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REMOTE WORKPLACES OVER THE TIME OF COVID-19 IN POLAND AS A FORM OF ORGANISATIONAL SPACE

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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:

1. What is the profile of a spatial model created without preparation of remote workplaces?
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).

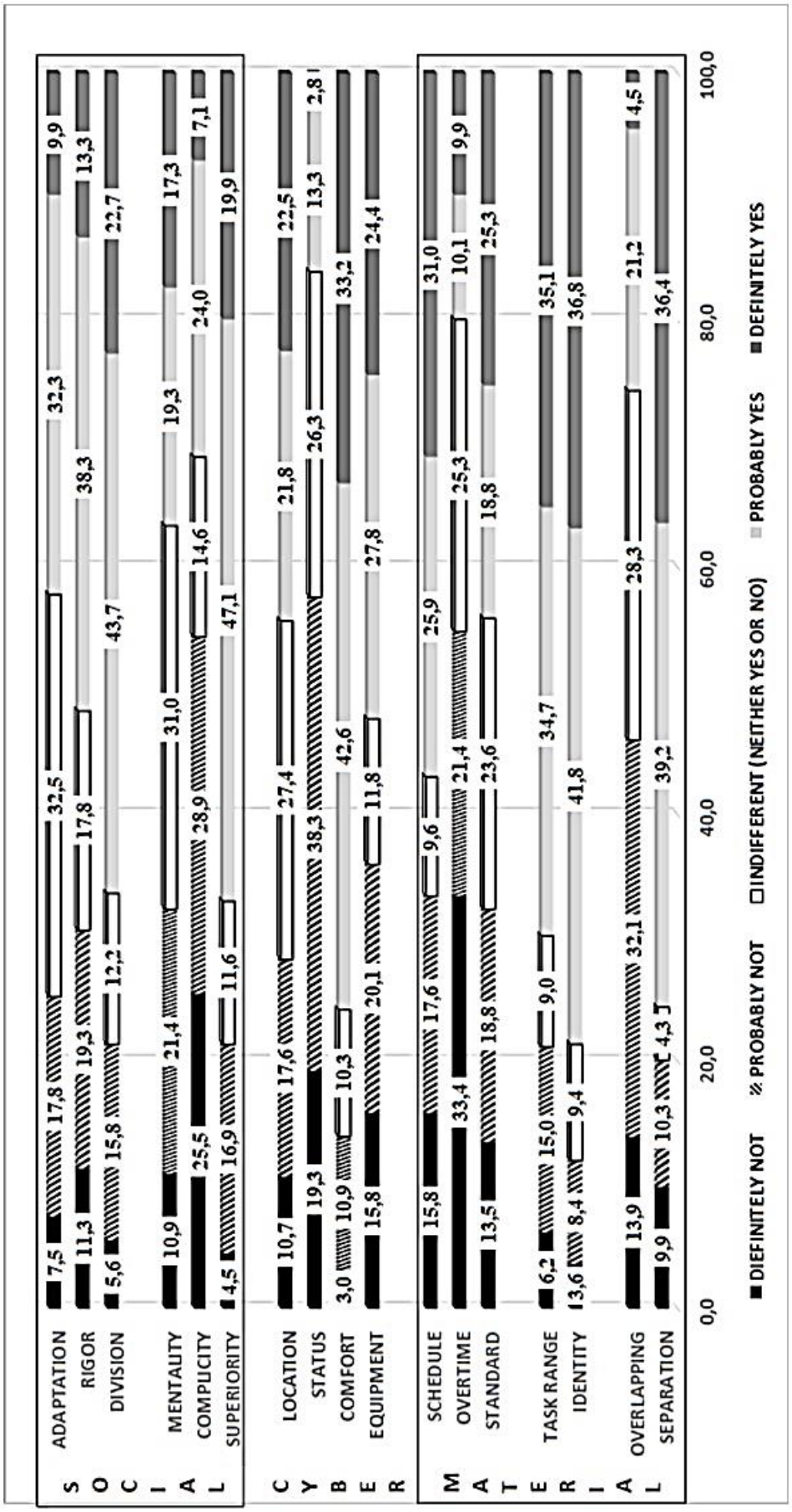

Figure 1. Structure of spatial features of pandemic workplaces.
Source: research results

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

FACTORS		FINANCING			ORGANIZATION		RESULTS	
codes & items		equipment	service	compensation	periodicity	stability	efficiency	disconnect
MATERIAL SPACE								
PL1	Separation	**0,215****	**0,185****	**0,192****	0,009	-0,029	-0,068	-0,034
PL2	Overlapping	**-0,104***	**-0,110***	-0,072	**-0,442****	**0,442****	**0,442****	**0,442****
T1	Identity	0,069	**0,120****	0,030	**0,217****	**0,290****	**0,358****	0,022
T2	Task range	0,024	0,037	0,012	**0,196****	**0,250****	**0,358****	0,026
TB1	Standard	-0,065	-,0,064	0,035	**0,295****	**0,259****	**0,442****	0,087
TB2	Overtime	0,050	**0,094****	0,067	**-0,290****	**-0,125****	-0,038	0,008
TB3	Schedule	-0,061	-0,064	-0,013	**0,261****	**0,187****	**0,253****	0,096
CYBERSPACE								
CS1	Equipment	0,011	0,029	**0,146****	-0,053	-0,032	0,030	**0,138****
CS2	Comfort	-0,059	-0,069	**-0,083***	**0,232****	**0,204****	**0,348****	**0,090***
CS3	Status	**-0,143****	-0,072	0,029	0,021	**0,217****	0,058	**0,089****
CS4	Location	0,005	-0,012	-0,046	**0,089***	**0,170****	0,073	0,037
SOCIAL SPACE								
FW1	Superiority	0,014	**0,085***	**0,154****	**-0,207****	-0,055	-0,083	**0,105***
FW2	Complicity	**0,194****	**0,118****	**0,087***	**-0,128****	-0,028	**-0,137****	0,080
FW3	Mentality	**0,125****	**0,196****	**0,251****	**-0,260****	**-0,186****	**-0,322****	-0,063
WF1	Division	0,073	0,058	**0,123****	**-0,098***	-0,044	**-0,198****	-0,062
WF2	Rigor	0,033	**-0,083***	0,040	**0,204****	**0,170****	**0,285****	**0,119****
WF3	Adaptation	**-0,111****	**-0,089***	**0,094***	**0,213****	**0,343****	**0,384****	0,070

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

1. 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.
2. 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.
4. 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.

6. 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.
7. 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.
8. 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.
11. 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=0041B02050EDD6AA1A2FBD38428A4632?doi=10.1.1.468.5552&rep=rep1&type=pdf, 10.02.2022.
12. 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.
13. 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.
14. 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.
15. 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.