ORGANIZATION AND MANAGEMENT SERIES NO. 185

# JOB CRAFTING AMONG EMPLOYEES OF ENTERPRISES IN THE UPPER SILESIAN-ZAGŁĘBIE METROPOLIS (GZM) AREA

#### Magdalena KOT-RADOJEWSKA

WSB University, Dabrowa Gornicza, Poland; mkot@wsb.edu.pl, ORCID: 0000-0002-7323-1913

**Purpose:** The aim of this article is to find out whether job crafting occurs among employees of small and medium-sized enterprises (SME) in the Upper Silesian-Zagłębie Metropolis (GZM). **Design/methodology/approach**: The study used the Job Crafting Questionnaire, based on the Job Crafting Scale (JCS), designed to measure the transformation of work conceptualised within the model: job demands-resources. The questionnaire covers three forms of job crafting: crafting tasks, relationships, and cognitions about work. Descriptive statistics (M, Me, SD, S, r), the Mann-Whitney test, and Student's t-test were used in the analysis of the results. A significance level of  $\alpha = 0.05$  was adopted in applying the statistical tests.

**Findings:** The results obtained confirm that SME employees in the GZM do craft their jobs, most strongly in the task and cognitive crafting dimensions, and to a lesser extent in the relational dimension. Statistically significant SME differences were found for three statements (two on task crafting, one on cognitive crafting) – the average score for medium-sized enterprises was higher compared to small enterprises.

**Research limitations/implications**: The study was conducted only among SMEs in the GZM area. Omission of other types of organisations may affect the completeness of the analysis. In future, it would be worthwhile to include a more diverse sample that includes different sizes of enterprises. Additional research methods, e.g., in-depth interviews, could be considered.

**Practical implications:** The results of the survey constitute an important contribution to understanding the current situation and identifying the needs that characterise small and medium-sized enterprises operating in the GZM area.

**Social implications:** Job crafting practices can be an important tool in improving employeework relations and can serve to strengthen work engagement.

**Originality/value:** Although the issue of job crafting has featured in academic publications for some time, little empirical research has been conducted on the subject. The results obtained in this study add to the body of knowledge about actual job crafting practices in the context of small and medium-sized enterprises operating in the GZM area. The results may be relevant for managers – discovering that employees are active in shaping their work may encourage employers to create conditions that foster such activities.

**Keywords:** job crafting, small and medium-sized enterprises, Upper Silesian-Zagłębie Metropolis.

**Category of the paper:** research paper.

#### 1. Introduction

Job crafting, as an expression of positive interactions at work, has been a subject of growing interest among both researchers and practitioners for several years (Rogala, Cieślak, 2019). In the Polish literature, job crafting is sometimes referred to as 'kształtowanie pracy' (Kasprzak, Michalak, Minda, 2017; Minda, Kasprzak, 2018) or 'przekształcanie pracy' (Rogala, Cieślak, 2019). Job crafting is based on the assumption that greater employee effectiveness, but also greater job satisfaction and employee well-being, depends to a large extent on the creative potential and self-initiative of employees at each level of an organisation. In job crafting, the employee takes the initiative to adapt the work they perform to their own needs, requirements and resources (skills, competencies, talents), which involves physical and cognitive modification of work activities and tasks, resulting in work gaining a personal dimension (Berg et al., 2010) and adapting to the individual preferences of employees. The actions taken by the employee are conscious and purposeful, and have the character of proactively-introduced changes (Bruning, Campion, 2018), which help employees to maintain, but also increase, their motivation and energy for work. The key aspect of job crafting is that it is the employee who takes the initiative in shaping the work, not the supervisor, as for example in the job enrichment method (Slemp, Vella-Brodrick, 2014). By undertaking the shaping of their own work, employees expand their resources, grow, and take on new challenges (Hakanen, Peeters, Schaufeli, 2018). In the simplest terms, job crafting can be defined as an employee making physical and cognitive changes to the tasks or relationships within the work they perform (Wrześniewski, Dutton, 2001).

#### 2. Literature review

Job crafting generates a number of benefits, not only for the employee but also for the employer. It influences the experience of positive emotions and the development of positive attitudes towards work (Ko, 2011; Van de Riet, 2015), increased job satisfaction and enjoyment (Berg et al., 2010), employee engagement (Bakker et al., 2012; Leana et al., 2009; Tims et al., 2012), more effective functioning under time pressure and stress, the development of social relationships (Slemp, Vella-Brodnik, 2014), reduced levels of burnout, reduced levels of absenteeism from work, better coping with change, increased efficiency (Ghitulescu, 2006; Tims, Bakker, Derks, 2014), increased creativity (Hu, Wang, Long, 2020), reduced boredom (Oprea, Barzin, Virga, Iliescu, Rusu, 2019), professional development in a positive direction (Bakker, Demerouti, 2014), enhanced well-being (Boehnlein, Baum, 2020), and the sense of meaning in one's work. Taking responsibility for one's well-being at work and giving meaning

to one's duties are some of the key needs of an employee (Wrześniewski, Dutton, 2001), also influencing increased involvement in shaping work. Employees know what duties they perform and how they perform them, so they themselves can create their optimal working environment and intervene, when necessary, to prevent negative outcomes such as reduced motivation or productivity (Berings, De Fruyt, Bouwen, 2004).

Based on the model of job crafting outlined by A. Wrzesniewski and J. Dutton (2001), three forms of job crafting can be identified: task crafting, which involves changing the number, type or nature of tasks; relational crafting, which involves changing the number, type and intensity of relationships and the style of interaction; and cognitive crafting, which involves changing the perception of tasks and their meaning.

A number of factors, both those related to the individual (Bandura, Lyons, 2014) and to the nature of the job (Lyons, 2008) and its demands (Petrou et al., 2012), influence employees' engagement in job crafting activities.

Therefore, the right circumstances must be present for work-shaping activities to be undertaken (Wrześniewski, Dutton, 2001). First and foremost, the employee must feel the motivation necessary to take action. This motivation can be driven by the needs for: control, meaningful work, positive self-esteem, cooperation with others, and a sense of fulfilment and self-development. Another important element is the employee's belief that change can be made, so the employee must have some autonomy to act. In addition, the less control from superiors and the more freedom of action the employee experiences, the more likely they are to be open to introducing work-improving changes themselves from the bottom up. It is also emphasised that personality traits such as, for example, a belief in one's self-efficacy (Roczniewska, Rogala, Puchalska-Kaminska, Cieślak, Retowski, 2020) and a proactive personality (Rudolph, Katz, Lavigne, Zacher, 2017; Xu, Jiang, Wang, 2019) are very important for taking action towards job crafting.

Feedback and support from superiors for the employee are also not insignificant (Ghitulescu, 2013). Enabling employees to modify and personalise the work they perform also fosters a positive atmosphere at work and mutual relationships based on partnership, mutual respect, and trust. On the other hand, engaged employees may be more proactive and willing to do more than others to shape their own work (Hakanen, Perhoniemi, Toppinen-Tanner, 2008).

It is significant that job crafting is not a one-off or incidental activity, but a continuous and systematic process (Wrześniewski, Dutton, 2001; Kasprzak, Michalak, Minda, 2017).

Undoubtedly, job crafting encourages employees to connect their work to their individual predispositions, interests, values, or talents. In addition to the previously mentioned range of positive effects of job crafting, the employee's joy and pride in the tasks they perform cannot be ignored.

#### 3. Methods and Materials

Taking into account the impact of job crafting on, among other things, organisational effectiveness, work atmosphere, risk-taking ability, employees' level of commitment, and loyalty to the organisation, a study was conducted among employees of small and medium-sized enterprises in the Upper Silesian-Zagłębie Metropolis to find an answer to the question of whether job crafting occurs among employees of small and medium-sized enterprises in the GZM. The survey also sought to answer the question of what job crafting behaviours are used by employees of these organisations. The research tool used was the Polish version of a scale—the Job Crafting Questionnaire ('kwestionariusz kształtowania pracy', KKPracy) — based on the *Job Crafting Scale (JCS)* (Tims, Bakker, Derks, 2012), a scale that measures job crafting conceptualised within the 'job demands-resources' model and was designed based on the results of an exploratory factor analysis and validated by the results of a confirmatory factor analysis. The questionnaire covers three forms of job crafting: crafting tasks, crafting relationships, and crafting cognitions about work. The research process was guided by some of the tenets of grounded theory.

The analysis of the survey results was carried out, firstly, using basic descriptive statistics (arithmetic mean [M], median [Me], standard deviation [SD], skewness coefficient [S], and Pearson's linear correlation coefficient [r]). Secondly, the comparison between small and medium-sized enterprises was made using the Mann-Whitney test, a test which is used to compare two populations from the point of view of a variable measured on an ordinal scale, but also when the studied phenomenon is quantitative but shows significant deviations from a normal distribution (Wiktorowicz, Grzelak, Grzeszkiewicz-Radulska, 2020); in this case, it was used to compare responses to individual questions on job shaping. Additionally, the Student's t-test for independent samples was used to compare variables measuring job crafting in aggregate — overall and within three subscales. The significance of the relationship was assessed using the Student's t-test. A significance level of  $\alpha = 0.05$  was adopted in applying the statistical tests.

The metric properties of the tool for measuring job crafting were confirmed using exploratory factor analysis (validity) and Cronbach's alpha coefficient (reliability). Exploratory factor analysis (EFA) assesses whether and which subscales of variables should be distinguished within a given scale (Tabachnick, Fidell, 2007). The sample size is appropriate for this type of analysis (n = 500) (Comrey, Lee, 1992). After checking the initial conditions, i.e., the correlation between the scale items, using, among other tools, the KMO measure (Kaiser-Meyer-Olkin Measure of Sampling Adequacy, which should be above 0.5) and Bartlett's Test of Sphericity, in which  $p < \alpha$  is expected (Wiktorowicz, 2016), the model parameters were estimated using the principal components method (an adaptation of Hotelling's method for the purpose of factor analysis) (Walesiak, Bak, 1997). The number of factors was

confirmed using the Kaiser-Cattell criterion (scree plot), while in order to find a solution (indicate items related to a given factor), a factor rotation (varimax) was performed (Wiktorowicz, 2016). The Cronbach's alpha coefficient (Cronbach's alpha) used to assess reliability can take values in the range [0; 1], and 0.7 is usually taken as the threshold value (Rószkiewicz, 2011). Calculations were performed using IBM SPSS Statistics 28.0.

## 4. Sample composition

The study included 500 enterprises, of which 50.0% were small enterprises (10 to 49 people) and the other half were medium-sized enterprises (50 to 249 people). Approximately 70.0% of the respondents were women, while the remaining percentage were men. There is a similar distribution in enterprise size, with a slightly higher proportion of women in medium-sized enterprises compared to small enterprises (72.4% versus 68.8%). The majority of respondents were aged 35-44 (33.8%) and 45-54 (31.0%). The least numerous groups were those at the extremes of the age range, i.e., under 25 (2.0%) and 65 and over (2.2%). A similar distribution was observed in enterprise size. When analysing the job position, the vast majority (64.2% of the total, 62.8% of small enterprises, 65.5% of medium-sized enterprises) were employed as a specialist or independent worker. About 20.0% of the respondents were mid-level managers, while about 12.0% were executives. Those employed in other positions accounted for approximately 3.5% of the sample. More than 70.0% of the respondents were university graduates, regardless of the size of the enterprise. A high percentage was also represented by those with secondary education (24.4% of the total). Elementary education was held by 1.2% of the total respondents, while postgraduate education was held by 4.0% (with more than twice as many in medium-sized enterprises compared to small enterprises). Analysing the period of employment in the enterprise, more than 48.0% were those with a length of employment in the current company between 6 and 15 years. The smallest percentage were those working at the current enterprise for less than a year (5.8% of the total, 6.4% in small enterprises, 5.2% in medium-sized enterprises). It is worth noting the not insignificant percentage of those who worked at a surveyed enterprise for more than 20 years – 16.0% of the total. A similar distribution was observed when analysing overall length of employment. More than 43.0% of respondents had work experience of 6 to 15 years, with the most numerous group being those with work experience of more than 20 years (31.8% of the total, 30.0% in small enterprises, 33.6% in medium-sized enterprises).

**Table 1.** *Sample composition by enterprise size* 

Specification	Total		Sma (from 10 peopl	to 49	Medium-sized (from 50 to 249 people)		
		n	%	n	%	n	%
Total	Total		100.	250	50.0	250	50.0
	1		0				
Gender	Woman	353	70.6	172	68.8	181	72.4
	Man	147	29.4	78	31.2	69	27.6
Age	Up to 25 years old	10	2.0	7	2.8	3	1.2
	26-34 years old	83	16.6	40	16.0	43	17.2
	35-44 years old	169	33.8	86	34.4	83	33.2
	45-54 years old	155	31.0	73	29.2	82	32.8
	55-64 years old	72	14.4	39	15.6	33	13.2
	65 and older	11	2.2	5	2.0	6	2.4
Position	Specialist or independent worker	321	64.2	157	62.8	164	65.6
	Mid-level manager (e.g.,	101	20.2	48	19.2	53	21.2
	coordinator, supervisor)						
	Executive (e.g., director,	60	12.0	35	14.0	25	10.0
	president)						
	Other	18	3.6	10	4.0	8	3.2
Education	Elementary	6	1.2	4	1.6	2	0.8
	Secondary	122	24.4	67	26.8	55	22.0
	Higher	352	70.4	173	69.2	179	71.6
	Postgraduate	20	4.0	6	2.4	14	5.6
	Tertiary	_	_	_	_	_	_
	Other	_	_	_	_	_	_
Length of	Less than a year	29	5.8	16	6.4	13	5.2
employment	1-5 years	132	26.4	60	24.0	72	28.8
in current	6-10 years	109	21.8	59	23.6	50	20.0
company	11-15 years	90	18.0	43	17.2	47	18.8
	16-20 years	60	12.0	31	12.4	29	11.6
	More than 20 years	80	16.0	41	16.4	39	15.6
Overall	Less than a year	2	0.4	2	0.8	_	_
length of	1-5 years	33	6.6	17	6.8	16	6.4
work	6-10 years	96	19.2	41	16.4	55	22.0
experience	11-15 years	120	24.0	63	25.2	57	22.8
-	16-20 years	90	18.0	52	20.8	38	15.2
	More than 20 years	159	31.8	75	30.0	84	33.6

Source: own survey.

## 1. Job crafting in enterprises in the GZM area

Employees of small and medium-sized enterprises filled out the job crafting questionnaire. They assessed each statement on a scale of 1 to 6, where a higher score indicated a higher rating. Table 2 summarises the distributions of responses to each question and presents basic descriptive statistics, in total, for the entire sample.

**Table 2.**Job crafting according to employees of small and medium-sized enterprises in the Upper Silesian-Zagłębie Metropolis

Statement	Percentage of responses per score							Descriptive statistics			
	1	2	3	4	5	6	M	Me	SD	S	
I introduce new solutions to	2.6	2.6	8.2	15.2	28.6	42.8	4.93	5	1.25	-1.25	
improve my work.											
I change the scope or type of tasks	10.6	8.0	12.2	19.6	23.6	26.0	4.16	4	1.63	-0.59	
I perform at work.											
I take on new tasks that I think are	7.0	4.8	13.0	20.8	25.0	29.4	4.40	5	1.49	-0.77	
better suited to my skills and											
interests.											
I decide to take on additional tasks	4.4	5.6	8.0	17.2	29.8	35.0	4.67	5	1.40	-1.06	
at work.											
I prioritise tasks that match my	5.6	3.6	9.8	17.2	31.4	32.4	4.62	5	1.40	-1.06	
skills and interests.											
I reflect on the meaning work gives	8.8	5.8	11.8	17.0	25.4	31.2	4.38	5	1.58	-0.79	
to my life.											
I think about the importance my	4.0	4.8	10.4	21.6	24.4	34.8	4.62	5	1.38	-0.89	
work has for the success of my											
company.											
I remind myself of the importance	9.6	8.8	15.6	23.6	20.2	22.2	4.03	4	1.57	-0.43	
of my work to the broader											
community.											
I think about how work positively	4.8	4.8	11.0	18.4	28.8	32.2	4.58	5	1.41	-0.93	
impacts my life.											
I reflect on the importance of work	3.8	3.8	11.8	16.8	27.2	36.6	4.70	5	1.37	-0.98	
for my overall well-being.											
I make an effort to get to know	2.6	3.6	8.0	19.0	24.0	42.8	4.87	5	1.29	-1.11	
the people at work better.											
I organise or participate in meetings	11.0	8.2	14.2	15.0	22.4	29.2	4.17	5	1.68	-0.57	
with work colleagues outside of											
work as well.											
I organise special gatherings	13.6	10.6	11.8	12.6	20.8	30.6	4.08	5	1.79	-0.49	
at the workplace (e.g., celebrating											
a colleague's birthday).											
I choose to mentor and help new	4.2	4.2	10.4	15.2	31.2	34.8	4.69	5	1.37	-1.06	
employees (officially or											
unofficially).											
I form friendships with those	9.0	8.2	12.2	18.2	25.8	26.6	4.23	5	1.59	-0.65	
colleagues at work who have											
similar skills or interests to mine.											

M – mean, Me – median, SD – standard deviation, S – skewness coefficient.

Source: own survey

Analysing the frequency distribution of ratings for each statement, it was observed that the predominant rating for each statement was '6' – the most for the statement 'I introduce new solutions to improve my work' – 42.8%, while the least for the statement 'I remind myself of the importance of my work to the broader community' – 22.2%. A slightly lower percentage of respondents rated statements at the '5' level. The lowest point ratings were given to the statement 'I organise special gatherings at the workplace (e.g., celebrating a colleague's birthday)' – 36.0% of respondents rated it at most '3'. Commenting on the results for descriptive statistics, similar conclusions were drawn. All statements were rated at a level higher than '4', with the highest-rated statement being 'I introduce new solutions to improve my work',

with an average score of 4.93, and the lowest-rated being 'I remind myself of the importance of my work to the broader community', with an average score of 4.03. For more than 86.0% of the statements, the median rating was '5', meaning that half of the respondents assigned at most this rating. The remaining two statements have a median score of 4: 'I change the scope or type of tasks I perform at work' and 'I remind myself of the importance of my work to the broader community'. Assessing the variation in the ratings, it is similar, with a range of 1.25 to 1.79 (highest for the statement 'I organise special gatherings at the workplace (e.g., celebrating a colleague's birthday' and lowest for the statement 'I introduce new solutions to improve my work'). Confirmation of the high ratings for the statements analysed is also provided by an analysis of the skewness of the ratings' distribution. For all statements, the skewness coefficient is negative, which means that respondents were more likely to give ratings above the average level. The most symmetrical distribution of ratings was observed for the statement 'I remind myself of the importance of my work to the broader community', while the most asymmetrical distribution was observed for the statement 'I introduce new solutions to improve my work'. Such a high asymmetry in the distribution of ratings for the statement 'I introduce new solutions to improve my work' is confirmed by the fact that more than 42.0% of the respondents assigned a rating of '6' to this statement.

When comparing the distributions of the ratings assigned by the respondents in detail according to the size of the enterprise, it was observed that there were statistically significant differences in the ratings only in the case of the following three statements:

- I introduce new solutions to improve my work (p-value 0.002),
- I decide to take on additional tasks at work (p-value < 0.001), and
- I think about the importance my work has for the success of my company (p-value 0.027).

The first two statements are about task crafting. In both cases, the average score for medium-sized enterprises was statistically significantly higher compared to small enterprises (for new developments 5.08 vs 4.78, while for additional tasks 4.86 vs 4.49). In turn, the third statement concerns crafting cognitions about work. In this case, the average score for medium-sized enterprises was 4.77 vs 4.48 for small enterprises. For the rest, the distributions of ratings did not differ significantly by enterprise size.

In the case of the statement 'I introduce new solutions to improve my work', the average rating given by employees of medium-sized enterprises was 5.08 while that given by employees of small enterprises was 4.78. Employees of small enterprises gave a higher percentage of low ratings to this statement, while those of medium-sized enterprises gave correspondingly higher ratings (the percentage of ratings of at most '3' for small enterprises is 16.0% and for medium-sized enterprises 10.8%; the percentage of ratings above '3' for small enterprises is 84.0% and for medium-sized enterprises – 89.2%). The biggest difference in ratings was observed for the statement 'I decide to take on additional tasks at work.' The average rating among employees of medium-sized enterprises was 4.86 compared to 4.49 for small enterprises. In the case of

medium-sized enterprises, respondents gave a higher percentage of ratings of at least '5' for this statement (57.2% – small enterprises, 72.4% – medium-sized enterprises). The last statement for which a statistically significant difference in ratings was noted was 'I think about the importance my work has for the success of my company.' The average rating in small enterprises was 4.48, while in medium-sized enterprises it was 4.76. Employees of small enterprises were more likely to give ratings of at most '3', while employees of medium-sized enterprises were more likely to give ratings above '3'– (see Table 3).

**Table 3.**Job crafting according to employees of small and medium-sized enterprises in the Upper Silesian-Zaglębie Metropolis

Statement	Small (10-49 people)				Mediu	m-sized	(50-249	p-value	
	M	Me	SD	S	M	Me	SD	S	
I introduce new solutions to improve my work.	4.78	5	1.27	-0.95	5.08	5	1.21	-1.64	0.002*
I change the scope or type of tasks I perform at work.	4.08	4	1.60	-0.48	4.23	5	1.66	-0.72	0.201
I take on new tasks that I think are better-suited to my skills and interests.	4.41	5	1.48	-0.80	4.40	5	1.51	-0.75	0.978
I decide to take on additional tasks at work.	4.49	5	1.41	-0.87	4.86	5	1.36	-1.30	<0,001*
I prioritise tasks that match my skills and interests.	4.54	5	1.42	-0.97	4.70	5	1.38	-1.17	0.178
I reflect on the meaning work gives to my life.	4.30	5	1.57	-0.68	4.46	5	1.59	-0.91	0.191
I think about the importance my work has for the success of my company.	4.48	5	1.42	-0.80	4.76	5	1.33	-0.98	0,027*
I remind myself of the importance of my work to the broader community.	4.02	4	1.57	-0.40	4.03	4	1.58	-0.47	0.956
I think about how work positively impacts my life.	4.56	5	1.41	-0.85	4.60	5	1.40	-1.01	0.737
I reflect on the importance of work for my overall well-being.	4.65	5	1.39	-0.85	4.74	5	1.35	-1.12	0.466
I make an effort to get to know the people at work better.	4.76	5	1.32	-0.95	4.97	5	1.26	-1.30	0.057
I organise or participate in meetings with work colleagues outside of work as well.	4.02	4	1.72	-0.42	4.32	5	1.63	-0.73	0.052
I organise special gatherings at the workplace (e.g., celebrating a colleague's birthday).	4.05	4	1.79	-0.43	4.12	5	1.79	-0.55	0.714
I choose to mentor and help new employees (officially or unofficially).	4.60	5	1.37	-0.97	4.78	5	1.36	-1.17	0.075
I form friendships with those colleagues at work who have similar skills or interests to mine.	4.16	4	1.57	-0.55	4.31	5	1.62	-0.76	0.191

 $M-mean, Me-median, SD-standard deviation, p-Mann-Whitney test probability, * statistically significant differences (<math>\alpha=0.05$ ).

Source: own survey.

## 2. Evaluation of the properties of the job crafting measurement tool

Exploratory factor analysis and reliability analysis were used to assess the properties of the measurement tool. The KMO test and Bartlett's sphericity test were used to assess the validity of the factor analysis. The value of the KMO test was 0.889, which indicates a high degree of adequacy of the research sample. In the case of the Bartlett's sphericity test, on the other hand, the test statistic of 3699.93 (p-value < 0.001) indicates the need to reject the hypothesis of the singularity of the correlation matrix between the ratings of individual statements. The result is satisfactory and provides a rationale for the use of factor analysis. Based on the results of the factor analysis, it was observed that the analysed statements form three unobservable factors that explain a total of 62.26% of the variability of the input set of 15 statements. The first factor consisting of statements V11-V15 explains 42.68% of the variability, the second factor (statements V6-V10) explains 11.37% of the variability, while the last factor (statements V1-V5) explains 8.21% of the variability of the input set of statements. All of the items forming the individual factors are characterised by high factor loadings. For factor one - 'Crafting relationships at work' – the highest factor-loading value was observed for the statement V13: 'I organise special gatherings at the workplace (e.g., celebrating a colleague's birthday).' The second factor - 'Crafting cognitions about work' - mainly describes item V6: 'I reflect on the meaning work gives to my life.' On the other hand, for the third factor, 'crafting tasks', the highest factor load is found in the statement V3: 'I take on new tasks that I think are bettersuited to my skills and interests' (see Table 4).

**Tabela 4.** *Evaluating job crafting – results of exploratory factor analysis and reliability analysis* 

Statement		Factor		Characteristic	Cronbach's
	F1	F2	F3	value	alpha
V13: I organise special gatherings at the workplace	0.82	0.18	0.16	6.40	0.86
(e.g., celebrating a colleague's birthday).					
V12: I organise or participate in meetings with work	0.81	0.21	0.16		
colleagues outside of work as well.					
V15: I form friendships with those colleagues at work	0.74	0.37	0.12		
who have similar skills or interests to mine.					
V14: I choose to mentor and help new employees	0.69	0.22	0.14		
(officially or unofficially).					
V11: I make an effort to get to know the people at work	0.63	0.24	0.24		
better.					
V6: I reflect on the meaning work gives to my life.	0.10	0.84	0.18	1.71	0.88
V9: I think about how work positively impacts my life.	0.38	0.75	0.15		
V7: I think about the importance my work has for the	0.27	0.72	0.18		
success of my company.					
V10: I reflect on the importance of work for my overall	0.44	0.71	0.15		
well-being.					
V8: I remind myself of the importance of my work to	0.24	0.71	0.21		
the broader community.					

Cont. Table 4.

V3: I take on new tasks that I think are better-suited to	0.15	0.14	0.79	1.23	0.78
my skills and interests.					
V2: I change the scope or type of tasks I perform at	0.08	0.10	0.77		
work.					
V4: I decide to take on additional tasks at work	0.19	0.16	0.71		
V1: I introduce new solutions to improve my work.	0.10	0.11	0.64		
V5: I prioritise tasks that match my skills and interests.	0.25	0.32	0.53		

Source: own survey.

The study also confirmed the high reliability of the measurement tool. Cronbach's alpha for the entire set of 15 statements was at 0.90, which indicates a high level of reliability of the questionnaire. Similarly, for each of the subscales, the Cronbach's coefficient value is satisfactory (above 0.70).

## 3. Overall assessment of job crafting and assessment of relationships between subscales

When analysing the overall indicators of the evaluation of job crafting, it was observed that, regardless of the subscale, the average ratings were high. Additionally, a statistically significant difference was observed in the average ratings between small and medium-sized enterprises for the subscale 'task crafting'. The average value of the subscale for respondents representing medium-sized enterprises was statistically significantly higher compared to small enterprises (23.27 versus 22.30). The distributions of the overall values of the subscales are left-asymmetric, which means that respondents were more likely to give higher ratings to the items constituting the components of the studied subscales (see Table 5).

**Table 5.** *Job crafting (overall and subscales) – overall and comparison by enterprise size* 

Statistics	Task crafting			Cognitive crafting			Relati	onal craf	ting	Overall scale		
	Total	Small	Medium -sized	Total	Small	Medium -sized	Total	Small	Medium -sized	Total	Small	Medium -sized
Min.	5	5	5	5	5	5	5	5	8	15	15	27
Max.	30	30	30	30	30	30	30	30	30	90	90	90
M	22.79	22.30	23.27	22.30	22.02	22.59	22.05	21.60	22.50	67.14	65.92	68.36
Me	23	23	24	23	22.5	24	23	22.5	24	67.5	66	69
SD	5.24	5.46	4.97	5.98	6.35	5.58	6.19	6.39	5.96	14.41	15.51	13.12
S	-0.78	-0.64	-0.92	-0.69	-0.66	-0.69	-0.46	-0.44	-0.47	-0.43	-0.45	-0.29
<i>P</i> -value	_	0.038*		_	0.289		_	0.103		_	0.058	

Min. – minimum, Max. – maximum, M – mean, Me – median, SD – standard deviation, S – coefficient of skewness, p – probability in Student's t-test for independent samples, \*statistically significant differences ( $\alpha = 0.05$ ).

Source: own survey.

Correlation analysis between the subscales indicated that statistically significant relationships were observed regardless of enterprise size (see Table 6). Both when analysing the entire research sample together and when breaking it down by enterprise size, the relationships between the subscales are statistically significant, positive, and strong or moderately strong.

**Table 6.** *Correlations between the individual dimensions of job design – total and by enterprise size* 

			Total			Small		Medium-sized			
		KZ	KM	KR	KZ	KM	KR	KZ	KM	KR	
KZ	r	1	0.478	0.449	1	0.584	0.521	1	0.341	0.356	
	P-value	_	<0,001*	<0,001*	_	<0,001*	<0,001*	_	<0,001*	<0,001*	
KM	r	0.478	1	0.634	0.584	1	0.650	0.341	1	0.612	
	P-value	<0,001*	_	<0,001*	<0,001*	_	<0,001*	<0,001*	_	<0,001*	
KR	r	0.449	0.634	1	0.521	0.650	1	0.356	0.612	1	
	P-value	<0,001*	<0,001*	_	<0,001*	<0,001*	_	<0,001*	<0,001*	-	

r – Pearson's linear correlation coefficient, p – probability in the significance test of the correlation coefficient, \* – statistically significant relationship ( $\alpha$  = 0.05), KZ – Crafting tasks, KM – Crafting cognitions about work, KR – Crafting relationships at work.

Source: own survey

When analysing the relationships between the subscales without disaggregating by enterprise size, it was observed that the strongest relationship was between the subscale 'Crafting relationships at work' and 'Crafting cognitions about work' (r = 0.643). Similar results were obtained for small and medium-sized enterprises (0.650 and 0.612 respectively). The weakest relationship was observed for relational crafting and task crafting (overall: 0.449). In turn, by enterprise size: for small enterprises for the relationship between task crafting and relational crafting at work: 0.521, while for medium-sized enterprises for the relationship between task crafting and cognitions about work: 0.341. All relationships are statistically significant, positive.

## 4. Summary

Summarising the results obtained in the survey conducted among employees of small and medium-sized enterprises in the Upper Silesian-Zagłębie Metropolis area, it can be concluded that the phenomenon of job crafting is present among the employees of these organisations, and it applies to varying degrees to all areas of job crafting: crafting tasks, crafting cognitions about work, crafting relationships at work. Respondents acknowledged that they introduce new solutions at work in order to improve it. In this case, more than 42.0% of the respondents assigned a score of '6' to this statement. Respondents also make an effort to get to know the people at work better. They also reflect on the importance of work for their own overall well-being, decide to take on additional tasks at work, and to mentor and help new employees

(officially or unofficially). Respondents gave the lowest ratings to the statements: 'I remind myself of the importance of my work to the broader community' and 'I organise special gatherings in the workplace (e.g., celebrating a colleague's birthday)'. Taking into account the size of the enterprise, it should be noted that only three statements showed statistically significant differences in ratings. These related to introducing new solutions to improve work, deciding to take on additional tasks at work, and thinking about the importance of the respondents' work for the success of their organisation. For these three statements, the average rating for medium-sized enterprises was statistically significantly higher compared to small enterprises.

The overall job crafting evaluation indicators show high ratings, regardless of the specific aspects of work. Moreover, a statistically significant difference in ratings was noted between small and medium-sized enterprises in the context of task crafting. Respondents representing medium-sized enterprises gave higher ratings on average in this subscale than those from small enterprises.

Although there are differences in favour of medium-sized enterprises between the different types of enterprises in certain areas, it is important to emphasise the fact that the results in terms of job design obtained for the surveyed collective are generally high. The results obtained in the survey may indicate some recommendations for management practice. Undoubtedly, job crafting – the shaping of work by employees at every level – is an innovative activity that makes employees more responsive and flexible in the work context, thus facilitating the implementation of organisational and work improvement changes (Chmiel, Fraccaroli, Sverke, 2017). Of course, by definition, job crafting is a bottom-up activity, but it is nevertheless worth introducing circumstances in the organisation that will foster the development of this phenomenon. Introducing conditions that promote job crafting can bring many benefits. Organisations should aim to make the organisational structure more flexible, giving employees the opportunity to adapt their roles. For example, instead of imposing a rigid framework of tasks, a certain amount of freedom in performing them can be provided, which would stimulate creativity and engagement. Managers play a key role here. They should inspire autonomy and initiative in employees, encouraging adapting to change. This approach can enable employees to gain a sense of control over their tasks, which can ultimately increase their motivation and satisfaction. It is also worth creating an environment where mistakes are treated as a learning opportunity rather than a reason for penalties. This encourages employees to experiment with different ways of performing tasks and contributes to their development and, in turn, the development of the organisation.

### References

- 1. Arregle, J.-L., Hitt, M.A., Sirmon, D.G., Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1).
- 2. Bakker, A.B., Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- 3. Bandura, R.P., Lyons, P.R. (2014). The impact of personal motivators and job performance on job crafting: Empirical study. *International Journal of Management and Human Resources*, Vol. 2, No. 1.
- 4. Berg, J.M., Wrześniewski, A., Dutton, J.E. (2010). Perceiving and responsing to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Torganizational Behaviour, Vol. 31, No. 2-3*.
- 5. Berings, D., De Fruyt, F., Bouwen, R. (2004). Work values and personality traits as predictors of enterprising and social vocational interests. *Personality and Individual Differences*, *Vol. 36*, *Iss.* 2, pp. 349-364.
- 6. Boehnlein, P., Baum, M. (2020) Does job crafting always lead to employee well-being and performance? Meta-analytical evidence on the moderating role of societal.
- 7. Bruning, P.F., Campion, M.A. (2018). A role-resource approach-avoidance model of job crafting: A multimethod integration and extension of job crafting theory. *Academy of Management Journal*, *61*(2), 499-522. https://doi.org/10.5465/amj.2015.0604
- 8. Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms Entrepreneurship. *Theory and Practice*, *29*(3).
- 9. Carson, S.J., Madhok, A., Wu, T. (2006). Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting. *Academy of Management Journal*, 49(5).
- 10. Chmiel, N., Fraccaroli, F., Sverke, M. (2017). *An introduction to work and organizational psychology: An international perspective*. Hoboken, NJ: John Wiley& Sons Inc.
- 11. Comrey, A.L., Lee, H.B. (1992). A first course in factor analysis. Hillsdale, NJ: Erlbaum.
- 12. Ghitulescu, B.E. (2013). Making change happen: The impact of work context on adaptive and proactive behaviors. *Journal of Applied Behavioral Science, Vol. 49, No. 2.*
- 13. Ghitulescu, B.E. (2006). Shaping Tasks and Relationships at Work: Examing the Antecedents and Consequences of Employee Job Crafting. University of Pittsburgh, 30-47.
- 14. Hakanen, J.J., Peeters, M.C., Schaufeli, W.B. (2018). Different types of employee well-being across time and their relationships with job crafting. *Journal of Occupational Health Psychology*, 23(2), 289-301. https://doi.org/10.1037/ocp0000081

- 15. Hu, Q., Wang, H., Long, L. (2020). Will newcomer job crafting bring positive outcomes? The role of leader-member exchange and traditionality. *Acta Psychol. Sinica.*, *52*(5), 659-668, https://doi.org/10.3724/SP.J.1041.2020.00659
- 16. Jeffries, F.L., Reed, R. (2000). Trust and adaptation in relational contracting. *Academy of Management Review*, 25(4).
- 17. Kasprzak, E., Michalak, M., Minda, M. (2017) Kwestionariusz kształtowania pracy KKPracy. Polska adaptacja narzędzia. *Psychol. Spol.*, *12*(4), 459-475, https://doi.org/10.7366/1896180020174308
- 18. King, K. (2017). Specyfika funkcjonowania firm rodzinnych. In: R. Tyszkiewicz (ed.), *Dynamiczne zarządzanie procesowe. Teoria i praktyka*. Częstochowa: Oficyna Wydawnicza Stowarzyszenia Menedżerów Jakości i Produkcji.
- 19. Ko, I. (2011). *Crafting a job: Creating optimal experiences at work* (Doctoral dissertation). Claremont CA: Clarrmont Graduale University.
- 20. Leana, C., Appelbaum, E., Shevchuck, I. (2009). Work process and Quality of Care in Early Childhood Education. The Role of Job Crafting. *Academy of Management Journal*, *Vol. 52*, *No. 6*.
- 21. Lyons, P. (2008). The crafting of jobs and individual differences. *Journal of Business Psychology*, Vol. 23, No. 1-2.
- 22. Minda, M., Kasprzak, E. (2018). Czynniki kontekstu pracy i kształtowanie pracy jako predyktory przywiązania do organizacji. *Org. Kierow.*, *3*,145-161.
- 23. Occup, J. (2019). Organ. Psychol., 92(4), 848-872, https://doi.org/10.1111/joop.12277
- 24. Oprea, B.T., Barzin, L., Virga, D., Iliescu, D., Rusu, A. (2019) Efectiveness of job crafting interventions: a meta-analysis and utility analysis. *Eur. J. Work Organ. Psychol.*, 28(6), 723-741, https://doi.org/10.1080/1359432X.2019.1646728
- 25. Petrou, P., Demerouti, E., Peeters, M.C.W., Schaufeli, W.B., Hetland, J. (2012). Crafting a job on daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior, Vol. 33, No. 8*.
- 26. Roczniewska, M., Rogala, A., Puchalska-Kaminska, M., Cieślak, R., Retowski, S. (2020). I believe I can craft! Introducing Job Crafting Self-Efficacy Scale (JCSES). *PLoS ONE*, *15*(8), e0237250, https://doi.org/10.1371/journal.pone.0237250
- 27. Roczniewska, M.A., Puchalska-Kamińska, M. (2017). Are managers also'crafting leaders'? The link between organizational rank, autonomy, and job crafting. *Polish Psychological Bulletin, Vol. 48, No. 2.*
- 28. Rogala, A., Cieślak, R. (2019). Narzędzie do pomiaru przekształcania pracy: właściwości psychometryczne polskiej wersji job crafting scale. *Medycyna Pracy*, 70(4), pp. 445-457, https://doi.org/10.13075/mp.5893.00822
- 29. Rószkiewicz, M. (2011). Analiza klienta. Kraków: SPSS.

- 30. Rudolph, C.W., Katz, I.M., Lavigne, K.N., Zacher, H. (2017) Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *J. Vocat. Behav.*, *102*, 112-138, https://doi.org/10.1016/j.jvb.2017.05.008
- 31. Schulze, W.S., Lubatkin, M.H., Dino, R.N., Buchholtz, A.K. (2001). Agency relationships in family firms. *Theory and Evidence Organization Science*, *12*(2).
- 32. Slemp, G.R., Vella-Brodic, D.A. (2014). Optimising employee mental health: the relationship between intrinsic need satisfaction, job crafting and employee well-being. *Journal of Happines Studies, Vol. 15, No. 4*, 957-977. https://doi.org/10.1007/s10902-013-9458-3
- 33. Tabachnick, B.G., Fidell, L.S. (2007). *Using Multivariate Statistics*. Boston: Pearson Education Inc.
- 34. Tims, M., Bakker, A.B., Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behaviour, Vol. 80, No. 1*.
- 35. Tims, M., Bakker, A.B., Derks, D. (2014). Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology*, 24(6), 1-15, DOI:10.1080/1359432X.2014.969245
- 36. Van de Riet, J. (2015). *Leadership and job crafting: Relationships with employability and creativity* (Master's thesis). Eindhoven, The Nederlands: Eindhoven University of Technology.
- 37. Walesiak, M., Bąk, A. (1997). Wykorzystanie analizy czynnikowej w badaniach marketingowych, "Badania Operacyjne i Decyzje", 1.
- 38. Wiktorowicz, J. (2016). Międzypokoleniowy transfer wiedzy a wydłużanie okresu aktywności zawodowej. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 39. Wiktorowicz, J., Grzelak, M.M., Grzeszkiewicz-Radulska, K. (2020). *Analiza statystyczna z IBM SPSS Statistics*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- 40. Wrzesniewski, A., Dutton, J.E. (2001). Crafting a Job: Revisioning employees as active crafters of their work. *The Academy of Management Review*, 26(2), 179-201. doi: https://doi.org/10.2307/259118
- 41. Xu, X., Jiang, L., Wang, H.J. (2019). How to build your team for innovation? A cross-level mediation model of team personality, team climate for innovation, creativity, and job crafting.