



SELECTED PERSONALITY TRAITS AND ORGANIZATIONAL FACTORS IN THE WORK ENVIRONMENT AND PROFESSIONAL BURNOUT AMONG EMERGENCY DISPATCH OPERATORS – RESULTS OF A PILOT STUDY

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Abstract. The phenomenon of occupational burnout, due to its severe consequences at both the individual and organizational levels, is attracting the interest of an increasingly wide range of specialists, not only psychologists but also doctors. This trend is confirmed by the classification of occupational burnout as an occupational syndrome in the 2019 ICD. In view of the aforementioned consequences borne by the development of the phenomenon, many researchers want to determine the risk factors for the development of occupational burnout, so that in the long run, it can be effectively prevented. In this area, opinions are divided. However, two dominant positions are emerging – one that assigns more importance to personal factors, and the other that considers organizational factors more important. Accordingly, the purpose of this study is to verify whether there is, and if so, what is the relationship between personality work determinants and perception of organizational climate and job burnout? In addition, it was decided to verify whether sociodemographic variables such as seniority, gender, education, hobbies, relationship status and having children statistically significantly differentiate the level of job burnout. The pilot study included 100 Emergency Number Operators from four Emergency Notification Centres of varying sizes in terms of the number of employees and located in different parts of Poland. Data obtained from the LBQ, BIP questionnaires and the author's sociodemographic data questionnaire confirmed the presence of a very large number of statistically significant associations between organizational climate and job burnout and less statistically significant relationships

between personality traits and job burnout. In addition, sociodemographic variables were found to slightly significantly differentiate the level of occupational burnout in the study group.

WYBRANE CECHY OSOBOWOŚCI I CZYNNIKI ORGANIZACYJNE ŚRODOWISKA PRACY A WYPALENIE ZAWODOWE WŚRÓD OPERATORÓW NUMERÓW ALARMOWYCH – WYNIKI BADANIA PILOTAŻOWEGO

Słowa kluczowe: wypalenie zawodowe; Operator Numerów Alarmowych; 112; klimat organizacyjny; osobowościowe wyznaczniki pracy

Streszczenie. Zjawisko wypalenia zawodowego z uwagi na doniosłe konsekwencje zarówno na poziomie jednostki, jak i organizacji wzbudza zainteresowanie coraz szerszych grup specjalistów, nie tylko psychologów, ale także lekarzy. Tendencję tę potwierdza zaklasyfikowanie w ICD w 2019 roku wypalenia zawodowego jako syndromu zawodowego. W związku ze wspomnianymi konsekwencjami ponoszonymi na skutek rozwoju zjawiska, wielu badaczy pragnie ustalić czynniki ryzyka rozwoju wypalenia zawodowego, by w dalszej perspektywie skutecznie mu zapobiegać. W tym obszarze zdania są podzielone. Wyłaniają się jednak dwa dominujące stanowiska – jedno, które przypisuje większą wagę czynnikom osobowościowym, drugie uznające za bardziej istotne czynniki organizacyjne. W związku z tym celem niniejszego opracowania jest zweryfikowanie, czy istnieje i jeśli tak, to jaka jest zależność między osobowościowymi wyznacznikami pracy i percepcją klimatu organizacyjnego a wypaleniem zawodowym? Ponadto postanowiono sprawdzić, czy zmienne socjodemograficzne, takie jak: staż pracy, płeć, wykształcenie, posiadanie hobby, status związku i posiadanie potomstwa w sposób istotny statystycznie różnicują poziom wypalenia zawodowego? Badaniem pilotażowym objęto 100 Operatorów Numerów Alarmowych z czterech Centrów Powiadamiania Ratunkowego o zróżnicowanej wielkości pod względem liczby zatrudnienia i usytuowanych w różnych częściach Polski. Dane uzyskane w wyniku badania kwestionariuszami LBQ, BIP oraz autorską ankietą dotyczącą danych socjodemograficznych potwierdziły występowanie bardzo dużej ilości istotnych statystycznie związków między klimatem organizacyjnym a wypaleniem zawodowym i mniej istotnych statystycznie zależności między cechami osobowości a wypaleniem zawodowym. Ponadto ustalono, że zmienne socjodemograficzne w niewielkim stopniu istotnie różnicują poziom wypalenia zawodowego w badanej grupie.

Introduction

The phenomenon of occupational burnout is receiving increasing attention not only from the psychological field but also from the medical field. This is evidenced by the fact that in May 2019, the World Health Organization (WHO)

classified occupational burnout as an occupational syndrome in the International Classification of Diseases (WHO, 2019). Such widespread interest in the topic suggests that occupational burnout is becoming an increasingly significant problem, not only from an individual perspective but also from an organizational perspective (Mańkowska, 2016).

Analysing the literature on the subject, it can be observed that occupational burnout is a multidimensional phenomenon, both in terms of its symptoms and its causes. This is evident, for example, in the work of the most prominent researcher on the topic, Christina Maslach, who, over several decades, made numerous modifications regarding its understanding, prevalence, and potential predictors (Mańkowska, 2016). Initially, she claimed that it was a syndrome occurring only among helping professions (Maslach, Jackson, 1981), but over time, she expanded its scope to include other occupational groups as well (Maslach, 2011; Maslach & Leiter, 2022). Currently, occupational burnout is recognized as a crisis of occupational engagement that can be experienced by any individual in the workforce. Many researchers, both Polish and international, have attempted to identify risk factors contributing to the occurrence of this phenomenon. The most common perspective emphasizes the strong association between occupational burnout and stress, as well as maladaptive coping strategies. A significant amount of research has explored the importance of subjective factors, particularly personality traits, in the development of occupational burnout (Mańkowska, 2013, 2015, 2016; Pines, 1996; Cox & Ferguson, 1991; Sęk, 2011; Ogińska-Bulik, 2005, 2006; Tucholska, 2009). However, an increasing number of researchers investigating occupational burnout are drawing attention to the lack of fit in the individual-work relationship, where working conditions play a significant role (Lubrańska, 2011, 2014; Świętochowski, 2008; Siwiorek, 2018; Mańkowska, 2016; Sęk, 1994; Rosenstiel & Boegel, 2003). This perspective is also strongly emphasized by Christina Maslach (2011), who, more than twenty years ago, highlighted areas of misfit for employees, including issues such as control and decision-making, workload, community, compensation, justice, and values (Maslach, Schaufeli, & Leiter, 2001; Maslach & Leiter, 2022). This raises the question of whether occupational burnout is more influenced by individual personality or by the work climate within which the individual practices their profession. Employers often tend to attribute greater weight to personality factors, which can shift the responsibility for the development of occupational burnout solely onto the employee. Consequently, recruitment and selection processes are being improved, with a focus on identifying the best candidates, while

the current workforce emphasizes personal development and individual work. However, is this the only correct approach to prevent such a complex syndrome as occupational burnout? In what other ways can we prevent the development of this phenomenon and facilitate work, especially in helping professions such as Emergency Dispatch Operators, whose work quality directly impacts the effectiveness of assistance provided to citizens and, in turn, our personal safety?

The subject of the author's study

The main research problem takes the form of the question: Is there a relationship between personality determinants of work, perceived organizational climate, and occupational burnout among Emergency Dispatch Operators?

The general working hypothesis states: There is a relationship between personality determinants of work, perceived organizational climate, and occupational burnout among Emergency Dispatch Operators.

The hypothesis is further specified in the following research questions:

1. Is there a relationship, and if so, what is the nature of the relationship between personality determinants of work and occupational burnout among Emergency Dispatch Operators?
2. Is there a relationship, and if so, what is the nature of the relationship between perceived organizational climate and occupational burnout among Emergency Dispatch Operators?
3. Do sociodemographic variables such as work experience, gender, education, hobbies, relationship status, and parenthood significantly differentiate the level of occupational burnout among Emergency Dispatch Operators?

The justifications for these hypotheses can be made by referring to the literature on the subject. Research indicates that occupational burnout is associated with personality factors, particularly in terms of an individual's resilience or susceptibility to stress and burnout. Furthermore, researchers suggest that personality factors modify the individual's perception of specific work situations and influence the choice of coping strategies (Mańkowska, 2016). The relationships between specific personality dimensions and occupational burnout have been explored by both Polish and international researchers (Cherniss, 1980; Pines & Aronson, 1988; Kliś & Kossewska, 1998; Krawulska-Ptaszyńska, 1992; Tucholska, 2009; Mills & Huebener, 1998; Ogińska-Bulik, 2005; Mańkowska, 2016; Simionato & Simpson, 2018).

However, it is worth noting that current research increasingly emphasizes the relationship between occupational burnout and organizational climate, which significantly influences its occurrence and modifies its intensity across all dimensions. This topic has been explored by both Polish and international researchers (Lubrańska, 2011, 2014; Świętochowski, 2008; Siwiorek, 2018; Mańkowska, 2016; Sęk, 1994; Rosenstiel & Boegel, 1992; Maslach & Jackson, 1984; Maslach & Leiter, 2010; Maslach, 2001, 2011; Maslach & Leiter, 2022).

Furthermore, the relationship between occupational burnout and sociodemographic variables has been highlighted by numerous authors in various studies over the years, both in Poland and internationally (Santinello, 2014; Kantasa & Vassilaki, 1997; Mańkowska, 2015; Tucholska, 2009; Sęk, 2011; Lewandowska & Litwin, 2009; Piotrowski, 2010; Kirenko & Zubrzycka-Maciąg, 2011; Gould et al., 2013; Wilczek-Rużycka, 2014; Siwiorek, 2018; Makara-Studzińska & Załuski, 2021).

However, it should be noted that the relationship between burnout and personality indicators, organizational climate, or sociodemographic variables is not unequivocal in all aspects. This will be described in more detail in the discussion of the results.

The following instruments were used to verify the presented hypotheses in the study: the Link Burnout Questionnaire (LBQ) by Massimo Santinello (Polish adaptation – Jaworska, 2014), the Buchomski Inventory of Personality Indicators of Work (BIP) by Rudiger Hossiep and Michael Paschen (Polish adaptation – Jaworska, Brzezińska, 2014), and the Organizational Climate Questionnaire by Rosenstiel and Boegel (Polish adaptation – Durniat, 2018).

In addition to the aforementioned questionnaires, a custom sociodemographic survey was administered, specifically designed for the study. Emergency Number Operators provided information regarding their gender, age, length of service in the Emergency Call Centre, education level, relationship status, declaration of having/not having children, and declaration of having/not having hobbies.

The study involved Emergency Number Operators from four different Emergency Call Centres (25 employees from each centre), whose superiors gave their consent for the subordinates to participate in the study. The participating Emergency Call Centres varied in terms of the number of employed personnel (ranging from 34 to 153 individuals) as well as their geographical locations across the country (Central, Western, Northern, and Southern Poland). Due to the obligation to ensure anonymity and the risk of result identification, especially for

operators working in smaller centres, the results will be presented collectively without a breakdown according to the participating centres in the study.

Table 1. Descriptive statistics for the age of the surveyed Emergency Dispatch Operators (N=100)

Variable	M	ME	SD	MIN	MAX
Age	33.52	32	7.97	20	54

Source: Own work [unless otherwise stated, the illustrative material in this article is a result of our own research].

The mean age of the participating operators in the study was 33.52 years, with a standard deviation (SD) of 7.97 and a median (ME) of 32. The youngest respondent was 20 years old, while the oldest respondent was 54 years old.

Table 2. Descriptive statistics for the length of employment in the Emergency Dispatch Centre of the surveyed Emergency Dispatch Operators (N=100)

Variable	M	ME	SD	MIN	MAX
Length of employment – years	5.41	5.00	9.95	0.25	10.00

The average length of service of the participating operators in the study was 5.41 years, with a standard deviation (SD) of 9.95 and a median (ME) of 5.00. The operator with the longest tenure in the Emergency Call Centre had been working for 10 years, while the operator with the shortest tenure had been working for 3 months.

Table 3. Socio-demographic data of the surveyed sample (N=100)

No.	Type of responses	N and %
1.	Gender:	
	– Female	64
	– Male	36
2.	Education:	
	– Secondary	23
	– Higher	77
3.	Hobbies:	
	– Yes	90
	– No	10
4.	Children:	
	– Yes	44
	– No	56
5.	Relationship status:	
	– In a relationship	84
	– Single	16

In the examined sample, women dominated, comprising 64% of all respondents (N=64). Men accounted for 36% of the participants (N=36), reflecting the predominance of women among the individuals employed in the Emergency Call Centres. The largest group, constituting 77% of all respondents (N=77), had a higher education, while 23% (N=23) of the respondents had a secondary education. A significant majority of individuals (90%, N=90) declared having hobbies, while only 10% of the respondents disagreed (N=10). Over half of the participating operators, 56% (N=56), did not have children, while 44% of the respondents (N=44) were parents of at least one child. Among the examined sample, individuals in a relationship dominated, accounting for 84% (N=84) (Table 1). Participation in the study was voluntary and anonymous.

Analysis of the results of the author's research

To answer research questions 1 and 2 and verify the potential relationships between variables, the Pearson correlation coefficient (r -Pearson) was used. To address research question 3 and determine the significance of differences between the compared groups, taking into account sociodemographic variables and the unequal sample sizes, the Mann-Whitney U test for independent samples was employed (calculations were performed using the Statistica software). Statistically significant results are indicated in the presented tables by bold and underlined font.

Table 4. Results of Pearson's correlation coefficient (N=100) for individual scales of the Burnout Questionnaire (LBQ), Personality Determinants of Work Inventory (BIP), and Organizational Climate Questionnaire ($p < 0.05$)

Burnout Questionnaire – LBQ						
	domains	scales	psycho-physical exhaustion	lack of engagement in relationships	sense of professional inefficacy	disappointment
Personality Determinants of Work Inventory – BIP	vocational orientation	achievement motivation	-0.078	-0.306	0.011	-0.088
		power motivation	-0.131	-0.148	-0.168	-0.140
		leadership motivation	0.031	-0.035	-0.039	-0.033
	professional behaviours	conscientiousness	-0.190	-0.209	-0.016	-0.224
		flexibility	-0.206	-0.239	-0.065	-0.258
		action orientation	-0.399	-0.319	-0.232	-0.431
	social skills	social sensitivity	-0.237	-0.189	-0.165	-0.321
		openness to relationships	-0.197	-0.134	-0.242	-0.204
		sociability	-0.120	-0.091	-0.177	-0.244
		team orientation	-0.180	-0.068	-0.056	-0.115
		assertiveness	-0.217	-0.196	-0.328	-0.286
	psychological nature	emotional stability	-0.306	-0.170	-0.335	-0.406
		working under pressure	-0.447	-0.324	-0.286	-0.520
		self-confidence	-0.256	-0.142	-0.236	-0.270
	Organizational climate questionnaire	general questions	-0.405	-0.383	-0.214	-0.473
co-workers		-0.262	-0.118	-0.288	-0.417	
supervisors		-0.373	-0.348	-0.232	-0.536	
work organization		-0.283	-0.379	-0.115	-0.425	
communication		-0.382	-0.435	-0.217	-0.489	
employee interests		-0.447	-0.417	-0.317	-0.545	
promotion and development		-0.369	-0.330	-0.271	-0.491	
total		-0.394	-0.419	-0.241	-0.556	

Analysing the obtained results presented in Table 4, it can be observed that individual dimensions of burnout among Emergency Number Operators correlate with the majority of organizational climate scales and certain scales of personality indicators of work. Therefore, it can be inferred that in the examined sample of 112 operators, burnout is more dependent on the work climate, which includes factors such as relationships with colleagues, management practices, information flow, advancement and development opportunities, rather than the personal characteristics of the employees, which are assessed during a multi-stage recruitment and selection process for employment in the Emergency Call Centre.

The first dimension of burnout, namely *psycho-physical exhaustion*, correlates with over half of the scales of personality indicators of work and with all the scales of organizational climate. Considering personality factors, this dimension of burnout shows statistically significant negative relationships with flexibility ($r=-0.206$, $p<0.05$), social sensitivity ($r=-0.237$, $p<0.05$), relationship openness ($r=-0.197$, $p<0.05$), assertiveness ($r=-0.217$, $p<0.05$), and self-confidence ($r=-0.256$, $p<0.05$). These are relationships of weak strength that should be interpreted cautiously. The negative direction of the relationships indicates that as the level of flexibility, social sensitivity, relationship openness, assertiveness, and self-confidence decreases among the Emergency Number Operators during the performance of their duties, the feelings of psycho-physical exhaustion, tension, and pressure increase. Statistically significant relationships of moderate strength were found between psycho-physical exhaustion and action orientation ($r=-0.399$, $p<0.05$), emotional stability ($r=-0.306$, $p<0.05$), and working under pressure ($r=-0.447$, $p<0.05$). The negative direction of these relationships suggests that as the level of action orientation, which may manifest as difficulties in making and implementing quick decisions, decreases, the level of emotional exhaustion and perceived pressure increases.

Furthermore, when examining the statistically significant relationships of the first dimension of burnout, which is *psycho-physical exhaustion*, with specific dimensions of organizational climate, it should be considered that it shows relationships with co-worker support ($r=-0.262$, $p<0.05$) and work organization ($r=-0.283$, $p<0.05$). These are relationships of weak strength that should be interpreted with caution. The negative direction of the relationships indicates that operators who have unsatisfactory relationships with co-workers, characterized by competition, and whose work is organized in an inadequate manner, not aligned with their capabilities, are more likely to experience psycho-physical

exhaustion and feelings of tension. *Psycho-physical exhaustion* is also correlated with the overall perception of the organization ($r=-0.405$, $p<0.05$), perception of supervisors ($r=-0.373$, $p<0.05$), communication ($r=-0.382$, $p<0.05$), employee interests ($r=-0.382$, $p<0.05$), and advancement and development ($r=-0.369$). These are relationships of moderate strength, and their negative direction informs that as the perception of the organization worsens, instrumental treatment of subordinates and lack of trust, task-oriented leadership style, insufficient communication processes, weak employee rights protection, and limited opportunities for development and advancement in the workplace intensify the levels of fatigue experienced both mentally and physically. It also increases the sense of being under continuous pressure during the tasks performed by Emergency Number Operators.

The second dimension of burnout, which is *disengagement from client relationships*, only correlates with five scales of personality indicators of work and the majority of organizational climate scales. Considering the personality indicators of work, statistically significant relationships were found between this dimension and conscientiousness ($r=-0.209$, $p<0.05$) and flexibility ($r=-0.239$, $p<0.05$). These are relationships of weak strength that should be interpreted cautiously. The negative direction of the relationships indicates that as conscientiousness in task execution decreases and tasks are performed inaccurately, and as the level of flexible adaptation to situations decreases, the quality of relationships with the person reporting the incident may deteriorate, and the person may be objectified by the Emergency Number Operator. The dimension of *disengagement from client relationships* also shows statistically significant relationships with achievement motivation ($r=-0.306$, $p<0.05$) and action orientation ($r=-0.319$, $p<0.05$). These are relationships of moderate strength, and their negative direction suggests that as the motivation to enhance one's competencies in professional situations decreases, particularly in situations where they prove to be insufficient, a subjective treatment of the reporting individuals, indifference, and even hostility may intensify among the respondents.

Additionally, the second dimension of burnout, which is *disengagement from client relationships*, shows statistically significant relationships with the overall perception of the organization ($r=-0.383$, $p<0.05$), evaluation of supervisors' leadership style ($r=-0.348$, $p<0.05$), perception of work organization ($r=-0.379$, $p<0.05$), evaluation of communication processes ($r=-0.435$, $p<0.05$), perception of respecting employee interests ($r=-0.417$, $p<0.05$), and perceived opportunities for advancement and professional development ($r=-0.330$, $p<0.05$). All

these relationships exhibit a moderate strength of dependence and a negative direction. This may indicate that in the Emergency Call Centres, where instrumental treatment of subordinates by supervisors is observed, employees lack trust in the management, do not perceive their goodwill and good intentions, and furthermore, the leadership is more task-oriented and inclined towards punishing employees rather than adopting a subjective and benevolent approach towards them. Operators tend to treat reporting individuals with indifference, detachment, or even hostility.

When analysing the relationships observed in the study with the third dimension of burnout, which is *a sense of professional inefficacy*, it should be noted that it only correlates with six scales of personality indicators of work and the majority of organizational climate scales. Considering the personality indicators of work, statistically significant relationships were found between this dimension and action orientation ($r=-0.232$, $p<0.05$), relationship openness ($r=-0.242$, $p<0.05$), working under pressure ($r=-0.286$, $p<0.05$), and self-confidence ($r=-0.236$, $p<0.05$). These are relationships of weak strength that should be interpreted cautiously. The negative direction of the relationships indicates that as the difficulties in making quick decisions intensify, the perceived pressure during tasks increases, the level of openness to contact with other individuals decreases, and self-confidence diminishes, operators feel less effective in their work. Additionally, the study revealed statistically significant relationships between *a sense of professional inefficacy* and assertiveness ($r=-0.328$, $p<0.05$) and emotional stability ($r=-0.335$, $p<0.05$). These relationships demonstrate a moderate strength of dependence and a negative direction, suggesting that as the level of assertiveness and emotional self-control decreases, the belief in professional ineffectiveness intensifies within the examined group.

Furthermore, considering the relationships of the third dimension of burnout with individual scales of organizational climate, it should be noted that statistically significant relationships were found with the overall perception of the organization ($r=-0.214$, $p<0.05$), evaluation of the quality of co-worker relationships ($r=-0.288$, $p<0.05$), evaluation of supervisors' leadership style ($r=-0.232$, $p<0.05$), evaluation of communication processes ($r=-0.217$, $p<0.05$), and perceived opportunities for advancement and professional development ($r=-0.271$, $p<0.05$). These are relationships of weak strength that should be interpreted cautiously. The negative direction of the relationships indicates that as the overall assessment of the organization decreases, the evaluation of co-worker relationships deteriorates, the evaluation of supervisors' leadership style becomes negative,

communication processes function poorly both vertically and horizontally, and the perception of opportunities for advancement and professional development worsens, the belief in professional inefficacy may increase among the Emergency Number Operators. The only statistically significant relationship of moderate strength and negative direction occurred between this dimension of burnout and the perception of the extent to which employee interests are respected ($r=-0.317$, $p<0.05$). Therefore, it can be inferred that in the Emergency Call Centres, where operators have a perception of insufficient consideration of employee rights by supervisors and insufficient protection by the organization, such as through labour unions, the belief in professional inefficacy intensifies.

The final dimension of burnout, which is *disappointment*, correlates with nine scales of personality indicators of work and all scales of organizational climate. It is worth noting that only within the domain of this dimension of burnout, three correlations of high strength were found. Considering the personality indicators of work, statistically significant relationships were found between disappointment and conscientiousness ($r=-0.224$, $p<0.05$), flexibility ($r=-0.258$, $p<0.05$), relationship openness ($r=-0.204$, $p<0.05$), sociability ($r=-0.244$, $p<0.05$), assertiveness ($r=-0.286$, $p<0.05$), and self-confidence ($r=-0.270$, $p<0.05$). These are relationships of weak strength that should be interpreted cautiously. The negative direction of these relationships suggests that as the level of accuracy in performing job tasks decreases, the ability to adapt flexibly to changing work conditions diminishes, openness to others and sociability decrease, assertiveness declines, and self-confidence diminishes, operators may experience an increase in disappointment with their work. Additionally, statistically significant relationships of moderate strength and negative direction were found between *disappointment* and action orientation ($r=-0.431$, $p<0.05$) and emotional stability ($r=-0.406$, $p<0.05$). This indicates that Emergency Number Operators who face difficulties in making quick and decisive actions and exhibit problems in emotional self-control may experience an intensification of disappointment with their work.

Furthermore, when analysing the statistically significant relationships between the disappointment dimension and individual scales of organizational climate, it should be noted that statistically significant relationships were found with the overall perception of the organization ($r=-0.473$, $p<0.05$), evaluation of the quality of co-worker relationships ($r=-0.417$, $p<0.05$), evaluation of work organization ($r=-0.425$, $p<0.05$), evaluation of communication processes ($r=-0.489$, $p<0.05$), and perceived opportunities for advancement and professional development ($r=-0.491$, $p<0.05$). These are relationships of moderate strength

and negative direction. The obtained results may indicate that the level of disappointment with work and lack of enthusiasm among Emergency Number Operators intensify instrumental treatment of subordinates by supervisors and lack of trust in the management, competitive relationships with co-workers, inadequate work organization characterized by assigning tasks that do not correspond to employees' competencies, flawed communication systems both vertically and horizontally, and a lack of prospects for advancement and professional development in the workplace. Additionally, statistically significant relationships of high strength were found between the disappointment dimension and the perception of supervisors' management style ($r=-0.536$, $p<0.05$) and the perception of the degree of respect for employee interests ($r=-0.545$, $p<0.05$). Therefore, it can be inferred that the level of disappointment with work in the examined group of Emergency Number Operators is most intensified by a task-oriented leadership style focused on punishing employees and a sense of the employer's lack of respect for basic employee rights, as well as the ineffective functioning of institutions such as labour unions, which inadequately represent operators' interests in conflicts with supervisors.

Table 5. Comparison of the level of *psycho-physical exhaustion* dimension, measured by the Occupational Burnout Questionnaire (LBQ), between groups of Emergency Number Operators (N=100) differentiated based on socio-demographic variable categories, results adjusted ($p<0.05$).

Socio-demographic variables		M	ME	SD	U	Z	P
gender	woman	6.51	6.00	2.24	1112.00	0.38	0.702
	man	6.43	7.00	1.98			
work experience	=>4 years	6.22	6.00	1.96	1076.00	1.19	0.233
	<4 years	6.73	7.00	2.28			
education	secondary	5.91	6.00	2.27	686.50	1.42	0.145
	higher	6.64	7.00	2.08			
hobby	yes	6.34	6.00	2.13	369.50	-1.69	0.090
	no	7.50	7.50	1.98			
relationship status	in a relationship	6.29	6.00	2.24	436.50	-2.21	0.027
	single	7.50	7.00	0.97			
children	yes	6.32	6.50	2.39	1161.50	0.48	0.627
	no	6.61	7.00	1.92			

By analysing the results presented in Table 5, it can be observed that the only statistically significant difference in the dimension of psycho-physical exhaustion

occurred between the compared groups distinguished based on relationship status ($U=436.50$; $Z=-2.21$, $p<0.05$). Single Emergency Number Operators reported a significantly higher level of psycho-physical exhaustion, which may manifest as fatigue and a sense of being under pressure ($M=7.50$; $SD=0.97$), compared to respondents who are in a relationship ($M=6.29$; $SD=2.24$).

Table 6. Comparison of the level of the dimension disengagement from client relationships, measured by the Occupational Burnout Questionnaire (LBQ), between groups of Emergency Number Operators ($N=100$) differentiated based on socio-demographic variable categories, results adjusted ($p<0.05$).

Socio-demographic variables		M	ME	SD	U	Z	P
gender	woman	6.35	6.00	1.81	1037.5	-0.91	0.363
	man	6.78	7.00	1.89			
work experience	=>4 years	6.41	7.00	1.74	1155.00	0.65	0.517
	<4 years	6.61	7.00	1.94			
education	secondary	6.59	6.50	1.62	849.500	0.67	0.947
	higher	6.49	6.00	1.91			
hobby	yes	6.39	6.00	1.85	363.50	-1.74	0.082
	no	7.42	7.00	1.56			
relationship status	in a relationship	6.46	6.00	1.89	591.50	-0.75	0.452
	single	6.75	7.00	1.57			
children	yes	6.05	6.00	2.07	931.50	2.08	0.037
	no	6.88	7.00	1.56			

When attempting to interpret the results presented in Table 6, it is worth noting that the only statistically significant difference in the dimension of *disengagement from clients* appeared between the compared groups distinguished based on parenthood status ($U=931.50$; $Z=2.08$, $p<0.05$). Emergency Number Operators who have at least one child ($M=6.05$; $SD=2.07$) reported a significantly lower level of disengagement from clients, which may manifest as active involvement in conversations with the reporting individuals and an individualized approach, compared to childless respondents ($M=6.88$; $SD=1.56$).

Table 7. Comparison of the level of the dimension of perceived professional inefficacy, measured by the Burnout Questionnaire LBQ, among groups of Emergency Number Operators (N=100) distinguished based on sociodemographic variables categories, results adjusted ($p < 0.05$).

Socio-demographic variables		M	ME	SD	U	Z	P
gender	woman	5.90	6.00	2.23	985.00	1.29	0.198
	man	5.35	5.00	2.26			
work experience	=>4 years	5.22	5.00	2.17	924.50	2.24	0.024
	<4 years	6.16	6.00	2.25			
education	secondary	5.45	5.50	2.46	798.50	0.49	0.623
	higher	5.77	5.50	2.19			
hobby	yes	5.56	5.00	2.30	349.500	-1.89	0.059
	no	6.75	7.00	1.55			
relationship status	in a relationship	5.85	6.00	2.29	504.000	1.57	0.115
	single	4.94	4.50	1.91			
children	yes	5.80	5.50	2.56	1206.500	-0.174	0.862
	no	5.62	5.50	2.00			

Analysing the obtained results presented in Table 7, it can be observed that the only statistically significant difference in the dimension of perceived professional inefficacy occurred between the compared groups distinguished based on length of employment ($U=924.50$; $Z=2.24$; $p < 0.05$). Emergency Number Operators who have been working in their profession for more than 4 years ($M=6.16$; $SD=2.25$) reported a significantly higher level of perceived professional inefficacy, which may manifest as a belief in their own insufficient effectiveness and even a sense of failure, compared to the respondents who have been employed in the Emergency Call Centre for a maximum of 4 years ($M=5.22$; $SD=2.17$).

Table 8. Comparison of the level of the dimension of disappointment, measured by the Burnout Questionnaire LBQ, among groups of Emergency Number Operators (N=100) distinguished based on sociodemographic variables categories, results adjusted ($p < 0.05$).

Socio-demographic variables		M	ME	SD	U	Z	P
gender	woman	6.75	7.00	2.24	1081.000	0.600	0.549
	man	6.57	7.00	2.11			
work experience	=>4 years	6.14	6.00	2.24	906.000	2.365	0.018
	<4 years	7.20	7.00	2.03			
education	secondary	6.09	6.50	2.35	688.000	1.410	0.158
	higher	6.85	7.00	2.13			
hobby	yes	6.47	7.00	2.12	274.000	-2.689	0.007
	no	8.25	9.00	1.29			
relationship status	in a relationship	6.60	7.00	2.26	597.000	-0.700	0.484
	single	7.13	7.00	1.75			
children	yes	6.68	7.00	2.37	1193.500	-0.264	0.792
	no	6.68	7.00	2.05			

Analysing the results presented in Table 8, it can be observed that statistically significant differences in the dimension of *disappointment* occurred between the compared groups distinguished based on length of employment ($U=906.000$; $Z=2.365$; $p < 0.05$) and having a hobby ($U=274.000$; $Z=-2.689$; $p < 0.05$). Emergency Number Operators who have been working in their profession for more than 4 years ($M=7.20$; $SD=2.03$) reported a significantly higher level of job disappointment and lack of enthusiasm compared to the respondents who have been employed in the Emergency Call Centre for a maximum of 4 years ($M=6.14$; $SD=2.24$). Additionally, operators who have a hobby ($M=6.47$; $SD=2.12$) are significantly less disillusioned with their work than respondents who declare a lack of extraprofessional passion ($M=8.25$; $SD=1.29$). Employees who have engaging hobbies may not rely solely on their work for a sense of meaning in their lives, which significantly reduces the risk of disappointment with their work.

Conclusions

The main aim of the conducted pilot study was to verify the existence of relationships between personality determinants of work, perceived organizational climate, and professional burnout among Emergency Call Operators.

The obtained results confirm the contemporary tendency that emphasizes the increasing influence of organizational factors on the development of professional burnout (Lubrańska, 2011, 2014; Świętochowski, 2008; Siwiorek, 2018; Mańkowska, 2016; Sęk, 1994; Rosenstiel, Boegel, 1992; Maslach, 2011; Maslach, Leiter, 2022). In the group of Emergency Call Operators, specific dimensions of professional burnout correlate with a significant majority of organizational climate scales and only with certain scales of personality determinants of work.

In the present study, the dimensions of *psycho-physical exhaustion* and *disappointment* correlate with all organizational climate scales. In the dimension of *disengagement from client relations*, a significant relationship was found only with the perception of co-worker relationships, and in the dimension of *perceived lack of professional efficacy*, a relationship was not revealed only with improper work organization. This is consistent with the results of previous studies that demonstrate, among other things, that treating employees in a certain way by the managerial staff lowers their sense of worth and leads to negative evaluations of professional competence (Durniat, 2018). Furthermore, the relationship between the perception of co-worker relationships and the occurrence of professional burnout, revealed in the present study, is supported by numerous research findings (Sęk, 1994, 2011; Strykowska and Trzeciakowska, 1994; Ogińska-Bulik, 2005, 2006; Mańkowska, 2016; Rosenstiel, Boegel, 1992; Maslach, Jackson, 1984; Maslach, Leiter, 2010; Maslach, Leiter, 2022) indicating that social support is considered a significant correlate of the burnout syndrome. The results of the present study indicate that the management style is associated with the level of professional burnout among Emergency Call Operators in each dimension examined. This is consistent with the findings of Ogińska-Bulik (2006), Mańkowska (2015), and Maslach and Leiter (2010), who established that limited employee control over the manner in which they perform their duties and working under pressure from superiors are additional areas of job-person mismatch that contribute to the development of professional burnout. In Emergency Dispatch Centres, where work is improperly organized and employees are overloaded with a high volume of tasks and limited time for completion, the level of professional burnout increases in each dimension, except for the perceived lack of professional efficacy. Similar research findings indicating the relationship between work organization and professional burnout were obtained by Polish and foreign researchers (Mańkowska, 2015; Sęk, 2011). The results of the pilot study suggest that in Emergency Dispatch Centres where communication processes were evaluated negatively, there is a higher level of professional burnout

in all examined dimensions. This is consistent with the empirical data obtained by Piątek (1998) and Sęk (2011). The present study also reveals that among Emergency Call Operators, those who have a sense of inadequate protection of their rights at work experience an intensification of professional burnout in each dimension. This finding is reflected in research results that demonstrate that inadequate remuneration for work can be perceived by employees as a lack of respect and recognition for their professional actions. This is a significant area of work-person discrepancy that can influence the development of the burnout syndrome (Maslach, 2011; Maslach, Leiter, 2010, 2022). As the chances for promotion and professional development of Emergency Call Operators decrease, the level of burnout increases in all dimensions. The obtained results are consistent with the findings of other researchers (Mańkowska, 2015; Arnold, Walsh, Connelly, Ginis, 2015).

In the present study, significantly fewer statistically significant relationships between professional burnout and personality factors were found. However, it is important to emphasize that interesting negative relationships of varying strength were identified. The only characteristic that significantly correlates with all dimensions of professional burnout is working under pressure. In the examined group of Emergency Call Operators, it was observed that as the level of endurance and resilience to difficult situations decreases, unpleasant somatic symptoms intensify. Additionally, due to performing duties under continuous tension, there may also be an intensification of the sense of lack of professional efficacy and negative evaluation of one's work outcomes. Furthermore, the subjective treatment of callers, distance, and even hostility towards them, which is most undesirable in the work of Emergency Call Operators, may be intensified. This can result in a failure to provide effective assistance when it is needed, as confirmed by research conducted among psychotherapists, which demonstrated a correlation between working under pressure and work disappointment (Siwiołek, 2018). Moreover, in the examined group of Emergency Call Operators, several characteristics such as assertiveness, emotional stability, and self-confidence also correlate with most dimensions of professional burnout. These are negative correlations of varying strength, indicating that as the level of these traits decreases, the level of professional burnout increases. The obtained results are consistent with the conclusions from other studies conducted by Suzuki, Saito, Tagaya, Mihara, Maruyama, Azuma, Sato (2009) and Simionato, Simpson (2018), which clearly indicate that assertiveness protects against the development of burnout syndrome. The results of most studies suggest that a high level of neuroticism

is a factor that significantly increases the risk of developing burnout syndrome (Ogińska-Bulik, 2005; Mańkowska, 2013; see Tucholska, 2009; Simionato, Simpson, 2018; Schaufeli and Enzmann, 1998). Both Polish and foreign studies indicate that low self-esteem also contributes to the development of burnout syndrome (see Schaufeli, Enzman, 1998; Ogińska-Bulik, 2004; Terlak, 2005). In the present study, no relationship was confirmed between power motivation, leadership, and professional burnout, which was revealed by other researchers, particularly in relation to dimensions of depersonalization and lack of engagement in client relationships (see Jaworska, Brzezińska, 2014). The findings from a study conducted among school psychologists by Mills and Heubener (1994), who found a connection between high levels of competitiveness and egocentrism and high levels of burnout, were also not confirmed.

Another objective of the study was to verify whether and how sociodemographic variables differentiate the level of professional burnout. The results of the present study indicate that the level of professional burnout is significantly differentiated only by individual criteria of sociodemographic variables. Emergency Call Operators who are not in a relationship declare significantly higher levels of psycho-physical exhaustion, which may manifest as fatigue and a sense of being under pressure, compared to respondents who are in a relationship. These findings are consistent with research indicating that individuals in relationships exhibit lower levels of professional burnout compared to individuals living alone (Fengler, 2000; see: Włodarczyk, Obacz, 2013; Santinello, 2014). This also confirms the hypothesis of the main effect of support, which suggests a beneficial role of social support for health regardless of the stress experienced by an individual (Sęk, Cieślak, 2004).

Emergency Call Operators who have at least one child declare a significantly lower level of lack of engagement in client relationships, which may manifest as an individual approach to the caller, compared to childless participants. However, it should be noted that these findings contradict the trend emerging from most studies in this area. Andrzej Piotrowski (2010), while studying a group of prison service officers, found that having children was associated with a higher declared level of professional burnout. This trend is also supported by the results obtained by Helena Sęk (1996), indicating a higher level of professional burnout among women raising children. Similar patterns have been observed among psychotherapists (Hoeksma, Guy, Brown, Brady, 1993). Emergency Call Operators who have been in the profession for more than 4 years declare a significantly higher level of *perceived lack of professional efficacy* and *job disappointment*

compared to those employed in the Emergency Dispatch Centre for a maximum of 4 years. These results confirm the conclusions of Teresa Zbyrad's (2008) research, according to which length of service is a differentiating factor for the level of professional burnout, with a higher level of burnout associated with longer tenure. It should be noted that this contradicts the conclusions from the majority of studies conducted in Poland and worldwide, which indicate that burnout intensifies during the first years of work and decreases among employees with the longest tenure (Sęk, 2011; Kirenko and Zubrzycka-Maciąg, 2011; Gould, Watson, Price, Valliant, 2013; Jaworska, 2014). Emergency Call Operators who have hobbies are significantly less disappointed with their job compared to respondents who claim not to have hobbies. Employees who have extracurricular passions may not tend to derive a sense of meaning solely from work, which significantly reduces the risk of work disappointment. These results are consistent with empirical data from a study conducted by Marta Makara-Studzińska and Maciej Załuski (2021) involving Emergency Call Operators. Based on the results of the present study, it can be inferred that in the examined sample, the development of professional burnout depends more on the work climate, influenced by factors such as co-worker relationships, managerial leadership style, information flow, opportunities for promotion and development, than on the personal characteristics of the employees. However, personal characteristics receive greater attention, for example, during the multi-stage recruitment and selection process of future Emergency Call Operators. Additionally, it is worth considering that individual sociodemographic categories differentiate the level of professional burnout to a limited extent.

The conducted study would be valuable to replicate, including the remaining Emergency Dispatch Centres that did not participate in the pilot study. Encompassing a larger group of operators would provide a broader perspective on the prevalence of the phenomenon under investigation in the studied population, and the obtained results would be more representative. Additionally, the study was conducted during the pandemic, which could also influence the overall mood of operators and exacerbate the sense of work overload, mainly due to an increased number of emergency calls that were complicated by unclear and constantly changing regulations regarding quarantine, isolation, and sanitary measures. In future studies, it would be worthwhile to consider age groups to examine whether age significantly differentiates the level of professional burnout. Furthermore, it is worth noting that the present study had an exploratory character, considering only one conducted study involving a group of Emergency

Call Operators so far. A larger number of studies would provide a more extensive empirical material that serves as a starting point for conducting analyses and comparisons, enabling more accurate conclusions to be drawn. It should also be noted that the lack of norms for the group of Emergency Call Operators in the selected research tools hindered the interpretation of the obtained results. Due to the specificity of their work, it is difficult to classify representatives of the studied profession into existing occupation groups for which norms have been established.

References

- Cherniss, C. (1980). *Professional burn-out in human service organizations*. New York: Praeger.
- Cox, T., Ferguson, E. (1991). *Individual differences, stress and coping*. In: C.L. Cooper, R. Payne (eds.), *Personality and stress: Individual differences in the stress process*. Chichester: Wiley.
- Durniat, K. Kwestionariusz Klimatu Organizacyjnego Rosenstiela i Boegela – polska adaptacja i normalizacja. *Studia Oeconomica Posnaniensia*, 3 (6). (2018).
- Fengler, J. (2000). *Pomaganie mężczyznom. Wypalenie w pracy zawodowej*. Gdańsk: GWP.
- Gould, D.D., Watson, S.L., Price, S.R., Valliant, P.M. *The relationship between burnout and coping in adult and young offender center correctional officers: An exploratory investigation*. *Psychological Service*, 1 (10). (2013).
- Hoeksma, J.H., Guy, J.D., Brown, C.K., Brady, J.L. *The relationship between psychotherapist burnout and satisfaction with leisure activities*. *Psychotherapy in Private Practice*, 4 (12). (1993).
- Jaworowska, A. (2014). *LBQ Kwestionariusz Wypalenia Zawodowego. Massimo Santinello. Podręcznik. Polska Normalizacja*. Warszawa: PTP.
- Jaworska, A., Brzezińska, U. (2014). *Bochumski Inwentarz Osobowościowych Wyznaczników Pracy. Podręcznik. Polska Normalizacja*. Warszawa: PTP.
- Kantas, A., Vassilaki, E. *Burnout in Greek teachers: Main findings and validity of the Maslach Burnout Inventory*. *Work and Stress*, 11 (1997).
- Kirenko, J., Zubrzycka-Maciąg, T. (2011). *Współczesny nauczyciel. Studium wypalenia zawodowego*. Lublin: UMCS.
- Kliś, M., Kossewska, J. (1998). *Cechy osobowości nauczycieli a syndrom wypalenia zawodowego*. *Psychologia Wychowawcza*, 2 (1998).
- Krawulska-Ptaszyńska, A. *Analiza czynników wypalenia zawodowego u nauczycieli szkół średnich*. *Przegląd Psychologiczny*, 35 (1992).
- Lewandowska, A., Litwin, B. *Wypalenie zawodowe jako zagrożenie w pracy pielęgniarki*. *Roczniki Pomorskiej Akademii Medycznej w Szczecinie*, 3 (55). (2009).
- Lubrańska, A. *Klimat organizacyjny a doświadczanie wypalenia zawodowego*. *Medycyna Pracy*, 6 (62). (2011).
- Lubrańska, A. *Klimat organizacyjny jako wyznacznik emocjonalnych doświadczeń pracowników*. *Zarządzanie Zasobami Ludzkimi*, 1 (2014).

- Makara-Studzińska, M., Załuski, M. (2021). *Raport naukowy z badań operatorów numeru ratunkowego, 112*. <https://ipip.wnz.cm.uj.edu.pl/cm/uploads/2022/02/Wyniki-badania-operatorow-numeru-ratunkowego-112.-Raport-koncowy.docx> (11.04.2023).
- Mańkowska, B. (2013). *Podmiotowe korelaty wypalenia zawodowego pracowników socjalnych miejskich ośrodków pomocy społecznej*. In: M. Teodorczyk (ed.), *Koordinacja na rzecz aktywnej integracji. Widzieć – rozumieć – pomagać. Przykłady rozwiązań stosowanych w codziennej pracy pracownika socjalnego*. Warszawa: Instytut Rozwoju Służb Społecznych.
- Mańkowska, B. (2015). *Podmiotowe i organizacyjne wyznaczniki wypalenia zawodowego pracowników pomocy społecznej*. *Przegląd Psychologiczny*, 1 (58). (2015).
- Mańkowska, B. (2016). *Wypalenie zawodowe. Źródła, mechanizmy, zapobieganie*. Gdańsk: Harmonia Uniwersalis.
- Maslach, C. *What we learned about burnout and health?* *Psychol Health*, 16 (2011).
- Maslach, C. *Engagement research: Some thoughts from a burnout perspective*. *European Journal of Work and Organizational Psychology*, 20 (2011).
- Maslach, C., Jackson, S. *The measurement of experienced burnout*. *Journal of Occupational Behavior*, 2 (1981).
- Maslach, C., Leiter, M. (2010). *Pokonać wypalenie zawodowe: sześć strategii poprawiania relacji z pracą*, przekł. K. Braksal. Warszawa: Wolteres Kluwer.
- Maslach, C., Leiter, M. (2022). *The Burnout Challenge. Managing People's Relationships with Their Jobs*. London: Harvard University Press.
- Maslach, C., Schaufeli, W.B., Leiter, M. *Job Burnout*. *Annual Review of Psychology*, 52 (2001).
- Mills, L.B., Huebner, E. *A Prospective Study of Personality Characteristics, Occupational Stressors, and Burnout Among School Psychology Practitioners*. *Journal of School Psychology*, 1 (36). (1998).
- Ogińska-Bulik, N. *Wsparcie społeczne jako bufor chroniący menadżerów przed negatywnymi skutkami stresu w pracy*. *Zeszyty naukowe WSHE w Łodzi. Psychologia Zdrowia*, 1 (2004).
- Ogińska-Bulik, N. (2006). *Stres zawodowy w zawodach usług społecznych. Źródła, konsekwencje, zapobieganie*. Warszawa: Difin.
- Ogińska-Bulik, N. *Perceived job stress, personality traits and burnout syndrome in police officers*. *Polish Journal of Applied Psychology Volume*, 2 (11). (2013).
- Piątek, J. (1998). *Stres pomaga ludziom w kryzysach*. *Nowiny Psychologiczne*, 1 (1998).
- Pines, A.M., Aronson E. (1988). *Career burnout: Causes and cures*. New York: Free Press.
- Pines, A.M. (1996). *Couple burnout: Causes and cures*. New York: Routledge.
- Piotrowski, A. (2010). *Stres i wypalenie zawodowe funkcjonariuszy Służby Więziennej*. Warszawa: Difin.
- Rosenstiel, L., Bogel, R. (1992). *Betriebsklima geht jeden an. Bayerischer Staatsministerium für Arbeit*. München: Familie und Sozialordnung.
- Rosenstiel, L., Bögel, R. (2003). *Betriebsklima und Organisationsklima, Grundlagen der Organisationspsychologie. Basiswissen und Anwendungshinweise, Fünfte Auflage*, Stuttgart: Schaffer – PoeschelVerlag.
- Santinello, M. (2014). *Kwestionariusz Wypalenia Zawodowego Link*. Warszawa: PTP.
- Schaufeli, W.B., Enzmann, D. (1998). *The burnout companion of study and practice. A critical analysis*. London: Taylor and Francis.

- Sęk, H. (1994). *Wypalenie zawodowe u nauczycieli. Społeczne i podmiotowe uwarunkowania*. In: J. Brzeziński, L. Witkowski (eds.), *Edukacja wobec zmiany społecznej*. Poznań–Toruń: Edytor.
- Sęk, H. (1996). *Wypalenie zawodowe – psychologiczne mechanizmy i uwarunkowania*. Poznań: Zakład Wydawniczy K. Domke.
- Sęk, H. (ed.) (2011). *Wypalenie zawodowe. Przyczyny i zapobieganie*. Warszawa: Wyd. Nauk. PWN.
- Sęk, H., Cieślak, R. (2004). *Wsparcie społeczne – sposoby definiowania, rodzaje i źródła wsparcia, wybrane koncepcje teoretyczne*. In: I. Heszen – Niejodek, H. Sęk (eds.), *Psychologia zdrowia*. Warszawa: Wyd. Nauk. PWN.
- Siwiorek, J. (2018). *Wypalenie zawodowe i jego dynamika w kontekście indywidualnych doświadczeń psychoterapeutów*. https://www.sbc.org.pl/Content/355365/doktorat4100_Janusz_Siwiorek.pdf (15.02.2023).
- Simionato, G.K., Simpson, S.G. *Personal risk factors associated with burnout among psychotherapists: A systematic review of the literature*. *Journal of Clinical Psychology* (2018).
- Strykowska, M., Trzeciakowska A. (1994). *Wsparcie społeczne a satysfakcja z pracy i wypalenie zawodowe się kobiet*. *Przegląd Psychologiczny*, 37 (1994).
- Suzuki, E., Saito, E., Tagaya, A, Mihara, R, Maruyama, A., Azuma, T., Sato, C. (2009). *Relationship between assertiveness and burnout among nurse managers*. *Japan Journal of Nursing Science*. 6(2), pp. 71-81
- Świętochowski, R. (2008). *Klimat organizacyjny jako istotna właściwość miejsca pracy*. In: H. Skłodowski (ed.), *Polskie doradztwo dla młodzieży — idea czy rzeczywistość*. Łódź: SWSPiZ.
- Terelak, J. F. (2005). *Stres organizacyjny. Koncepcje, przyczyny, symptomy i sposoby radzenia sobie*. Warszawa: WSM SIG.
- Tucholska, S. (2009). *Wypalenie zawodowe u nauczycieli. Psychologiczna analiza zjawiska i jego osobowościowych uwarunkowań*, wyd. 2 popr. Lublin: KUL.
- WHO, (2019), <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases> (14.01.2023).
- Wilczek-Rużycka, E. (2014). *Wypalenie zawodowe pracowników medycznych*. Warszawa: Wolters Kluwer.
- Włodarczyk, D., Obacz, W. *Perfekcjonizm, wybrane cechy demograficzne i zawodowe jako predyktory wypalenia zawodowego u pielęgniarek pracujących na bloku operacyjnym*. *Medycyna Pracy*, 6 (64). (2013).
- Zbyrad, T. (ed.). (2008). *Wypalenie zawodowe pracowników służb społecznych*. Stalowa Wola: KUL.