020):

- 1. improving a specific product, organizational operation, IT system or service within the defined ranges of changes which allows a slight increase in the overall quality of the solution, service, interactions, etc.,
- 2. innovation, i.e. a new product, service, or application, that results from the innovative combination of the existing elements; as well as EI are also an interdisciplinary approach to search for new ideas and concepts, based on the knowledge from the applied/development researches from the anthropocentric, social, biotic and technical point of view (Dewicka, 2016); they synergistically increase the overall quality of the solution, or
- 3. inventions substantially defining a new quality level for a given solution.

The ergonomic innovations, constituting the innovations in general, are one of the main factors enabling the comparative and/or competitive advantage. Nevertheless, such innovations may become a decisive factor for the survival on the market (Grabowski, Muraszkiewicz, 2017). EI within the I 4.0 are the response to the posed paradigms i. e. Panetto et al., (2019), Pacholski and Kałkowska (2019) and Tan et al. (2019) indicating the integration on the i.e. management, production, logistics and analysis level of organization, whereas their implementation enables i.e. unlocking creativity of the employees (Taylor et al., 2020), the ergonomics improvement for the HME interaction (Wróbel, 2020b), as well as professional stimulation of people with resource deficits (Butlewski, 2018).

1.2. EI management in industry 4.0

The 4.0 Industry (I 4.0) has capabilities of qualitative improvements on operational level, as it is based on proven solutions arising from the Industry 3.0 and implements many new solutions. In this context, the I 4.0 solutions have the capabilities of ergonomic interventions (EI) (as long as their selection increases the quality of HME interaction, also referred to as the HME), with consideration to the fact that focus in the I 4.0 is made on a human being, who is referred to as the 4.0 Operator (O 4.0). The O 4.0 in smart factories constitutes the element of operation, with respect to which the remaining elements of the organization make self-improvements towards diversified skills, capabilities and preferences of the O 4.0 (Kaasinen et al., 2020; Fletcher et al., 2020), and technological processes (TP) are simultaneously implemented on a previously unprecedented perfection level, with a dynamic reaction to the changes in the organization and its environment.

This concept is achieved with means of the solutions based on artificial intelligence (AI). On the one hand, such solutions adapt the TP to the changes at higher levels of organization's operation, with a simultaneous consideration to interaction between the HME and the TP. On the other hand, such solutions improve the manufacturing organization management (Longo, Nicoletti, Padovano, 2017). In terms of ensuring the proper quality of HME interaction, there are measures for the replacement or strengthening the O 4.0. Moreover, organization management (OM) should focus on the social engineering aspects through resource relationships at all levels of management (Jantsch, 1972). However, there is a lack of methodology and guidelines for transforming ideas into the practice of applying knowledge about the human factor in organization management (Peruzzini, Pellicciari, 2017). Organizations should focus on assessing employee activities, perceived comfort and quality of work from a physical and cognitive point of view (Chen, Khoo, Chen, 2015). Including, assessing human-machine interaction (Witten-Berg, 2016) and the dynamics of resource states through adaptive and proactive actions (Griffin, Neal, Parker, 2007).

1.3. Criteria and decision barriers in EI management in industry 4.0

The criteria for determining the scope of EI include economic, organizational, methods of organization and performance of work (Pacholski and Kałkowska, 2019), operational (Sparrow, 2020), as well as ergonomic criteria (e.g. Jasiak, Misztal, 2004) (cognitive, sociological, physiological, physical, anthropometric, motor, cultural, etc. requirements).

In the management and implementation of EI in terms of P4.0, the barriers are very often the costs related to the automation of assembly processes and quality control. This contributes to a certain exclusion of these processes from development towards P4.0. The solution to this problem is the use of individual multi-indicator monitoring of employee loads and the use of AI methods. The article presents this type of approach to the stage of quantification of the variable states affecting human load on the example of the window production process.

1.4. Purpose of the article

The cognitive goal of the article is the quantification of various states of operational and tactical variables influencing the workload of the employee in the process of window assembly. The utilitarian goal is to assess the significance of variables for the application of artificial neural network methods in supporting EI management for partially and non-automated assembly processes in the aspect of industry 4.0.

2. Variables in EI management in window production

2.1. The technological process of window production in the aspect of industry 4.0

The work system of any organization consists of resources and the relationship between these resources. The description of the dynamic phenomena accompanying the aforementioned relations of organization resources are chains of action (CA) (Slawinska, Wrobel, 2021). These are the characteristics of the systems of three elements: human, interface and technical device (Sławińska, 2016). The CA in the production of windows is presented in Table 1 – CA odpowiadają charakterystyczne zadania przedstawione w procedurze badań (rozdział 3.1).

Table 1.

Strategic and tactical stages of the CA for window production (selected scope)

No	Operation level (all)	Tactical level (selected range)
1.	Cutting PVC posts to size	1.1. Pick up the bars; 1.2. Loading the posts into the PVC saw; 1.3. Taking the posts out of the Saw; 1.4. Loading the posts on the mobile rack; 1.5. Transporting the posts on the rack to the next position
2.	Preparation of posts - installation of PVC posts with metal profiles	2.1. Pick up the bars; 2.2. Get the connector; 2.3. Twisting of posts and profiles; 2.4. Putting the connected elements back on the shelf; 2.5. Transporting the posts on the rack to the next position
3.	CNC processing of window frame profiles	3.1. Taking twisted posts and profiles from the rack; 3.2. Verification of dimensions; 3.3. Scanning an item; 3.4. Loading of elements into the NCN machining machine; 3.5. Twisting and milling of elements loaded into the machine; 3.6. Receipt of items; 3.7. Machine operation verification; 3.8. Labeling elements with labels; 3.9. Putting the processed elements on the shelf; 3.10. The elements are transported on the rack to the next station
4.	Welding of PVC profiles	 4.1. Checking the order in the IT system; 4.2. Taking a few profiles from the rack; 4.3. Verification of the downloaded items with the order; 4.4. Entering data into the IT system; 4.5. Setting the collected elements in the PVC welding machine; 4.6. Switching on the welding machine; 4.7. Welding and processing of the window frame or sashes by the device; 4.8. Moving the welded elements to the next station by the device
5.	Forging window frames	5.1. Collection of door frames and leaves by an employee; 5.2. Completion of assembled and tethered elements; 5.3. Twisting selected elements, e.g. hinges; 5.4. Forging selected elements; 5.5. Scanning frames (stickers) and identification with the order; 5.6. Putting the forged elements on the shelf; 5.7. The elements are transported on the rack to the next station
6.	Folding frames and window sashes	6.1. Taking the frame from the rack; 6.2. Frame codes check; 6.3. Get the right wings; 6.4. Placing the wings in the frome; 6.5. Verification of the performance of previous tasks - quality control; 6.6. The combination of wings and Frome; 6.7. Re-quality control - window functionality; 6.8. Window scanning - verification with the order and window description; 6.9. Putting the connected elements back on the shelf; 6.10. The elements are transported on the rack to the next station
7.	Glazing of windows	7.1. Collection of the combined frame and window sashes; 7.2. Scanning and verification with the order; 7.3. Taking the glass and placing it in the sash; 7.4. Getting the shims; 7.5. Placing the washers under the glass; 7.6. Securing the glass position; 7.7. Quality control - window functionality; 7.8. Transporting the window for quality control - offset with a roller conveyor
8.	Quality control	8.1. Comprehensive window control and verification with the order;
9.	Securing the window for transport	9.1. Downloading the window from the transmitter; 9.2. Positioning the window on the palette; 9.3. Securing the window for transport; 9.4. Transport of the pallet to the warehouse

Real-time monitoring of the employee's condition and recording of CA enables the diagnosis of causes of changes in the work situation (Slawinska, Wrobel, 2021). The diagnosis of the causes of changes becomes the basis for the optimization of work processes, it is important for improving productivity and reducing the costs of modifying the work system in improving safety and ergonomics (Butlewski et al., 2020).

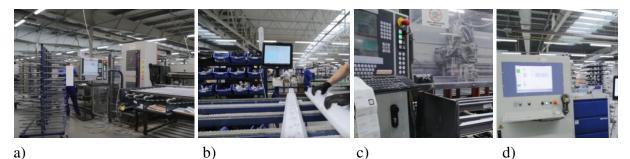


Figure 1. Examples of work stations: a) post cutting station (PVC saw); b) post preparation station; c) CNC processing station; d) PVC profiles welding station.

Source: https://www.youtube.com/watch?v=UOodLJof7Y0.

For this purpose, significant technical and organizational variables affecting the workload of the employee should be identified. Based on the analysis of window production processes (example in Fig. 1), the frequent states of the variables were determined, which are described in Table 3.

2.2. Worker Workload in IE Management

Analyzing the work and load (tab. 2) of operators from a physical and mental point of view is key to defining effective ways of working and optimizing tasks (Romero et al., 2016). The use of monitoring and analysis techniques of loads and operator reliability in P4.0 is possible in real time, when recording psychophysiological indicators in terms of the so-called User experience (UX). Measuring the operator's reaction creates knowledge about the interaction and possibilities of modifying the system thanks to objective data (Peruzzini, Grandi, Pellicciari, 2020).

Table 2.

Lp.	Type of load	The essence of the load
1.	Sensory and cognitive	All the loads that arise during the reception, processing and transmission of information between elements of the environment, and above all, between people and computers
2.	Postural- physical	Loads related to the way work is performed, body posture, body characteristics (internal loads) and external loads
3.	Stress- emotional	All psychological burdens
4.	Motorized	Stress on eye-hand coordination, eye-foot coordination and coordination during locomotion

Types of employee workload

The main set of indicators used to measure UX are heart rate (HR), heart rate variability (HRV), respiratory rate, pupil dilation, gaze direction, and eye blinking. In particular, the measurement concerns HR and HRV, which correlate correlated with physical and mental workload (Mulder, De Waard, Brookhuis, 2004). Other indicators are also specified, i.e. analysis of electroconductivity activity, electroencephalography, electromyography and the use of accelerometers and gyroscopes (Moschetti, Fiorini, Esposito, Dario, Cavallo, 2016) and the measurement of individual cognitive load and situational awareness (for example: NASA Task Load Index (NASA-TLX) (Hart, Staveland, 1988; Endsley, 1995).

3. Research method and scope

3.1. Research procedure

The quantification of the variable states for the assembly process was preceded by a research procedure:

- 1. preliminary research, i.e. collecting metric data and assessing cognitive-motor skills (using the test (Wróbel, 2020)),
- 2. preceded by HR and NASA-TLX measurements (resting measurement), experimental tests involving the performance of 16 tasks (Table 3); each task was a work cycle covering: a) Approach to the position and information and control activities; b) approaching the "material pallet", picking up the material containers and transferring the material to the site; c) communication with the information and control device, verification of the correctness of the collected material, use of the assembly manual and assembly of the collected elements; d) dismantling the elements and putting them back in the containers; e) completing the NASA-TLX survey; f) reference of containers; g) Rest,
- 3. overall assessment of employee's work fatigue.

The total duration of the research was approximately 3 hours.

3.2. Scope, tools and research stand

The assessment was made taking into account 1 person. Such an approach is in line with the ergonomics' pursuit of "optimal" adaptation of working conditions to the employee, which is difficult due to the personal differentiation. During the research, the person was to perform 16 tasks chronologically, which were selected to define specific research goals (Table 3).

Table 3.

Tasks carried out during the research process

Task	Description of the task
No.	[variable state]
1	Free work without imposed working time; one position; manipulation space = work straight ahead; manipulation close to the body; info source at the height of the working plane next to the mounted object - on the left side; working plane height = 110 cm; distance between the post and the pallet equal to 3 meters
2	As in task 1 + travel distance 2x longer
3	As in the quest $1 + 2x$ faster
4	As in task 1 + stress factors: "negative assessment of the employee's work by the supervisor"
5	As in task 1 + manipulation space = 45 degrees to the right
6	As in task 5 + manipulation space 2x further (or max.); an info source next to the manipulation box
7	As in task 1 + manipulation space 2x further (or max.); an info source next to the manipulation box
8	As in task 1 + info source 50 cm higher and further
9	As in task 1 + info source 50 cm straight ahead
10	As in task 1 + info source moved 45 degrees to the leftand 50 cm further
11	As in task 1 + listening and comprehending a documentary = 40-60 db
12	As in task $1 +$ with industrial noise = 60-80 db
13	As in task 1 + work plane height = 90 cm
14	As in task 1 + work plane height = 130 cm
15	As in task 5 + work plane height = 130 cm
16	Move and manipulate an 8 kg object for 40 seconds

The research included indicators and research tools such as: 1) type of thoughts [positive/ negative] - signaled by person; 2) postural load index according to the RULA (ang. Rapid Upper Limb Assessment); 3) heart rate (HR) - measured with the Huawei GT2 Pro smartwatch; 4) NASA-TLX indicators.

A test stand was prepared for the research (Fig. 2).



Figure 2. Test stand.

Despite the fact that the production of windows is associated with heavy elements, the research used light elements in order to eliminate the impact of external physical loads on the collected and analyzed indicators, which, for example, could make it difficult to assess the level of stress in task 4. The assembled and disassembled elements were Lego blocks from set 42133 [lego.com] given to the 18th page of the manual (fig. 3).



Figure 3. Assembled and disassembled elements (lego.com).

Assessment of the impact of external physical forces, i.e. the force needed for movement and manipulation, was included in task no. 16 (Table 3), which consisted of moving and manipulating an object weighing 8 kg for 40 seconds.

4. Results

4.1. Results of preliminary and final tests

The examined person was a 23-year-old woman weighing 47 kg, height 170 cm and having an average resting heart rate of 69 HR. The declared fatigue after completing all tasks was assessed by the respondent as low (grade 3 on a 10-point scale, where 10 - extreme work exhaustion). The examined person did not have any deficits in terms of the functionality of the locomotor system. The average task completion time in the cognitive-motor skills assessment test, the average task completion time was 10 seconds (min. = 9; max. = 11) and the steering accuracy coefficient U was 21 (min. = 14; max. = 34).

4.2. Results of postural-physical stress

The most unfavorable states of the variables for the average and maximum postural load were forcing the torso twist by an angle of 45°, abducting and crossing the upper limbs, and using the extreme range of the grip (Table 4).

Table 4.

Average and maximum values of postural load according to RULA for the body position during communication with the information and control device, reaching elements from containers and assembly

Task No.	RULA rating [mean]	RULA rating [max.]									
1.	2,33	3	5.	4,33	5	9.	2,33	3	13.	3	4
2.	2,33	3	6.	4,33	5	10.	2,66	3	14.	2,33	3
3.	2,33	3	7.	3,66	5	11.	2,33	3	15.	4,33	5
4.	2,33	3	8.	2,66	3	12.	2,33	3			

Postural load was lowest when there was no forced position of the torso and upper limbs. Even in the case of forcing to look at the information and control device distant from the examined person (as in task 9).

4.3. Task load results according to heart rate measurement

The obtained results of the heart rate measurement showed that the heart rate at the beginning of the tests was the highest and it decreased with time (Table 5).

Table 5.

Average HR	index for tasks -	without taking	into account	t the rest time

Task No.	HR [mean]						
1.	84,91	5.	78,83	9.	75,33	13.	76,33
2.	85,83	6.	75,5	10.	76,33	14.	72,41
3.	80,83	7.	74,25	11.	76,16	15.	72,83
4.	82,5	8.	74,16	12.	76,33	16.	72,83

It was probably related to stress and anxiety, as the test person was not previously instructed about the scope and course of the research.



Figure 4. The course of the heart rate value during the tasks performed - description: 1) red clouds show the time of occurrence of negative thoughts in the examined person; 2) gray task flow - approach to the station and interaction with the info-control device; 3) purple task flow - approach the pallet with containers, pick them up and transport them to the workplace; 4) yellow task flow - assembly of the collected elements; 5) red course of the task - disassembly of elements; 6) blue task flow - completion of the NASA-TLX survey; 7) orange task flow - reference pallet containers; 8) green course of the task - rest.

4.4. Task (factor) load results according to NASA-TLX

The results of mental and physical stress are presented in Figure 5.

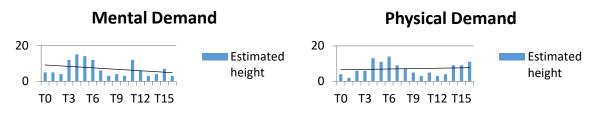


Figure 5. Task load related to mental and physical needs.

The results of the time and performance load are shown in Figure 6.

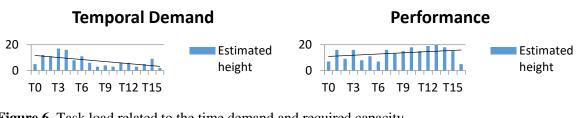


Figure 6. Task load related to the time demand and required capacity.

The results of the effort load and frustration are given in Figure 7.

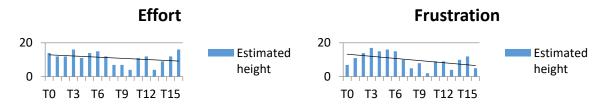


Figure 7. Task load related to the required effort and frustration.

The comparison of the heart rate trend (Table 6) with the trends of the NASA-TLX ratings (Fig. 5-7) shows the similarity of the direction of the trends (apart from the performance required trend), but their quality of fit is different.

5. Quantification of the significance of variables in supporting EI management

The quantification was performed by a quantitative comparative method. For EI and employee workload management, it is beneficial to separate the quantifications into postural load, heart rate, NASA-TLX ratings, NASA-TLX cumulative ratings, and all load indices cumulative. The individual quantifications should take into account the dispersion of the minimum and maximum marks (Table 6) in relation to the overall result of employee fatigue after work (chapter 4.1).

			NASA-TLX rating								
No. task	Average RULA rating	Average HR indicator	Mental Demand	Physical Demand	Temporal Demand	Performance	Effort	Frustration	min.	max.	mean
1	2,33	84,91	5	2	12	16	12	11	2	84,91	18,16
2	2,33	85,83	4	6	11	9	12	14	2,33	85,83	18,02
3	2,33	80,83	12	6	17	16	16	17	2,33	80,83	20,90
4	2,33	82,5	15	13	16	8	11	15	2,33	82,5	20,35
5	4,33	78,83	14	11	8	11	14	16	4,33	78,83	19,65
6	4,33	75,5	12	14	11	7	15	15	4,33	75,5	19,23
7	3,66	74,25	6	9	6	16	12	10	3,66	74,25	17,11
8	2,66	74,16	3	7	3	13	7	5	2,66	74,16	14,35
9	2,33	75,33	4	5	4	15	7	8	2,33	75,33	15,08
10	2,66	76,33	3	3	3	18	4	2	2	76,33	14,00
11	2,33	76,16	12	5	6	15	11	9	2,33	76,16	17,06
12	2,33	76,33	6	3	6	19	12	9	2,33	76,33	16,71
13	3	76,33	3	4	3	20	4	4	3	76,33	14,67
14	2,33	72,41	4	9	5	18	9	10	2,33	72,41	16,22
15	4,33	72,83	7	9	9	15	12	12	4,33	72,83	17,65
16	-	72,83	3	11	2	5	16	5	2	72,83	16,40
min.	2,33	72,41	3	2	2	5	4	2			
max.	4,33	85,83	15	14	17	20	16	17			
mean	2,91	77,21	7,06	7,31	7,63	13,81	10,88	10,13			

Table 6.

T 7 1 C1 1	· 1· C 1	1 . 11	11	. 1	11)
values of load	indices for the	tested variable s	states (table c	continuea on	page 11)

The developed quantifications were made for methods based on artificial neural networks, so the evaluation range is in the range from 0 to 1 (Tab. 7).

Table 7.

Quantifications according to the range of human load measurement

Overall assessment of fatigue after work	Quantification of postural load [according to RULA]		The quantification of the workload of the heart		Quantification of NASA-TLX ratings		Quantif of NAS Cumu Rati	A-TLX llative	Quantification of all load indicators cumulative	
after work	1.	2.	1.	2.	1.	2.	1.	2.	1.	2.
1	1	0.0	65-66	0.0	1	0.0	6-11	0.0	11	0.0
1	1		68	0.05	2	0.05	12-17	0.05	12	0.05
2	2	0.2	70	0.1	3	0.1	18-23	0.1	13	0.1
2	2	0.2	72	0.15	4	0.15	24-29	0.15	14	0.15
3	3	0.4	74	0.2	5	0.2	30-35	0.2	15	0.2
5	5	0.4	76	0.25	6	0.25	36-41	0.25	16	0.25
4	4	0.5	78	0.3	7	0.3	42-47	0.3	17	0.3
4	4	0.5	80	0.35	8	0.35	48-53	0.35	18	0.35
5	5	0.6	82	0.4	9	0.4	54-59	0.4	19	0.4
5	5	5 0.6	84	0.45	10	0.45	60-65	0.45	20	0.45
6	6	6 0.8	86	0.5	11	0.5	66-71	0.5	21	0.5
0	0		88	0.55	12	0.55	72-77	0.55	22	0.55

7			90	0.6	13	0.6	78-83	0.6	23	0.6
/			92	0.65	14	0.65	84-89	0.65	24	0.65
8			94	0.7	15	0.7	90-95	0.7	25	0.7
0			96	0.75	16	0.75	96-101	0.75	26	0.75
9	7	1.0	98	0.8	17	0.8	102- 107	0.8	27	0.8
9			100	0.85	18	0.85	108- 113	0.85	28	0.85
10			102	0.9	19	0.9	114- 119	0.9	29	0.9
			104	1.0	20	1.0	120	1.0	30	1.0

Cont. table 7.

Note: 1. – The value of the indicator; 2. – The significance of the variable.

6. Summary

The P4.0 concept includes 9 pillars, for example big data and artificial intelligence, standalone robots, simulations and information systems integration. At the same time, it is not specified what combination and scope of application of the P4.0 pillars determines the transition of the organization to the P4.0 level. This means that enterprises, taking into account their situation, can individually pursue their development. Manufacturing companies, which require human manipulation, may have problems with financing high-capital technologies that replace humans, and therefore should especially take into account the requirements of ergonomics. Therefore, the use of management support with the use of AI methods can be a solution. The concept of the solution should consist of automatic collection of data on human loads, individual quantification of variables affecting the employee's load, computer inference generating hints for the employee and his superiors, as well as statistical analysis and registration.

The research in the scope of the article allows you to check the presented concept against the need to determine the significance of the variables necessary to identify the parameters of inference of neural networks in order to use them to describe, model and predict real changes.

On the basis of bench tests, personalized results of the impact of variable states occurring in the window assembly process were obtained. The obtained results were subjected to deliberate quantifications, which were assigned to the IE management objective, e.g. the need to minimize the stress load at the expense of the physical load. The quantifications made will enable their use in the method of artificial neural networks in supporting IE management for partially and non-automated assembly processes in the aspect of industry 4.0.

Funding

This work was supported by the Faculty of Management Engineering at the Poznan University of Technology. This article was prepared as part of the project [grant number 0811/SBAD/1058].

References

- 1. Butlewski, M. (2018). Projektowanie ergonomiczne wobec dynamiki deficytu zasobów ludzkich. Wydawnictwo Politechniki Poznańskiej.
- 2. Dewicka, A. (2016). Charakterystyka instytucjonalnego programu wspierania innowacji techniczno-ergonomicznych w małych i średnich przedsiębiorstwach. Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie.
- 3. Endsley, M.R. (1995). A taxonomy of situation awareness errors. *Human factors in aviation operations*, *3*(2), pp.287-292.
- 4. Grabowski, S., Muraszkiewicz, M. (2017). Modelowanie ekosystemów informacyjnych dla innowacyjnych społeczności programistycznych. *Zagadnienia Informacji Naukowej-Studia Informacyjne*, *55*(2(110)), 30-45.
- 5. Griffin, M.A., Neal, A., Parker, S.K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, 50(2), pp. 327-347.
- Hart, S.G., Staveland, L.E. (1988). Development of NASA-TLX (Task Load Index): Results of empirical and theoretical research. *Advances in psychology, Vol. 52*, pp. 139-183. North-Holland.
- 7. Jantsch, E. (1972). Towards interdisciplinarity and transdisciplinarity in education and innovation. *Interdisciplinarity*.
- 8. Jasiak, A., Misztal, A. (2004). *Makroergonomia i projektowanie makroergonomiczne: materiały pomocnicze*. Wyd. Politechniki Poznańskiej.
- Kaasinen, E., Schmalfuß, F., Özturk, C., Aromaa, S., Boubekeur, M., Heilala, J., ... Mehta, R. (2020). Empowering and engaging industrial workers with Operator 4.0 solutions. *Computers & Industrial Engineering*, 139, 105678.
- 10. Lego.com, https://www.lego.com/cdn/product-assets/product.bi.core.pdf/6394257.pdf.
- 11. Longo, F., Nicoletti, L., Padovano, A. (2017). Smart operators in industry 4.0: A humancentered approach to enhance operators' capabilities and competencies within the new smart factory context. *Computers & industrial engineering*, *113*, 144-159.

- 12. Moschetti, A., Fiorini, L., Esposito, D., Dario, P., Cavallo, F. (2016). Recognition of daily gestures with wearable inertial rings and bracelets. *Sensors*, *16*(8), p. 1341.
- Mulder, L.B.J., de Waard, D., Brookhuis, K.A. (2004). Estimating mental effort using heart rate and heart rate variability. In *Handbook of human factors and ergonomics methods* (pp. 227-236). CRC Press.
- Pacholski, L., Kałkowska, J. (2019). Perspektywy zmienności paradygmatów ergonomii i organizacji przemysłowych procesów wytwarzania maszyn. In: L. Pacholski, J. Kałkowska, P. Kiełbasa, Ergonomia wobec wyzwań masowości i globalizacji w produkcji.
- 15. Panetto, H., Iung, B., Ivanov, D., Weichhart, G., Wang, X. (2019). Challenges for the cyberphysical manufacturing enterprises of the future. *Annual Reviews in Control*, 47, 200-213.
- Peruzzini, M., Pellicciari, M. (2018). User experience evaluation model for sustainable manufacturing. *International Journal of Computer Integrated Manufacturing*, 31(6), pp. 494-512.
- 17. Peruzzini, M., Grandi, F., Pellicciari, M. (2020). Exploring the potential of Operator 4.0 interface and monitoring. *Computers & Industrial Engineering*, *139*, p. 105600.
- Romero, D., Stahre, J., Wuest, T., Noran, O., Bernus, P., Fast-Berglund, Å., Gorecky, D. (2016). *Towards an operator 4.0 typology: a human-centric perspective on the fourth industrial revolution technologies*. Proceedings of the international conference on computers and industrial engineering (CIE46). Tianjin, China, pp. 29-31.
- 19. Slawinska, M., Wrobel, K. (2021). Indicative Method of Human Failure in Sustainable Chain of Custody Management. *European Research Studies*, 24(S5), 709-726.
- 20. Tan, Q., Tong, Y., Wu, S., Li, D. (2019). Anthropocentric Approach for Smart Assembly: Integration and Collaboration. *Journal of Robotics*.
- 21. Taylor, M.P., Boxall, P., Chen, J.J., Xu, X., Liew, A., Adeniji, A. (2020). Operator 4.0 or Maker 1.0? Exploring the implications of Industrie 4.0 for innovation, safety and quality of work in small economies and enterprises. *Computers & Industrial Engineering*, 139, 105486.
- Wróbel, K. (2020). Metoda kształtowania ergonomiczności ręcznych elementów sterowniczych dla osób starszych, praca doktorska. Wydział Inżynierii Zarządzania. Politechnika Poznańska, https://www.fem.put.poznan.pl/strona/sites/default/files/Doktor/ 15_Praca_doktorska_2019_Wrobel_Kamil_15_11_2019.pdf, 20.08.2020.
- Wróbel, K., Hoffmann, T., Czarnecki, K. (2020). Management of Ergonomic Interventions when Modeling The Technological Processes in The Industry 4.0. Proceedings of the 36th International Business Information Management Association Conference (IBIMA), 4-5 November 2020, Granada, Spain. Sustainable Economic Development and Advancing Education Excellence in the era of Global Pandemic, pp. 3202-3211.
- 24. Youtube.com, https://www.youtube.com/watch?v=UOodLJof7Y0.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

DIGITAL COMPETENCES OF THE INFORMATION SOCIETY ERA IN THE ASPECT OF SAFETY IN CYBERSPACE

Wiesława ZAŁOGA

Military University of Technology, Faculty of Security, Logistics and Management, Institute of Organization and Management; wieslawa.zaloga@wat.edu.pl, ORCID: 0000-0001-7758-0187

Purpose: The main objective of the article is to diagnose the level of digital competences of respondents in terms of knowledge, skills and attitudes in the areas of: problem solving, online safety, creating digital content, communication and cooperation, and the ability to use information and data.

Design/methodology/approach: Two research approaches were used in the research process - the first was based on quantitative research using a questionnaire as a data collection method, and the second was based on a general analysis of the content of the subject literature and netographic content.

Findings: The components of digital competences can be verified depending on the needs of social groups. It is dictated by the regularities that the application of certain principles of interaction is based on the principles of functioning of small and large social groups in various social and professional environments. This allows the conclusion that the level of companies' involvement in new technologies may affect the level of digital competences of employees.

Research limitations/implications: The main limitation of the research was the small sample size, limited generallization in the analysis of the literature content and a wide scope of the research resulting from the areas of knowledge, skills and attitudes in the field of digital competences.

Practical implications: A practical implication from the perspective of digital competency management is the creation of opportunities and the provision of tools to raise the level of digital competences by building awareness and practical skills of managers in terms of knowledge, skills and attitudes in the areas of: problem solving, online safety, digital content creation, communication and collaboration and the ability to use information and data.

Social implications: The impact of the research on society is of great importance from the point of view of managing employee competencies as a company's value. Digital Competence focuses on the critical and responsible use of, and an interest in, digital technologies for learning, working, and participation in politics and society. These include media literacy, digital content creation, security as well as intellectual property, problem solving and critical thinking issues.

Originality/value: The article addresses the challenges related to the need to develop digital competences in various sectors of the national economy. The value of the article results from the current challenges in the field of digital skills of the society. The time of the pandemic has shown the importance of issues related to knowledge, skills and a critical attitude towards digital activities on the web.

Keywords: digital competences, IT competences, information competences, online safety. **Category of the paper:** research work.

1. Introduction

The development of information and communication technologies in the last dozen or so years has irretrievably changed such aspects of people's lives as work, access to information, communication, education and social relations. Developing the ability to use computer applications as well as resources and communication in the network, putting emphasis on solving problems in various fields with the conscious use of methods and tools derived from computer science, is not only an aspect that facilitates the acquisition of knowledge by the student and teaching by the teacher. Free access to the Internet creates opportunities for constant and quick retrieval of news, provides tools that are helpful in work, study, communication and entertainment. However, while the network has become an important means of supporting the learning process, it also carries risks. The article discusses the issues related to the digital competences of the information society in the aspect of online security. The article is based on data obtained from scientific and information sources. The argumentation of the presented content is based on scientific publications in the area of digital competences of the digital society and the data obtained as a result of the author's research. The publication cites co-authoring articles and publications affiliated by prestigious experts conducting research in the field of digital competences. The article uses data from reports on the assessment of digital competences in an international perspective. The considerations in the publication were supplemented by the author's research carried out as part of the research project: Leadership in the light of the conditions of modern intellectual capital management and its impact on national security - a detailed study entitled "Digital leadership in Polish enterprises". The empirical research was commissioned by the Institute of Organization and Management of the Faculty of Security, Logistics and Management of the Military University of Technology in Warsaw (research grant no. UGB 865/2021). The CAWI interviews were conducted on a randomly selected research sample of respondents who served as owners, managers and board members in small, medium and large manufacturing, service and trade enterprises. The study covered 16 voivodeships in Poland. 163 respondents took part in the survey.

Research results confirm the existence of the digital competency gap. The analysis of the conducted research clearly shows that in order to undergo digital transformation in the professional environment, one should focus on developing digital competences, which are the key to the success of society in the digital reality. The obtained research results define the profile of digital competences of the information society. The subject matter presented in the article is of great importance for the perspective of maintaining appropriate attitudes, knowledge and

skills in the aspect of security in cyberspace. This study is a contribution to further research and subsequent articles on the dissemination of knowledge about the importance of the level of digital competences and the benefits of having them. As a result, extensive empirical material was obtained, the analysis and description of which goes far beyond the possibilities of a single scientific article. Based on the postulate mentioned in the article, the aim of this publication is also to systematize and argue a specific social phenomenon in order to present a rational understanding of the implementation of further empirical research.

In the Integrated State Informatization Program for 2014-2022, digital competences constitute the fourth set of basic skills, next to reading and writing, mathematics and language skills. The way of shaping digital competences is digital education, targeted at the needs of various social groups of citizens. Citizens' digital skills are an indispensable factor that builds social capital, influencing the competitiveness of the economy in a global perspective.

Digital competences are becoming a condition for full participation in social and professional life, and at the same time are essential for social and economic development. Dissemination of the use of skills has an impact on increasing the demand for products and services related to technologies, and indirectly facilitating the development of companies from the new technology sector. The development of digital competences in the society and the implementation of new solutions are also important for increasing innovation and increasing the competitiveness of companies and the efficiency of the institution's operation (Batorski, Płoszaj, 2012, p. 7).

In times of digital transformation, modern organizations face many challenges, such as the rapid development of technology, social and demographic changes. However, among all these changes, it is worth deepening one - digital transformation. According to many researchers, the imperative for these companies is to strive for a sustainable competitive position and economic success (Berman, 2012; Fiolka, 2019; Warner, Wagner, 2019). Digital transformation can be understood as a process that aims to improve the subject by causing significant changes in its properties through a combination of information, computing, communication and communication technologies (Vial, 2019, p. 121).

The definition of digital competences defines a set of skills that determine the effective use of digital space. Therefore, these will be both IT competences in the field of hardware and software skills, use of various applications, as well as information competences in the field of searching for the necessary information from electronic and traditional sources. Digital competences are also the ability to use digital media creatively, communicate and build relationships through electronic media, and the ability to ensure their security. As part of digital competences, the user of digital media should also have a level of knowledge of legal regulations and should be able to use new technologies in an ethical manner. Therefore, the concept of digital competences covers a very wide set of skills that determine the efficient and conscious use of new technologies and active participation in the life of the information society (Batorski, Płoszaj, 2012, p. 7).

Digital competences in terms of knowledge, skills and attitudes also apply to cyberspace security. The feeling of security is undeniably one of the basic human needs that can be guaranteed by the state thanks to the available means and techniques. Security has many definitions. Scientists agree that there is no clear definition of safety. The most common definition of security is the state and the process (Koziej, 2021).

Currently, there are many categories of security, among which information security has found its place. As one of many scientists, Piotr Potejko defined information security as: "a set of actions, methods and procedures undertaken by authorized entities, aimed at ensuring the integrity of collected, stored and processed information resources, by securing them against undesirable, unauthorized disclosure, modification or destruction" (Potejko, 2009, p. 193).

Another definition of information security is the protection of information against unwanted (accidental or deliberate) disclosure, modification, destruction or preventing its processing. The progress of civilization, the development of the media, the expanding amount of information shape new phenomena, expanding the catalog of national security with new areas, as was the case with information security.

In today's world, information is more valuable than money or raw materials. It exerts a great influence on states, societies and individuals. Being in possession of information has become a condition for a better and safer life, and the information itself began to be protected as a material good. Currently, there are security categories, among which information security has found its place. One of the greatest resources of information nowadays is cyberspace, which at the same time can pose a threat to the user.

Due to the objectives of the project, it was of key importance to operationalize the level of digital competences of the social environment in terms of knowledge, skills and a critical attitude towards digital activities online. Therefore, each of the specified areas of competence includes a complete list of activities resulting from the recommendations of the EU Council that can be carried out in this area by assigning appropriate indicators. The study used a five-point Likert scale, which allowed the respondents to assess digital competences in terms of the current state and the expected state. The respondents who were involved as a result of accepting the survey invitation assessed the project as very comprehensive and at the same time very exhaustive. This reflects the complexity of the concept of digital competences which are involved in many aspects of our lives.

2. Digital competences of the information society in practice

In the European Commission's 2020 report on digital progress, EU DESI "DESI Digital Economy and Society Index for 2021 Poland" (hereinafter EU DESI5 report), it was indicated that more than half (56%) of society do not have basic digital skills, .in. such as using information and data, communicating over the Internet or keeping yourself safe online.

According to the EU DESI report, in 2019 only 44% of citizens had basic digital skills, while the EU average was 56% (Director of the Public Administration..., 2021, p. 6).

For the new programming period 2021-2027, the European Commission has for the first time set a specific target to increase the proportion of citizens with basic digital skills from 56% in 2019 to 70% in 2025. The EU DESI report for 2021 shows that Poland ranks 24th in the 27 EU Member States in the Digital Economy and Society (DESI) Index for 2021. The statistics are illustrated in (Figure 1).

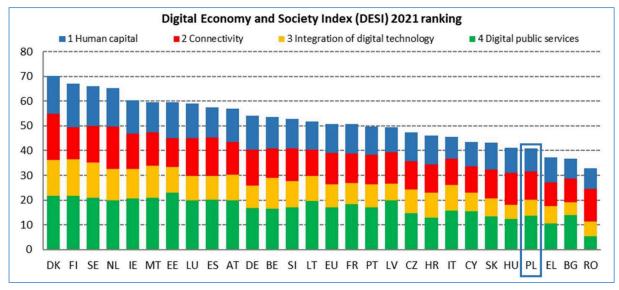


Figure 1. Ranking of the Digital Economy and Society Index for 2021.

Source: Digital Economy and Society Index (DESI) 2021, p. 7.

It would seem that along with the technological progress, the level of competences of the Polish society should develop. However, the report shows that in 2021 there was a decrease in the ranking by one place compared to 2020.

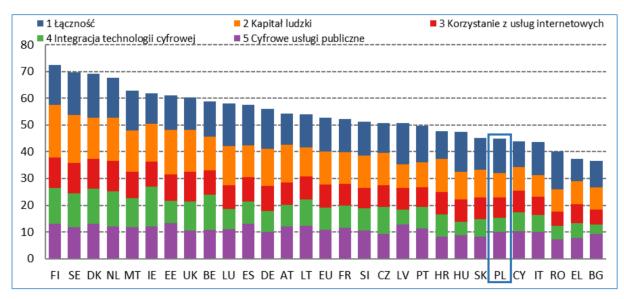


Figure 2. Ranking of the Digital Economy and Society Index for 2020. Source: Digital Economy and Society Index (DESI) 2020, p. 3.

In the ranking of the digital economy and society index (DESI) for 2020, against the background of 28 EU Member States, Poland ranks 23rd. Based on pre-pandemic data, Poland's score has improved, as has the EU average.

Recommendations of the European Parliament and the Council of Europe (2006) indicate eight key competences in the process of lifelong learning: communication in the mother tongue; communication in foreign languages; mathematical competences and basic scientific and technical competences; digital competences; learning to learn; social and civic competences; entrepreneurship; Cultural awareness and expression. Digital competences have been identified as one of the European Commission's priorities in the latest policies, activities and strategies.

The term "digital competences" is used relatively rarely in the literature on the subject, more often appearing in legislative materials, including the European documents and studies quoted in this chapter. In EU documents, the concept of digital competences is embedded in the concept of eight key competences "necessary for personal self-fulfillment, being an active citizen, social cohesion and obtaining employment opportunities in the knowledge society (Tarkowski, Mierzecka, Jasiewicz, 2015, p. 27).

The concept of digital competences is one of the many terms used to describe the area of competences related to the ability to use information, media and ICT. In European terminology, the key terms in this area are digital skills, e-skills and digital literacy. The Operational Program Digital Poland uses terminology based on the terms used in the Digital Agenda for Europe, in which the key term is digital competences. Kirsti Ala-Mutka (2011, p. 27) proposes a categorization that shows the relationship between computer literacy, network literacy, information literacy, media literacy and digital competences. (digital literacy, e-literacy) (Tarkowski, Mierzecka, Jasiewicz, 2015, p. 27).

In the literature on the subject, the authors also use the division into medium-related Internet skills, which relate to the use of hardware and basic software, and content-related Internet skills, which include information, communication and content creation competences. (Ala-Mutka, 2011, pp. 23-29). Digital competence (digital literacy) is defined as the ability to understand and use information available in various formats and electronic sources. The most important element of e-competences, however, is not the efficient use of ICT tools (Tarkowski, Mierzecka, Jasiewicz, 2015, p. 27).

As defined in the EU Council Recommendations of 22 May 2018 on Key Competences for Lifelong Learning, digital competences include confident, critical and responsible use and engagement with digital technologies for learning, working and participating in society. They include information and data literacy, communication and collaboration, media literacy, digital content creation, security including digital comfort and cybersecurity competences, intellectual property issues, problem solving and critical thinking (Director of the Public Administration..., 2021, p. 4).

Having the best tools to fight or reduce online threats, nothing can replace common sense, knowledge, skills or the basics of using, or rather, "life" in cyberspace. Therefore, the best antivirus program, the best firewall or the best laws will not replace experience, knowledge and responsible attitude. All these tools can only be an accessory for people who know how to recognize dangers on the Internet.

The competences discussed were analyzed in the framework of the conducted research in three areas - knowledge, skills and attitudes. On the level of knowledge, digital competences require (Ferrari, 2013, pp. 7-10):

- knowledge of the nature, role and potential of information society technologies (TSI) in personal and social life and at work,
- knowledge of computer applications (word processors, spreadsheets, databases, information storage) and the possibility of their use,
- knowledge of potential threats related to the Internet and electronic communication (e-mail, web tools),
- understand how TSI can foster creativity and innovation,
- awareness of issues related to truthfulness and reliability of the information,
- awareness of the legal and ethical aspects of the interactive use of TSI.

At the skill level, digital competences require (Ferrari, 2013, pp. 7-10):

- searching for, collecting, processing, evaluating and critically using information,
- using tools to create, present and understand complex information,
- search for and use of services offered on the Internet,
- using TSIs as a tool to support critical thinking, creativity and innovation.

At the level of attitudes, digital competences require (Ferrari, 2013, pp. 7-10):

- critical and reflective attitude towards available information,
- responsible use of interactive media,
- interest in participating in communities and internet networks for cultural, social or professional purposes.

The implementation of the research project referred to five areas of digital competences in terms of knowledge, skills and attitudes of respondents (Ferrari, 2013, pp. 7-10):

• information and data literacy - Expressing information needs, retrieving data, information and content in digital environments. Assessment of credibility and reliability of data sources, information and digital content. Data storage, organization and processing in a structured environment;

- communication and collaboration Interaction, communication and collaboration using digital technologies. Adapting communication strategies to specific audiences and awareness of cultural and generational diversity in the digital environment. Participation in society through the use of public and private digital services Seeking empowerment and civic activities through appropriate digital technologies. Managing your own digital identity and reputation;
- digital content creation Digital content creation and editing. Improving and integrating
 information and content with existing knowledge while understanding how copyright
 and licenses should be applied. Knowledge of how to provide understandable
 instructions for a computer system;
- security Protect devices, content, personal data and privacy in digital environments. Ability to avoid health risks and threats to physical and mental well-being when using digital technologies. Awareness of the importance of digital technologies for social well-being and social inclusion. Awareness of the environmental impact of digital technologies and their use;
- problem solving Identifying needs and problems and solving conceptual problems and problem situations in digital environments. The use of digital tools to introduce innovation in processes and products. Search for opportunities for self-development and ongoing tracking of digital evolution.

As a result of the analysis of the research process, it can be concluded that there is a competency gap in terms of the level of digital competences held in relation to the expectations of the respondents. As shown by the data on the chart, the respondents assessed their competences in the field of security the lowest. The respondents gave the lowest level of knowledge in the area of security (3.2). The ability to avoid health risks and threats to physical and mental well-being when using digital technologies is a very big problem nowadays. Respondents referred to online safety as a state of certainty. It is a state that each participant in the research process would prefer to feel - as opposed to being threatened.

Generally speaking, a threat can be called the state opposite to security. It is a situation in which someone feels threatened or an event that reduces the level of security of a given entity. The threat is characterized by the likelihood of its occurrence and its interdisciplinary nature (Marczyk, 2018, pp. 1-2).

At the level of (3.5), the respondents assessed their knowledge in the area of the ability to use information, data and solve problems. In relation to the current situation, the respondents obtained the highest results (4.0) in terms of knowledge in the area of communication and cooperation as well as creating digital content. As shown in the graphic presentation (Figure 3), the respondents' expectations in terms of knowledge, skills and attitudes in the surveyed areas are much higher than the level of their competences at the time of the survey.

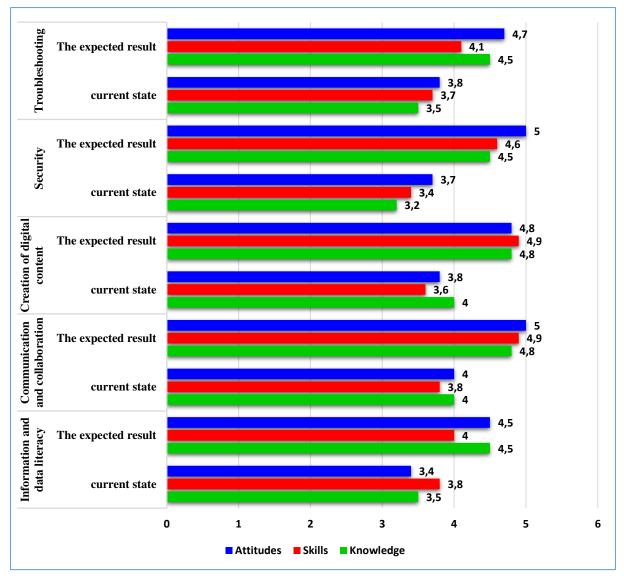


Figure 3. The level of possessed and expected digital competences according to respondents' opinions. Source: own study.

It is worth considering taking actions that will affect the development of digital competences of professional environments. Employees should be able to learn how to use new technological solutions in terms of knowledge, skills and attitudes in the areas of information and data literacy, communication and collaboration, digital content creation, security and problem solving. As a result of the research, it is postulated to introduce a training program that will increase the digital competences of employees. It is worth applying to examining the level of digital competences held by employees before and after the training.

3. Summary

Digital Competence focuses on the critical and responsible use of, and an interest in, digital technologies for learning, working, and participation in politics and society. These include media literacy, digital content creation, security (https://pl.wikipedia.org/wiki) as well as intellectual property, problem solving and critical thinking. All these factors are needed to consciously perceive the vast amount of information that the Internet provides us every day, especially those so important as political information. While young people have these competences in their blood, by using social media from an early age, older people, not born in the Internet era, may find it harder to assimilate these competences, which often results in excessive faith by such people in everything they read in the Internet networks

In order to obtain the above competences, it is necessary to understand how digital technologies help in communication, increase creativity and innovation, and to be aware of the opportunities, effects and risks associated with them. It is very important to understand the mechanisms and logic underlying the evolving digital technologies, as well as the ability to use various types of electronic devices, as well as software and networks. One should remember about the critical reception of information and its accuracy and credibility in the case of data made available on the Internet. In the political sense of digital communication, it is necessary to be able to use it to support active citizenship (https://pl.wikipedia.org/wiki), cooperate with other people and exchange views while respecting the views of others A frequent activity of the media and politicians nowadays is the deliberate division of the nation into groups by increasing the concentration of statements on sensitive and controversial topics, which should be aware of every recipient. Therefore, using digital technologies requires a reflective and critical approach, but also willingness and curiosity and a perspective approach to their development.

Essential skills for cybersecurity are primarily the ability to filter, manage and protect information, content, data, and digital identities, and to use software, devices, artificial intelligence and robots effectively. The development of the information society, combined with the expansion of the Internet reach, is accompanied by the penetration of other aspects of human activity into cyberspace. The global reach and the possibility of immediate access from almost anywhere on Earth, combined with low operating costs, has made more and more entities (governments, institutions and companies), as well as individuals, decide to transfer various elements of their daily activities to cyberspace. Many Internet users cannot imagine their lives without quick access to the latest information and e-mail, internet banking, online shopping, electronic ticket booking or contact with family and friends via social networks and instant messaging. Accessible via computers, mobile phones, tablets and even cars, the Internet has become one of the main utilities alongside electricity, gas and running water. It has become synonymous with freedom of speech and the unhindered flow of information, and in some cases has successfully served as a vehicle for revolution and social change.

The effect of the conducted critical analysis of the literature allows us to conclude that the components of digital competences can be verified depending on the needs of social groups. It is dictated by the regularities that the application of certain principles of interaction is based on the principles of functioning of small and large social groups in various social environments. The deepening of digital competences gives the opportunity to expand and interpret all interactive activities, provokes prosocial thinking and conditions collective experience. The description of digital competences proposed in the literature is vague, thus it seems to impoverish and narrow the understanding of the essence of the conscious choice of the proposed components of digital competences.

The aim of the article was fully achieved. The level of digital competences of respondents was diagnosed in terms of knowledge, skills and attitudes in the areas of: problem solving, Internet safety, digital content creation, communication and cooperation, and the ability to use information online.

The author of this publication hopes that the presented content will allow us to better understand the problematic situation, while being aware that the presented study is not an exhaustive description of the complexity of the phenomenon of digital competences. It seems justified to further explore the presented issues, and thus to conduct research that will be published in subsequent cyclical publications.

References

- 1. Ala-Mutka, K. (2011). *Mapping digital competence: Towards a conceptual understanding*. JRC 67075. Luxembourg.
- 2. Batorski, D., Płoszaj, A. (2012). Diagnoza i rekomendacje w obszarze kompetencji cyfrowych społeczeństwa kompetencji cyfrowych społeczeństwa i przeciwdziałania wykluczeniu cyfrowemu i przeciwdziałania wykluczeniu cyfrowemu w kontekście zaprogramowania wsparcia w latach 2014-2020. Warszawa.
- 3. Berman, S.J. (2012). Digital transformation: opportunities to create new business models. *Strategy & Leadership*, 40(2), 16-24.
- 4. Cyberbezpieczeństwo, https://pl.wikipedia.org/wiki, 7.03.2022.
- Dyrektor Departamentu Administracji Publicznej (2021). NIK KAP.430.017.2021 Nr ewid. 182/2021/P/21/003/KAP, DZIAŁANIA ORGANÓW ADMINISTRACJI PUBLICZNEJ NA RZECZ PODNOSZENIA KOMPETENCJI CYFROWYCH SPOŁECZEŃSTWA. Warszawa.
- 6. Ferrari, A. (2013). DIGCOMP Ramy odniesienia dla rozwoju i rozumienia kompetencji cyfrowych w Europie, Luksemburg (dostęp: (PDF) DIGCOMP: Ramy odniesienia dla

rozwoju i rozumienia kompetencji cyfrowych w Europie | Katarzyna Urban - Academia.edu, 20.03.2022).

- Koziej, S., Bezpieczeństwo: istota, podstawowe kategorie i historyczna ewolucja, (dostęp: Bezpieczenstwo_istota_podstawowe_kategorie_i_historyczna_ewolucja(1).pdf, 21.03.2022), 19-39.
- 8. Marczyk, M., (2018), Cyberprzestrzeń jako nowy wymiar aktywności człowieka analiza pojęciowa obszaru. *Przegląd Teleinformatyczny*, no. 1-2.
- 9. Potejko, P. (2009). Bezpieczeństwo informacyjne. In: K.A. Wojtaszczyk, A. Materska-Sosnowska, *Bezpieczeństwo państwa*. Warszawa.
- 10. Tarkowski, A., Mierzecka, A. et al. (2015). Polska Cyfrowa równych szans. Warszaw.
- 11. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28, 118-144.
- 12. Warner, K.S., Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, *52(3)*, 326-349.

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

THE ETHICAL AND CIVIC COMPETENCE OF YOUNG PEOPLE IN THE REGION OF WIELKOPOLSKA

Halina ZBOROŃ

Poznań University of Economics and Business; halina.zboron@ue.poznan.pl, ORCID: 0000-0002-8399-6709

Purpose: To present the results of research on the readiness of secondary school students to perform professional roles in Industry 4.0. The object of the research is the ethical and civic competence.

Design/methodology/approach: The research was conducted with the use of an original empirical research tool. The theoretical reference of the research are forecasts identifying professional competencies for Industry 4.0.

Findings: The research showed that young people from secondary schools are highly aware of social ethical norms in the context of the economic practice. Furthermore, the young people who took part in the research demonstrate readiness to behave responsibly and take account of non-economic values when making business decisions.

Research limitations/implications: The research sample was a group of students from the schools of the region of Wielkopolska. The research is not representative and thus the results may not be extrapolated to the entire population of young people in Poland. The developed research tool, however, is of universal use.

Practical implications: The research regards competencies that will be in demand in the Industry 4.0 labour market. Their identification allows for designing educational tools that will prepare young people better to perform professional roles.

Social implications: The development of the ethical and civic competence of young people is of importance for the quality of social life and the condition of the natural environment. Effective formation of responsible attitudes among young people is socially important.

Originality/value: The author has created an original tool to test the level of the ethical and civic competence. The tool may be used to verify educational effects in terms of the formation of the ethical and civic awareness among students.

Keywords: competencies, ethics, citizenship, civic attitude, Polish youth, Industry 4.0.

Category of the paper: Research paper.

1. Introduction. Educational challenges in the face of changes in the market

From the perspective of the education policy, mere observation of a present situation in the labour market seems to be insufficient. Appropriate preparation of young people to perform professional roles requires consideration of forecasted changes in the economy as well as accurate predictions of the labour market's future expectations. This is why it is so important to analyse long-term trends in economic changes and identify trends regarding the future requirements of employees' competencies. Such identification may form a basis for undertakings, pursued at various education levels, aimed at eliminating competency gaps. Thus, the effectiveness of education, as measured by how the learning effects correspond to the requirements of employers, requires that such education goals be pursued that are set based on correct forecasts and reliable diagnoses of a current situation. Based on such a diagnosis, attempts are made to identify the challenges regarding competency gaps that we are facing when preparing the future personnel for the economy. Currently, the diagnosis and identification measures as well as various forms of support of competency development regard, in the majority of cases, university students. Universities have an obligation to track the situation of their graduates,¹ and the results of such monitoring are used to introduce changes in the curricula and organise additional education forms, such as workshops, courses, seminars or apprenticeship programmes aimed at developing or reinforcing the competencies that are valuable for employers. Such measures should be extended to cover also those groups of young people who enter the labour market after graduating from a secondary school. To improve the effectiveness of such measures, we should implement them already at an earlier education stage. In this context, the identification of the competencies of primary and secondary school students seems to be a relevant task.

That matter is dealt with in this text. The aim of this paper is to present the results of a research project regarding the readiness of young people in Poland, i.e. students of secondary schools, to perform professional roles in Industry 4.0. The paper presents the results regarding the ethical and civic competence.

¹ Poland has introduced a national graduate tracking system (ELA), which provides valuable information about the economic situation of graduates of state universities.

2. Contemporary labour market and expected competencies of an employee

The contemporary labour market may be described by reference to two important trends of changes. The first one regards a gradual transformation of the contemporary economies of the West into Economy 4.0, a model marked by extensive use of information technologies and considerable level of automation in industrial production (Cellary, 2019). The fourth industrial revolution (fourth after mechanisation, electrification and computerisation), which is currently happening in the Western world, consists in the integration of the world of digitally controlled machines (production lines) with people who manage automated production processes. The changes that are taking place apply principally to the manufacturing sector, described as Industry 4.0, where the creation of networks connecting the material world (tangible elements of production processes) with the internet and information systems is of paramount importance. The flow of information between people, machines and information technologies is the basis of operation for production processes. A cyber-physical environment emerges, consisting of networks of information flow between people, machines and the systems forming the reality of Industry 4.0, which is the foundation of Economy 4.0, which also covers the entire infrastructure and market environment (Cellary, 2019). In this new economic environment, completely new challenges for employees emerge and they require specific preparation.

Knowledge-based Economy 4.0 will require specific competencies: IT, analytical and communication skills, self-organisation, readiness for constant learning, openness and teamwork, creativity, flexibility, ability to respond quickly to changes and adapt to changing conditions both inside and outside an organisation.

Competence areas are described as cognitive and social. The so-called hard (subject-matterrelated) skills gain in value with regard to social competencies: communication skills, openness, readiness to work with others, loyalty, ability to solve conflicts and organise teamwork. This list should be completed with the ethical and civic competence; and the reason for that lies in the second significant trend observed in the contemporary economies, i.e. the growing popularity of the socially responsible business model. Social expectations as to respecting ethical standards, addressed to market participants, affect the labour market in that the profile of the professional competencies sought by employers change. A business that respects CSR standards in its operations and pursues ethical programmes requires engagement of employees, who are ready to take up related challenges.

Market participants in the Western world are aware that there is a social agreement regarding the obligations imposed on them. The cultural changes, having been taking place gradually since the mid-1950s, of the social opinion about the impact of business on its environment have led to an effective change of our thinking about economic operations. The business social responsibility concept has evolved gradually: from the early defensive stage of negating corporate social responsibility in the greedy era, to the next stages: the charitable,

promotional, strategic and systemic one (see: Carroll, 1999; Frederic, 1994, 1998, 2013; Visser, 2010a, 2010b), to a conclusion that all previous attempts to improve the CSR model should be abandoned in favour of a completely different approach to define the idea. The starting point for this new approach is to reverse the applicable axiological order and adopt a different perspective, according to which the starting point of business operations should be to create shared value (CSV) (Porter, Kramer, 2011) or to create value together (Hausner, 2019). Currently, it may be assumed that the idea of social responsibility is evolving towards the concept of corporate citizenship (Valor, 2005; Zboroń, 2019). This paper does not allow to explore this idea more broadly², but for the needs of the main considerations of this paper we are going to assume that the basis of corporate citizenship is that businesses in their operations should take the perspective of society's welfare into account and make decisions that link the expected profits with social interest. The popularisation of this trend in thinking about social responsibility will lead to a broader definition of the obligations of the economic practice participants. It is thus reasonable to include the ethical and civic competence to the set of skills required from future employees.

3. Methods. The research on the competence of secondary school students

The research The New Generation in the New Economy (original name: Nowe Pokolenie w Nowej Gospodarce) was conducted as part of the project The Regional Initiative of Excellence (original name: Regionalna Iniciatywa Doskonałości) carried out in Poznań University of Business and Economics.3 The research was carried out between 17 May and 8 June 2021. The participants were young people aged 13-20 who were the students of secondary schools located in Poznań and the region of Wielkopolska: general education secondary schools, technical secondary schools and vocational secondary schools. The statistical unit was a student while the sampling unit was a school form. The type of town, type of school and the quality of education (determined by reference to the school ranking published every year in Perspektywy, a Polish monthly magazine about education) were taken into account in the sampling procedure. The research included students from schools representing varying education levels (the best, good, average, poor and the poorest schools) and varying locations. There were 26 schools in the research (9 general education schools, 9 technical schools, 8 vocational schools), of which 5 were located in Poznań, 19 in other towns of the region of Wielkopolska and 2 were located in villages. The goal of the research was to develop a methodology to carry out regular research on the preparation of the young generation

² This matter is discussed in another paper by H. Zboroń (2019).

³ The project is funded as part of the programme of the Minister of Science and Higher Education under the name *Regional Initiative of Excellence* in 2019-2022; project No.: 004/RID/2018/19; funding at PLN 3,000,000.

to serve professional roles. A set of 8 tools was created: 7 individual standardised tasks and one teamwork task. Each tool is used to examine one competency, and because each tool is an independent task, they may be used separately. The toolset covers the following: the mathematical literacy competence (allowing to determine analytical competence), the ethical and civic competence, communication, creativity, teamwork, self-organisation at work and task planning, digital content creation and ability to search for information with the use of IT tools, and learning new things⁴. This paper deals with the results of the test of the ethical and civic competence.

4. Results

4.1. Task one: evaluating negative behaviours by reference to moral norms

The research goal in task one was to answer the question how young people from secondary schools evaluate the importance of listed social norms. The questions in the task regarded the following situations: hiring employees without a contract, exposing employees to the risk of health or life loss, misleading a customer as to the quality of a good or service, failure to meet contractual terms, unequal treatment of employees, carrying out operations harmful to the natural environment.

Average rate	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6
Total	-1.28	-2.63	-2.07	-2.37	-1.89	-2.18
-12.42						
girls	-1.39	-2.68	-2.10	-2.42	-2.02	-2.22
-12.83						
boys	-1.10	-2.55	-2.01	-2.27	-1.68	-2.11
-11.72						

Table 1.Results of task 1, by sex

Source: Own work.

⁴ The list of the competencies was determined based on the literature on the subject, an analysis of data from individual in-depth interviews and opinions of experts, i.e. participants of discussion panels. The following literature, among others, was used: Żarczyńska-Dobiesz A., Chomątowska B., (2014), Pokolenie "Z" na ryku pracy – wyzwania dla zarządzania zasobami ludzkimi; Mazur-Wierzbicka E., (2019), Zarządzanie różnorodnością pokoleniową w organizacjach; Przyszłość edukacji. Scenariusze 2046. Raport z badan, Infuture Institute (2021); Młodość czy doświadczenie? Kapitał ludzki w Polsce. Raport podsumowujący III edycję badań Bilansu Kapitału Ludzkiego, (2013), J. Górniak (ed.).

The results of task one are satisfactory: all exemplary behaviours were evaluated negatively, so according to the common standards. The average rate of all answers is (-12.42), and this result is in the middle of the high level. A slight difference between the results of girls and boys may be observed. Girls are more inclined to deem the example behaviours to be reprehensible. Nevertheless, the results for both sexes are similar.

Table 2.

Results	of tasi	k 1, by	school	type
---------	---------	---------	--------	------

Average rate	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6
General education school -12.02	-0.93	-2.63	-2.15	-2.37	-1.85	-2.09
Technical school -13.37	-1.56	-2.65	-2.00	-2.41	-1.95	-2.28
Vocational school -12.54	-1.54	-2.61	-2.01	-2.29	-1.89	-2.20

Source: Own work.

The analysis of the results as broken down by school type does not show any significant differences between the students, although a difference between technical and general education schools may be puzzling. The higher ethical and civic sensitivity among students of technical schools may be explained by the differences in the number of girls among the tested groups: girls accounted for 63% of the total participants from general education schools, while in technical schools it was 69%.

4.2. Task two: evaluating behaviours in the context of a conflict of values

Task two was designed to see if the young people, when evaluating the behaviours, take account of the economic interest: does the perspective of earning potential financial gains makes the exemplary economic behaviours seem less negative? In the task instructions, the students were asked to impersonate a businessperson, an owner of a small construction company that competes with other businesses for access to profitable contracts, which forces the owner to make difficult decisions. The task description presented six examples of business situations requiring decisions to be made in the context of a conflict of ethical and business values. The students' task was to evaluate the behaviours resulting from the decisions made. The rating scale was the same as in task one.

The first situation regarded hiring employees without a contract. The description emphasised difficult conditions of competing with other businesses, which induced the business owner to hire economic migrants without an employment contract to allow for labour costs reduction. The young respondents found this behaviour morally questionable, and the average rating in numbers was (-0.99). There were slight differences between the ratings by girls (-1.10) and boys (-0.8) and the students from general education schools (-0.75), technical schools (-1.25) and vocational schools (-1.08).

The second example presented disregard for OHS rules driven by the need to maintain high pace of work and negligence in supplying employees with protective clothing and appropriate tools for safe work. In this case, the average rating was (-2.27) (in words: inappropriate behaviour), for girls the result was (-2.43), for boys (-2.01), while the answers in comparison of school types were very even and amounted to (-2.29) for general education and technical schools, and (-2.21) for vocational schools.

The third situation regarded an opportunity to gain benefit at a customer's cost. In the example, the entrepreneur used a lower quality material, against what was agreed with the customer and without the latter's knowledge. The description of the event underlined that it is very unlikely the abuse would be discovered. The behaviour was found morally questionable. In numerical terms the average rating was (-1.55), for girls it was (-1.64), for boys (-1.39). Students of general education schools rated it at (-1.6), students of technical schools at (-1.45) and students of vocational schools at (-1.59).

The fourth situation regarded a problem of failure to meet the deadline to perform a contract because of assuming another obligation. Emphasis was placed on the issue of seeking more contracts in order to ensure the liquidity of the company. The presented behaviour of misleading the customer consciously in respect of the order delivery time was, similarly as in the previous cases, evaluated as morally questionable. The average rating was (-1.4), girls rated it at (-1.54) on average, boys at (-1.15), general school students at (-1.43), technical school students at (-1.51) and vocational school students at (-1.16).

The fifth situation regarded varied treatment of employees by the employer and discrimination of the employed economic migrants. The description included the mechanisms of worse treatment of foreigners looking for a job in Polish businesses. It was underlined that such people are very determined and often agree to undertake a job without any contract and for a different, worse pay than other employees. This behaviour was evaluated slightly more severely than the previous ones: the average rating was in the morally questionable range and in terms of numbers it was (-1.65), the average for girls was (-1.89), and for boys (-1.22). The results of the students of general education and technical schools were almost identical, for the students of vocational schools the described behaviour was slightly more tolerable.

The last example of wrong behaviours regarded fly-tipping, i.e. illegal disposal of waste at places not intended for that purpose. Although it was underlined that businesses may save a lot when disposing waste this way, the young respondents definitely condemned such behaviour and deemed it improper – the average rating was (-2.14), for girls it was (-2.27), for boys (-1.92). In the case of general education and technical secondary schools, the rating was within the improper behaviour range ((-2.26) and (-2.11) respectively), for vocational schools the students deemed it morally questionable ((-1.92)).

	Situation 1	Situation 2	Situation 3	Situation 4	Situation 5	Situation 6
Total	-0.99	-2.27	-1.55	-1.40	-1.65	-2.14
-10						
girls	-1.10	-2.43	-1.64	-1.54	-1.89	-2.27
-10.87						
boys	-0.80	-2.01	-1.39	-1.15	-1.22	-1.92
-8.49						

Table 3. Table 1.

Total results of task 2, by sex

Source: Own work.

Table 4.

Total results of task 2, by school type

Average rating	Situation 1	Situation 2	Situation 3	Situation 4	Situation 5	Situation 6
General education school -10.07	-0.75	-2.29	-1.60	-1.43	-1.74	-2.26
Technical school -10.34	-1.25	-2.29	-1.45	-1.51	-1.73	-2.11
Vocational school -9.29	-1.08	-2.21	-1.59	-1.16	-1.31	-1.94

Source: Own work.

The results of task 2 show a high level of the ethical and civic competence, although they are slightly lower in comparison to task 1. Such a difference could have been expected due to the fact that the specific behaviours were rated in the complex context of the specific situation of the business owner making a choice due to various axiological reasons. Thus, the validity of ethical norms taken into consideration when rating the behaviours outside of the context of real-life situations decreased in the opinion of the young people.

5. Discussion on the results

The results of the entire research on the ethical and civic competence among students of secondary schools show a high level of this competence: it is contained within the range of (-18) to (-6), which is described as the range of high competence. Differences may be observed between female and male students as well as between the representatives of the particular school types, although they are not considerably large.

Table 5.

Total results, by sex

	Total	girls	boys		
Average of both tasks	-11.21	-11.85	-10.10		

Source: Own work.

	Total	General education schools	Technical schools	Vocational schools
Average of both tasks	-11.21	-11.04	-11.85	-10.91

Table 6.

Total results, by school type

Source: Own work.

Although there are no significant differences between the sexes (which was underlined above), girls achieved a slightly better result in both tasks in all questions. This is demonstrated consistently throughout the research. It may be a sign of differences in the upbringing effects and the expectation of higher empathy to be shown by girls. It may also be an argument for the thesis of a strong impact of the stereotypes of femineity and masculinity.

The differences in the results from both the tasks are worthy of note. For girls it is 1.96, for boys 3.23. This may mean that boys, when evaluating the behaviour in a specific situational context, took account of the conflict of interest and are more inclined to take account of the economic argument. In the case of girls, the conflict of interest has not affected their evaluation of the behaviour. Thus, it may be assumed that boys in their evaluations take account of material benefits to a larger extent and are more understanding for people violating ethical norms in the situation of a conflict of values.

Table 7.

Comparison of the results from both tasks, by sex

Average of both tasks	Task 1	Task 2
Girls	-12.83	-10.87
Boys	-11.72	-8.49

Source: Own work.

An important matter when analysing the research results is prudence. The research conducted regards the students' beliefs, the content of the awareness, and not actual attitudes confirmed in actual choices made. In research of this type, the factor described as the social desirability bias must be accounted for. It regards both the first and the second task. In the case of questions about important social matters with positive values, especially those regarding ethical and environmentally-friendly matters, the formulated answers may to a large extent be only of declaratory nature. This is why the results of the research must be treated with great prudence and interpreted accordingly. It is only justified to speak of the extent to which the young people are aware of the importance of the ethical norms pertaining to the behaviours of the participants of the economic practice. So, when speaking of a high level of the ethical and civic competence, we only refer to the area of knowledge – the identification and acknowledgment of the validity of the ethical norms determining the standards of behaviours. The ability to resolve moral dilemmas correctly is, however, certainly a good foundation for correct behaviours in social life.

6. Summary

The transformation of the contemporary economies of the West into the model of Economy 4.0 is the determinant of changes in the labour market. The forecasts regarding the professional competencies expected by employers in the future bring up a question whether the contemporary young people will be able to meet such expectations. Thus, a very important matter is the knowledge about what skills will be sought by employers from their potential employees in the near and the more distant future. It is equally important to identify the skills of future candidates, in particular interpersonal and social competencies.

References

- 1. Carroll, A. (1999). *Corporate Social Responsibility Evolution of Definitional Construct,* https://www.researchgate.net/publication/282441223_Corporate_social_responsibility_Ev olution_of_a_definitional_construct, 20.06.2019.
- 2. Cellary, W. (2019). Gospodarka 4.0 i Przemysł 4.0. Biuletyn PTE, No. 3(86).
- 3. Frederick, W.C. (1994). From CSR₁ to CSR₂. The Maturing of Business-and-Society Thought. *Business & Society, vol. 33, No. 2.*
- 4. Frederick, W.C. (1998). Moving to CSR4. What to Pack for the Trip? *Business & Society*, *vol. 37, No. 1.*
- Frederick, W.C. (2013). Corporate Social Responsibility: Deep Roots, Flourishing Growth, Promising Future. In: A. Crane, D. Matten, A. MacWilliams, J. Moon, D.S. Siegel (ed.), *The Oxford Handbook of Social Responsibility*. Oxford: Oxford University Press.
- 6. Górniak, J. (ed.) (2013). *Młodość czy doświadczenie? Kapitał ludzki w Polsce*. Raport podsumowujący III edycję badań Bilansu Kapitału Ludzkiego.
- 7. Hausner, J. (2019). Społeczna czasoprzestrzeń gospodarowania. W kierunku ekonomii wartości. Warsaw: Wydawnictwo Nieoczywiste.
- Mazur-Wierzbicka, E. (2019). Zarządzanie różnorodnością pokoleniową w organizacjach. In: I. Wyrwas (ed.), *Oblicza zarządzania różnorodnością w Polsce*. Warsaw: Wydawnictwo Nieoczywiste.
- 9. Porter, M.E., Kramer, M.R. (2011). Creating Shared Value. Harvard Business Review, 89.
- 10. Przyszłość edukacji. Raport z badań. Infuture Institute (2021).
- 11. Valor, C. (2005). Corporate Social Responsibility and Corporate Citizenship: Towards Corporate Accountability. *Business and Society Review, vol. 110, No. 2.*
- 12. Visser, W. (2010a) CSR 2.0. Ewolucja i rewolucja społecznej odpowiedzialności biznesu. In: M. Pohl, N. Tolhurst (ed.), *Responsible Business: How to Manage a CSR*

Strategy Successfully. Wiley, http://odpowiedzialnybiznes.pl/artykuly/csr-2-0-ewolucja-i-rewolucja-spolecznej-odpowiedzialnosci-biznesu/.

- 13. Visser, W. (2010b). The age of responsibility: CSR 2.0 and the new DNA of business. *Journal of Business Systems, Governance and Ethics, 5(3), 7-22.*
- 14. Visser, W. (2011). *The Ages and Stages of CSR: Towards the Future with CSR 2.0*, https://www.researchgate.net/publication/318096937_The_Ages_and_Stages_of_CSR_To wards_the_Future_with_CSR_20, 1.09.2021.
- 15. Żarczyńska-Dobiesz, A., Chomątowska, B. (2014). Pokolenie "Z" na rynku pracy wyzwania dla zarządzania zasobami ludzkimi. *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, No. 350.*

SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY ORGANIZATION AND MANAGEMENT SERIES NO. 164

2022

APPROACHES TO SOCIO-ECONOMIC INEQUALITY IN ECONOMIC THEORY

Patrycja ZWIECH

University of Szczecin; patrycja.zwiech@usz.edu.pl, ORCID: 0000-0002-4053-8177

Purpose: The purpose of this study is to present approaches to socio-economic inequality in economic theory.

Design/methodology/approach: This paper is theoretical in nature. I review relevant literature that addresses the perception of socio-economic inequality.

Findings: Three approaches to socio-economic inequality are identified in the course of the analysis of its perception. The first approach entirely legitimises inequality as an effect of operation of a free market economy, maximisation of profit, praise for individualism and recognition of paradigms that stem from a neoliberal system The second approach assumes that there must be systemic solutions in place that completely eliminate inequality of outcome. It is based on a belief that the state must interfere firmly in the redistribution policy, understood as an extreme solution that leads to the levelling off of standards of life of all citizens. The third approach is a solution that points out that we agree to inequality (or to its deepening) but on certain conditions that prescribe principles and acceptable boundaries. This paper shows four such conditions: adoption of solutions that remove inequality of opportunity (start), adoption of solutions that remove inequality of opportunity, adoption of solutions that improve the position of the worst-off group and adoption of solutions associated with establishing a conventional minimum accepted by the society.

Research limitations/implications: This research may affect political decisions of state authorities and will point out that we need to address the subject matter of inequality in future scholarly investigations.

Practical implications: This knowledge may be used in the context of modelling economic and social systems.

Originality/value: The article identifies 4 restricting conditions for the approach that points out that we must agree to socio-economic inequality.

Keywords: socio-economic inequality.

Category of the paper: General review, Viewpoint.

1. Introduction

In social studies inequality is evaluated by a comparison of characteristics of a given individual with analogical characteristics of another individual. When we evaluate inequality, we must specify what variables will be taken into account. Sen (2000) has a very good take on this aspect, saying that the most important question is: "equality of what?", because equality in one realm entails inequality in another. This paper focuses on social and economic inequality.

The terms social inequality, economic inequality and socio-economic inequality are used separately or interchangeably. The second approach is applied more often due to the impact of resources and revenues on social positions, social status, affiliation with social groups or perception of individuals and also due to the impact of the social position, social status and affiliation with groups on the revenues and resources. For example, Jarosz (1984) writes that inequality must be recognized in the context of unequal division of both, material benefits and prestige into positions identified before and in the context of the social inclination to inherit them (Jarosz, 1984). Zwiech (2016), on the other hand, defines economic inequality with an assumption that a certain level of inequality is an immanent feature of every socio-economic system, in three contexts. Firstly, in the context of conditions that create equality, inequality is recognized as permanent symmetrical (asymmetric) access to resources, wealth, prosperity and existence of barriers and differentiated opportunities to achieve these variables. Secondly, in the context of the effect of the functioning of a specific system as a result of redistribution of resources, wealth, and prosperity. And thirdly, in the context of the process that leads to redistribution as the existence of permanent relations that occur between the parties. Hence, social inequality means economic inequality and is strictly interrelated with it.

The purpose of this study is to present approaches to socio-economic inequality in economic theory.

2. Literature review - perception of socio-economic inequality

Michalczyk (2004) writes that inequality may be approached in three different angles – an apologetic approach (using arguments that justify inequality), a damasking approach (using arguments that criticise inequality) or a rational approach (the aim is to better understand the functioning of societies). Different approaches to socio-economic inequality may also result from beliefs of individuals. Their perception of this unfairness largely results from an ideology they adhere to. Ideological assumptions are usually based on three mainstreams: elitist, egalitarian and meritocratic. These mainstreams provide a basis for the emergence of 3 approaches to socio-economic inequality. The first approach entirely legitimises inequality as an effect of operation of a free market economy, maximisation of profit, praise for individualism and recognition of paradigms that stem from a neoliberal system The second approach is an antitype of the first one. It assumes that there must be systemic solutions in place that eliminate inequality of outcome completely. It is based on a belief that the state must interfere firmly in the redistribution policy, understood as an extreme solution that leads to the levelling off of standards of life of all citizens. The third approach is a solution that points out that we agree to inequality (or to their deepening) but on certain conditions that prescribe principles and acceptable boundaries (Zwiech, 2016).

The first approach – legitimising inequality – is based on the assumptions that reinforce inequality (these beliefs are also considered "myths" by some scholars). They include convictions such as that elitism is efficient, exclusion is necessary, prejudice is natural, greed is good and despair is inevitable (Dorling, 2010). They derive largely from the principles of classical economy, which pushes problems of income redistribution, rising inequality and lack of social cohesion to the back, focusing mostly on allocation. It is because acceptance of Pareto optimality as a paradigm allowed us to avoid entirely the issues of redistribution of income, as it was assumed that the case where the situation of wealthy people improves significantly and the situation of poor people does not change is beneficial (Blaug, 1985). Thus, the absolute approach completely obscures the relative approach.

Utilitarians present a similar position and prove that the question of income redistribution is irrelevant because we must aim to maximise utility of the entire society. This boils down to a conclusion that it is not important who gets more and who gets less, as long as the overall welfare (sum of wealth) is maximised (Rawls, 1994). Brandt (1996) expressed it really clearly, saying that equality in utilitarianism is completely subjugate to the size of wealth and should be sacrificed in exchange for even the slightest increase in it.

Proving that an increase in inequality is necessary also resulted from the conviction that a rise of income inequality is a necessary condition of economic development because it allows accumulation of capital necessary to stimulate GDP growth. Capital accumulation happens through concentration of incomes and the consequence of this process involves increased income inequality. Such an approach suggested unrestricted rise of economic inequality. The Kuznets theory weakens slightly the implications of this necessity, presenting the possibility of changes after a certain time, after obtaining a certain level of development – it is because according to Kuznets' hypothesis, income inequality increases immanently in the process of industrialization to shrink at the higher level of social welfare. Kuznets proved that income inequality grows rapidly in the initial period of accelerated economic growth, and then a levelling effect comes into play and inequalities decrease (an inverted U shape) (Kuznets, 1955).

The Washington Consensus also heralded that an increase of inequality is inevitable. The Washington Consensus policy pointed to typically neo-liberal solutions that lead to the minimising of the role of the state, deregulation, emphasis on privatisation, and liberalization of trade and capital market, often at the expense of local communities. The Consensus did not pay attention to the problem of inequality or social cohesion (Stiglitz, 2003, 2006).

Legitimisation of socio-economic inequality has also gained support from theories that refer to other values. For example, Friedman (2008) argued that focus should be given to freedom, not equality, and freedom inevitably leads to increasing inequality. Limitation of socioeconomic inequality could then strike at the value of freedom. Hayek (2007) emphasised in turn that an individualistic approach to individuals is the most important and natural differences between people justify an increase in inequality. Nozick (1999) argued in his entitlement theory that a just distribution is a question of reason, not effect, thus there is an absolute right of private property which cannot be infringed. Transfer of ownership from the better-off to the worse-off is a violation of entitlement of the former. Elite theories (e.g. by Pareto, Mosca, Mills, Lasswel, Mannheim, or Keller) point out that elites may be attributed certain 'inherent' skills of exercising power. Also, the 'Matthew effect', which says that with time the rich get richer and the poor get poorer (Gospel of Matthew), legitimises rising inequality.

The second approach – a complete lack of permission for inequality of outcome – assumes that there must be systemic (usually state-operated) solutions in place that remove outcome inequality entirely. Utopian socialists represent such an approach. Their theories served as a springboard for the idea of a classless society, where private ownership of means of production is abolished and new economic relations result from community property and just income distribution. These theories proved to be utopian and unrealistic and the most radical attempt to create such a society (USSR) failed because certain elites were replaced with other ones, certain classes were replaced with other classes and a classless society never materialized (Lane, 1984). Besides, an attempt to introduce such an approach revealed great inefficiency of the entire socio-economic system.

The third approach – agreeing to legitimisation of socio-economic inequality (or to deepening it) under certain terms – forces us to think what terms these must be and what limits to set for an increase of inequality. Rawls's (1994) discussion made economists look at conditional acceptance of socio-economic inequality. According to Rawls's (1971) theory of justice, all primary social goods (liberties and opportunities, income and wealth, and all that determines one's self-respect) should be distributed equally, unless an unequal distribution of any or all of these goods is beneficial to those least privileged. In other words, inequalities are admissible on the condition that the poorest draw benefits from them.

Roemer (1998, 2000) also pointed out that inequality of resources ownership is a key factor of socio-economic inequality and that the inequality in the ownership of the means of production is the basic reason of exploitation. The author presents the concept of equality of opportunity where he proposes that "bad luck in the birth lottery" should be compensated. At the same time, he points out that individuals must stay responsible for their choices and effort. The equal opportunity policy levels off outcomes in the extent in which they are the consequence of reasons independent of a person. On the other hand, though, it allows us to differentiate between the situation of individuals that results from their independent choices and efforts. In other words, inequality is admissible only if equality of opportunity is introduced.

On the other hand, Sen (2000) highlights that there is no permission for rapidly progressing inequality. He believes that poverty is an effect of bad governance, especially governance of a few social groups that do not take into consideration interests of other groups. The author does not refer to distribution of resources (like Rawls does), but to equality of opportunity. He associates equality of opportunity with the term entitlement (which may be understood as a right to goods and performances or, better still, as a right of access; entitlements have been defined by Sen (1984, p. 497) as "the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces"). Entitlement determines goods distribution and depends on income, social position and education. He associates this term with another one: capabilities, which are expressed in functionings (possibilities to use them). Sen shifts the focal point from resources on to capabilities to use them, pointing out that the resources to capabilities conversion rate must be equal. Therefore, he focuses on distribution, not allocation. At the same time, he points out that participation of the greatest possible number of different social groups in taking economic decisions is the condition for development and welfare. Hence, in this concept, inequality is admissible provided equality of opportunity is introduced.

3. Discussion

The author believes that the second approach (no permission for inequality of outcome) must be discredited entirely as utopian, ineffective and bringing measurable damage to societies. It does not lead to greater social justice, to greater efficiency of economies, or to a higher standard of living of communities.

The first approach (legitimising inequality without laying down any conditions) does not seem the most efficient choice for entire societies. Legitimisation of inequality favours well-off individuals and justifies their state of possession, while justice-related expectations of other social groups are reduced to entitlements and ownership rights. An optimal belief about gradually growing social mobility in market societies is a myth and an extremely naive assumption.

Besides, implementation of the programme of neo-liberals led in many countries to a situation where societies have limited possibilities to influence economic matters.

The third approach (legitimisation of socio-economic inequality on certain conditions) is the only possible way. Permission for the existence and growth of socio-economic inequality entails at the same time the need to adopt certain solutions that protect those who are at a disadvantage of these growing inequalities. Mitigating the effects of socio-economic inequality points to having to ensure systemic solutions that will ensure equal perspectives of achievements for like-gifted and like-motivated persons. On the other hand, such an approach allows maintaining responsibility of an individual for their decisions, engagement, talents and efforts.

Therefore, the first requirement is to adopt solutions that mitigate inequality of opportunity (start). Equality of opportunity is defined as a principle of conditions of a start in life for the young generation. Equality of conditions of a start in life on the one hand requires considerable outlays (or, depending on the researcher's approach – investment) on elements that lead to the achievement of success. On the other it, requires that necessary factors be defined. The problem begins right here – there is no agreement as to what should be included in this "basket of factors". Apart from this, we also need to think where the boundary of transferring outcomes achieved by individuals on further generations is (succession), because the problem lies in the fact that inequality of outcome achieved by the parents will be inequality of opportunity for their children, and then, as a result of accumulation it will affect further generations. In the minimum version, equality of opportunity boils down to a situation where at least no one is by default denied the opportunity to embark on a road to distinctive social positions (Ziembiński, 1981). This requires not only a well-developed system of public education at an adequate level, but also developed other social systems guaranteed by the state, which eliminate individual and collective poverty.

Another condition is to adopt measures that remove inequality of opportunity. Equality of opportunity boils down to focusing on possibilities of enjoyment of resources, not on owning them.

Rawls (1994) mentions the third condition. He says that inequality may be deepened only if improvement of the situation of a randomly selected person will at the same time cause improvement of the situation of a person that is worst-off in the society. In other words, all effects of part of society are fair if this situation does not damage others or maximises the position of a worse-off group in a situation of inequality.

On the other hand, we must remember about the poorest (e.g. Hobhouse's 1922 concept). In this case we point to solutions associated with establishing a conventional minimum accepted by society. Individual countries apply different solutions under their social practices.

Societies should undoubtedly strive to socialize capitalism. The market is only one of the institutions that could either mitigate economic inequality or contribute to its getting deeper. The existing social and economic system affects the fate and life achievements of individuals because they are determined by inheriting material, financial, social and cultural capital.

4. Summary

Socio-economic inequality is a basis of functioning of a social system. On the other hand, it needs to be remembered that it is maintained and reinforced by those in power with the aid of social institutions and processes (Naidoo, Wills, 2008). Too great inequality becomes a problem for effective functioning of societies and economies.

In the course of analysis of the perception of socio-economic inequality three approaches to this unfairness are identified: absolute legitimisation of socio-economic inequality, complete lack of permission for inequality of outcome and consent for socio-economic inequality on certain boundary conditions that set out rules of admissible boundaries. The author points out that we must reject the first two approaches and adopt the third one. At the same time, the paper shows four boundary conditions for adopting the third approach: adoption of solutions that remove inequality of opportunity (start), adoption of solutions that remove inequality of opportunity, adoption of solutions that improve the position of the worst-off group and adoption of solutions associated with establishing a conventional minimum accepted by the society.

The author is aware that she did not address all motives and that she did not refer to all theories concerning socio-economic inequality. At the same time, she notes that further research must be taken up in this realm. Addressing these issues is paramount to the improvement of conditions of life and to increasing awareness of societies.

References

- 1. Brandt, R. (1996). *Etyka: zagadnienia etyki normatywnej i metaetyki [Ethical Theory. The Problems of Normative and Critical Ethics]*. Warsaw: PWN.
- 2. Dorling, D. (2010). All in the mind? Why social inequalities persist. *Public Policy Research, Vol. 16, Iss. 4*, pp. 226-231.
- 3. Friedman, M. (2008). Kapitalizm i wolność [Capitalism and Freedom]. Gliwice: Helion.
- 4. Hayek, F.A. (2007). Konstytucja wolności [The Constitution of Liberty]. Warsaw: PWN.
- 5. Hobhouse, L.T. (1922). *The Elements of Social Justice*. New York: Henry Hold and Company.
- 6. Jarosz, M. (1984). Nierówności społeczne. Warsaw: Książka i Wiedza.
- 7. Kuznets, S. (1955). Economic Growth and Income Inequality. *American Economic Review*, *Vol. 45, No.1*, pp. 1-28.
- 8. Lane, D. (1984). Social Stratification and Class. In: E.P. Hoffman, R.F. Laird, (Eds.), *The Soviet Polity in the Modern Era* (pp. 563-605). New York: Aldine de Gruyter.

- 9. Michalczyk, T. (2004). Nierówności społeczne a kryzys społeczno-moralny. *Nierówności Społeczne a Wzrost Gospodarczy, no. 4,* pp. 9-26.
- 10. Naidoo, J., Wills, J. (2015). Introducing the Health Studies. In: J. Naidoo, J. Wills (Eds.), *Health Studies: An Introduction*. Basingstoke: Palgrace Macmillan.
- 11. Nozick, R. (1999). Anarchia, państwo, utopia [Anarchy, State, and Utopia]. Warsaw: Fundacja Aletheia.
- 12. Rawls, J. (1994). Teoria sprawiedliwości [A Theory of Justice]. Warsaw: PWN.
- 13. Roemer, J. (1998). *Theories of Distributive Justice*. Cambridge Massachusetts: Harvard University Press.
- 14. Roemer, J. (2000). *Equality of Opportunity*. Cambridge Massachusetts: Harvard University Press.
- 15. Sen, A. (1984). Resources, Values and Development. Oxford: Basil Blackwell.
- 16. Sen, A. (2000). Nierówności. Dalsze rozważania [Inequality Reexamined]. Cracow: Znak.
- Stiglitz, J.E. (2003). The Roaring Nineties. A New History of the World's Most Prosperous Decade. New York: W.W. Norton & Company.
- 18. Stiglitz, J.E. (2006). Making Globalization Work. New York: W.W. Norton & Company.
- 19. Urbaniec, M. (1985). *Economic Theory in Retrospect. Fourth edition*. Cambridge: Cambridge University Press.
- 20. Ziembiński, Z. (1981). Związki między sprawiedliwością a równością [The Relationships between Justice and Equality]. *Etyka, no. 19,* pp. 99-109.
- 21. Zwiech, P. (2016). *Nierówności Ekonomiczne w Polsce [Economic Inequalities in Poland]*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.

REVIEWERS

PhD Jamila JAGANJAC, University Vitez, Bosnia and Herzegovina
Prof. Wojciech JARECKI, University of Szczecin, Poland
Prof. Sławomir KAMOSIŃSKI, Kazimierz Wielki University, Poland
Prof. Marek KUNASZ, University of Szczecin, Poland
Prof. Jelena LUKIĆ NIKOLIĆ, Modern Business School, Belgrade, Republic of Serbia
Prof. Halyna MISHCHUK, National University of Water and Environmental Engineering, Rivne, Ukraine
Prof. Olena OLIINYK, National University of Water and Environmental Engineering, Rivne, Ukraine.
Prof. Natalia SAMOLIUK, National University of Water and Environmental Engineering, Rivne, Ukraine.
Prof. Ligita ŠIMANSKIENE, Klaipeda University, Lithuania
Prof. Izabela STAŃCZYK, Jagiellonian University, Poland
Prof. Marcin ŻEMIGAŁA, University of Warsaw, Poland