Archives of Psychiatry and Psychotherapy, 2025; 3: 79–88

10.12740/APP/207835

Negative consequences of secondary exposure to trauma in police officers – the role of empathy and job satisfaction

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Abstract

Aim of the study: Police officers working with individuals who have directly experienced trauma are exposed to the negative consequences of such exposure to the tragic experiences of others, including secondary traumatic stress (STS). The aim of this study was to examine the relationships between empathy, job satisfaction, and secondary traumatic stress among police officers exposed to indirect trauma.

Subject or material and methods: The study analyzed data from 220 police officers who, as part of their official duties, provided assistance to individuals who had directly experienced trauma. Their age ranged from 22 to 59 years (M = 39.08, SD = 7.00). The majority of the respondents were men 83.2%). The research utilized a specially designed survey, the Secondary Traumatic Stress Inventory, the Empathic Sensitivity Scale and the Job Satisfaction Scale.

Results: Police officers exhibited relatively low levels of secondary traumatic stress. Job satisfaction was negatively correlated with the severity of secondary traumatic stress. Moreover, specific aspects of empathic sensitivity were positively related to the intensity of secondary traumatic stress. The strongest predictor of secondary traumatic stress was one of the components of empathic sensitivity—personal distress.

Discussion: A lower level of empathy and high job satisfaction may protect police officers working with trauma survivors from developing secondary traumatic stress. Therefore, it is important to enhance officers' skills in maintaining their mental health and increasing job satisfaction.

Conclusions: Implementing strategies that support police officers' mental health can enhance their effectiveness in working with trauma survivors.

INTRODUCTION

Negative effects of secondary trauma exposure

Individuals who provide assistance to people who have experienced trauma may also experience negative consequences as a result. Among these consequences is secondary traumatic stress (STS). According to Figley [1], this type of stress is a natural consequence of helping someone who has gone through traumatic events, as it involves confronting the events experienced by that person.

Secondary traumatic stress, also referred to as secondary traumatic stress disorder (STSD), is characterized by similar symptoms to PTSD (Posttraumatic Stress Disorder), such as intrusive symptoms, avoidance, negative changes in cognitive functioning or mood, and increased arousal and reactivity [2]. The term "vicarious traumatization" [3] is also used to describe the negative consequences of secondary trauma ex-

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posure. Some symptoms of STS may also resemble other effects of prolonged occupational stress, such as compassion fatigue or burnout, however, these are not identical phenomena [4].

There have been few studies conducted on the prevalence of STS among police officers. In the United Kingdom, 51% of surveyed officers reported symptoms of STS [5]. In other studies, conducted among police officers working on cybercrime cases involving child victims, only 4% of men and 7% of women reported high levels of STS [6]. Polish studies have indicated relatively low levels of STS among police officers [7,8].

The relationship between empathy and job satisfaction with secondary traumatic stress

Factors influencing secondary traumatic stress include both work-related factors and individual characteristics of the helper, with the latter being considered more important. Some of these factors may contribute to the development of STS, while others may provide protection. The importance of individual factors in STS is highlighted by Dutton and Rubinstein's Ecological Framework of Trauma [9]. The authors of this model include personal and professional resources (such as education and work experience), individual vulnerability (personal trauma history), and job satisfaction. The significant role of both work and personal resources in the effective functioning of an employee is also emphasized by the Job-Demands-Resources (JD-R) Theory [10]. Research conducted among Italian police officers confirmed that the resources available to officers may protect them from developing STS [11].

One of the factors associated with STS is empathy. Empathy can be understood as a response of one person resulting from observing the behaviors of another, as the ability to put oneself in another person's internal state and imagine their situation [12], or as empathetic concern, the desire to communicate with the client, and the tendency to emotional contagion [13]. The significance of empathy for STS is addressed in the theories and models developed by Figley [14], such as the Compassion Fatigue Theory, the Trauma Transmission Model, the Compassion Stress and Fatigue Model, as well as the recently developed Compassion Fatigue Resilience Model [15]. Generally, these models indicate that empathy leads to experiencing the emotional distress of those they are helping, which directly contributes to the development of compassion fatigue as a secondary traumatic stress response.

The significant role of empathy in the development of STS is also highlighted by the Empathy-Based Stress Model, developed by Rauvoli et al. [16], which suggests that the effect of secondary trauma exposure and empathetic engagement in helping traumatized clients manifests as stress resulting from empathy, expressed in the form of compassion fatigue or STS. Empathy plays a crucial, though—as Figley [17] points out—ambiguous role in the occurrence of negative consequences of secondary trauma exposure. On one hand, it is an essential factor for a professional to provide effective help to a traumatized individual. On the other hand, those who have high levels of empathy are more susceptible to the "cost" of caregiving, in the form of STS symptoms, compassion fatigue, or burnout. Empathy has been shown to be important in the police's work with trauma victims [18]. Victims who feel comfortable with their interviewing officer are also more likely to disclose more information and they are more willing to participate and continue the prosecution process. Most available research results indicate a positive relationship between empathy and STS [19-24]. However, there are also studies that do not confirm positive correlations between the variables. For example, research conducted among therapist trainees working with individuals who have experienced trauma did not show a link between empathy and negative consequences of secondary trauma [25]. On the other hand, studies of social workers have provided data suggesting a negative relationship between empathy and STS [26]. Similarly, research among Australian social workers and psychologists found that a higher level of empathy was associated with a lower risk of developing STS [27]. Therefore, the relationship between these variables remains unclear, highlighting the need for further research in this area. It should be emphasized that there are no studies on the relationship between empathy and STS among Polish police officers.

Another factor associated with STS is job satisfaction. Job satisfaction is a multidimensional

and ambiguous concept. It is often equated with job contentment; however, according to Zalewska [28], these are not identical terms. Job contentment is considered an attitude that reflects the evaluation of how beneficial (or detrimental) the work is for the individual, expressed in affective reactions and cognitive assessments. The emotional aspect refers to the emotional evaluation of the job, the employee's well-being, or mood in the workplace. On the other hand, the cognitive aspect of job satisfaction is referred to as job satisfaction itself. Satisfaction is a subjective category, dependent on the individual's perception. In general, both job contentment and job satisfaction influence employee functioning. They impact attitudes toward work, and can increase attachment to the organization, engagement, and employee effectiveness.

For individuals exposed to secondary trauma, job satisfaction may be an important factor in reducing the risk of developing STS or reducing the severity of its symptoms. The importance of job satisfaction as a critical factor in preventing the negative consequences of secondary trauma exposure is highlighted in Dutton and Rubinstein's Ecological Framework of Trauma model [9]. Studies conducted to date on the relationship between job satisfaction and the negative consequences of secondary trauma exposure have mostly focused on satisfaction derived from helping others, rather than on the general sense of job satisfaction. Most of these studies have been conducted among medical personnel. The results indicate a negative relationship between the variables [29-33].

There are also studies indicating no relationship between job satisfaction and STS. Such relationships were not found in studies involving nurses [34], as well as in research among various groups of professionals working with individuals who have experienced trauma [21]. There are also analyses suggesting the opposite direction of the relationship, indicating that high levels of STS lead to job dissatisfaction [35].

Job satisfaction may also serve as a mediator. Research among medical personnel [36] showed that job satisfaction mediated the relationship between social support and STS. Among consultants working with individuals addicted to substances, job satisfaction mediated the relationship between STS and work engagement [37].

The unclear data on the relationships between job satisfaction and the negative consequences of secondary trauma exposure indicate the need for further research in this area. Additionally, there is a lack of such analyses among police officers exposed to secondary trauma. This issue seems important, as job satisfaction may be a crucial factor in preventing the negative effects of secondary traumatization in this professional group, as well as contributing to increased work efficiency.

It is also worth noting the possible connections between empathy and job satisfaction, although few studies have been conducted in this area, and the available ones do not provide a clear picture of the relationship between the variables. On one hand, positive correlations between them can be expected, as empathetic engagement in helping those affected may increase the sense of meaning and value of the work, commitment to the job, and thus lead to higher job satisfaction. Many researchers have pointed to the importance of empathy for perceived job satisfaction [38, 39]. A positive correlation between empathy and job attachment has also been shown [40]. On the other hand, there is data suggesting a negative impact of empathy on job satisfaction [41]. Therefore, further research in this area is needed, including among police officers. This issue also seems important from a practical perspective. It can be assumed that police officers who demonstrate empathy will be able to recognize and respond effectively to the needs, expectations, and concerns of their charges, which may enhance their sense of the value of their work and job satisfaction.

The aim of the study was to determine the relationships between empathy, job satisfaction, and secondary traumatic stress (STS) among police officers exposed to secondary trauma. The following research questions were explored:

- What is the level of STS, empathy, and job satisfaction in the studied group of police officers?
- Are empathy and job satisfaction related to the severity of STS?
- Are empathy and job satisfaction related to each other?
- Which of the variables considered in the study are predictors of STS?
- Does job satisfaction mediate the relationship between empathy and STS?

The study also included controlled variables, which were the participants' gender, age, police force, length of service in the police, experience working with people who have experienced trauma, workload, and personal trauma history. It was assumed that STS would be positively related to empathy and negatively related to job satisfaction. Moreover, empathy and job satisfaction would be positively correlated, and job satisfaction would mediate the relationship between empathy and STS.

METHOD

The study, conducted from December 2023 to October 2024, involved 237 Polish police officers. They were participants in a professional officers' training at the Police Academy in Szczytno. The analysis included only those officers who reported having contact with trauma victims as part of their service (n = 220, 92.82%). These officers worked in two police divisions: preventive (n = 120; 54.5%) and criminal (n = 100; 45.5%). The respondents' ages ranged from 22 to 59 years (M = 39.08; SD = 7.00). Among them, the majority were men (n = 183; 83.18%) compared to women (n = 35; 15.91%); two individuals (0.91%) did not disclose their gender.

The total work experience in the police ranged from 2 to 32 years (M = 14.55; SD = 6.27), and the work experience with individuals who had experienced trauma ranged from one year to 32 years (M = 12.01; SD = 6.18). Workload, defined as the estimated percentage of time spent by police officers on direct assistance to individuals who have experienced trauma, ranged from 2% to 100% (M = 34.07; SD = 26.18). During their service, the police officers had contact with individuals who experienced various traumatic situations. The most common were situations related to death, including the loss of a loved one (n = 88), suicides and suicide attempts (n = 51), and accidents (n = 47).

The study used a survey developed specifically for the research as well as three standard measurement tools. To assess the symptoms of secondary traumatic stress, the Secondary Traumatic Stress Inventory (STSI) developed by Ogińska-Bulik and Juczyński [21] was used. This tool is a modified version of the PTSD Checklist for DSM-5 (PCL-5) by Weathers et al. [42], with the Polish adaptation prepared by Ogińska-Bulik et al. [43]. The inventory consists of 20 statements, which are rated by the respondents on a 5-point scale (e.g., "To what extent did recurring, distressing, and unwanted memories of clients' stressful events occur?"). The statements refer to symptoms covering the four PTSD criteria, namely, intrusions, persistent avoidance of trauma-related stimuli, negative changes in emotional and cognitive domains, and increased arousal and reactivity. The internal consistency of the tool, measured by Cronbach's alpha, is 0.95, while in the current study it reached a value of 0.83. A score of 33 points or higher suggests a high probability of developing secondary traumatic stress disorder [21].

Empathy was assessed using the Empathy Sensitivity Scale (SWE), developed by Kaźmierczak et al. [44], based on the Interpersonal Reactivity Index (IRI) [45]. The tool consists of 28 statements ("I often have tender, concerned feelings for people less fortunate than me"), which the participant rates on a 5-point scale. The scale measures empathy in three aspects: empathic concern, personal distress, and perspective-taking. Cronbach's alpha reliability coefficients for the individual scales are 0.78, 0.78, and 0.74. The analyses recommend considering the individual aspects of empathy rather than the overall score.

To assess the level of job satisfaction, the Job Satisfaction Scale was used. This is a modified version of the Life Satisfaction Scale, developed by Diener et al. [46], originally designed to measure overall life satisfaction. The Polish version of this scale was developed by Zalewska [28]. The scale includes 5 statements regarding the cognitive evaluation of work ("In many ways, my job is nearly perfect").

Participants in the study rated each statement on a seven-point scale, where 1 means "Strongly agree" and 7 means "Strongly disagree." The entire scale forms a single, unidimensional structure. The tool demonstrates good psychometric properties, with a Cronbach's alpha coefficient of 0.86.

RESULTS

The analyses were conducted using IBM SPSS Statistics 22. Due to the lack of normal distribu-

tion for almost every variable, non-parametric tests were used to determine relationships between the variables: the Mann-Whitney U test was used to determine the significance of differences between variables, and Spearman's rho was used to check the relationships between variables. Regression analysis using the backward method was used to identify predictors. Mediation analysis was conducted using the bootstrapping procedure. The mean values of the variables included in the study and the correlation coefficients in the studied group of police officers are presented in Table 1.

Table 1. Descriptive Statistics and Correlation Coefficients of the Analyzed Variables (n = 220)

Variables	1	2	3	4	5	6	7	8	9
1. STS total	-								
2. Intrusion	0,826**	-							
3. Avoidance	0,702**	0,559**	-						
4. Negative alterations in cognition and/or mood	0,912**	0,651**	0,580**	-					
5. Alterations in arousal and reactivity	0,923**	0,671**	0,523**	0,818**	-				
6. **Empathic concern**	0,272**	0,292**	0,219**	0,220**	0,194**	-			
7. **Personal distress**	0,273**	0,230**	0,186**	0,268**	0,255**	0,451**	-		
8. **Perspective-taking**	0,119	0,122	0,056	0,097	0,104	0,271**	0,071	-	
9. **Job satisfaction**	-0,249**	-0,164*	-0,185**	-0,244**	-0,269**	-0,064	-0,303**	-0,017	-
M	17,63	4,13	2,03	5,26	6,21	31,75	18,76	30,09	22,25
SD	15,22	4,25	2,08	5,13	5,79	4,46	4,43	3,38	5,61

**p<01; *p<0.5

The police officers surveyed reported relatively low levels of secondary traumatic stress (STS). Only 37 officers (16.82%) showed a high risk of developing secondary traumatic stress disorder. The vast majority, i.e., 183 respondents (83.18%), had a lower level of STS than the established cut-off point of 33.

The results for the individual aspects of empathy, expressed on the sten scale, indicate that the officers showed low or moderate levels of empathy (empathic concern – 4 sten, personal distress – 4 sten, perspective-taking – 5 sten). Additionally, the officers experienced moderate job satisfaction.

Regarding the control variables, no statistically significant relationships with STS were found for gender, age, police force, length of service in the police, years of work with trauma-experienced individuals, workload. Only the officers' personal history of trauma differentiated the levels of STS among the respondents. Those who had experienced traumatic situations in their own lives reported higher levels of STS (M = 19.37; SD = 16.15) compared to officers who had not experienced such situations (M = 11.45; SD = 9.01; U = 3029.50, Z = – 2.95, p = 0.006).

Symptoms of STS were positively correlated with empathy, expressed through empathic concern (rho = 0.272) and personal distress (rho = 0.273). Additionally, similar positive relationships were found between all aspects of empathy and the individual criteria of STS. On the other hand, job satisfaction was negatively correlated with overall STS intensity (rho = – 0.249) and all four categories of symptoms: intrusions (rho = – 0.164), avoidance (rho = – 0.185), changes in cognition and emotions (rho = – 0.244), and changes in arousal and reactivity (rho = – 0.269). Job satisfaction was negatively correlated only with one aspect of empathy, i.e., personal distress (rho = – 0.303).

To identify the predictors of secondary traumatic stress (STS), a multiple regression analysis using the backward elimination method was conducted. The variables that correlated with the overall intensity of STS, such as personal trau-

ma history, empathic concern, personal distress, and job satisfaction, were included in the model. For collinearity analysis, the following values were considered acceptable: tolerance > 0.1; VIF < 5. All factors fell within the accepted norms. As a result of the analysis, it was found that the predictors of STS are personal trauma history, personal distress, and job satisfaction. The obtained model had the following parameters: F = 13.66; p < 0.05, adjusted R2 = 0.151.

Table 2. Predictors of STS – Model coefficients

Model	Unstandarized coefficients	Standarized coefficients		t	p-value	Collinearity Statistics	
	B	Std. Error	Beta coefficient			Tolerance	VIF
Job satisfaction	-0,162	0,181	-0,436	-2,411	0,017	0,881	1,135
Personal trauma history	0,193	0,296	0,999	3,048	0,003	0,989	1,011
Personal distress	0,253	0,227	0,860	3,785	0,000	0,891	1,123

B – unstandardized regression coefficient, t – t-test, p-value – significance level, VIF – variance inflation factor

The strongest predictor of STS was personal distress (B = 0.253), followed by personal trauma history (B = 0.193). These are positive associations, meaning that experiencing personal distress and direct trauma increases the likelihood of developing STS. On the other hand, job satisfaction was found to be a negative predictor of STS. However, the contribution of these three variables in predicting the intensity of the negative consequences of secondary trauma exposure among police officers is weak; together they explain only 15% of the variance in the dependent variable.

It was also examined whether job satisfaction mediates the relationship between the analyzed aspects of empathy and STS. To this end, a mediation analysis was conducted using the bootstrapping procedure proposed by Preacher and Hayes [47]. This type of analysis allows for determining a more complex model structure in which the explanatory variable, acting as a predictor (in this case, empathy), is linked to the explained variable (here: overall STS and its individual symptom categories) through a third variable, which functions as a mediator (here: job satisfaction). A 95% confidence interval was used for the analysis. For each path in the mediation models, standardized β coefficients were calculated. Three models were constructed, but none of them were statistically significant.

DISCUSSION

Among the police officers surveyed, 16.82% showed a high risk of developing secondary traumatic stress disorder (STS). In contrast, the remaining 83.18% of respondents reported lower levels of STS, suggesting a low probability of experiencing this type of disorder. This result is similar to those obtained in previous studies of Polish police officers, where 13% of respondents showed a high likelihood of developing STSD, while the remaining 87% showed a low risk of developing the disorder [7-8]. Among the controlled variables, only personal trauma history was associated with STS, indicating that officers who have personally experienced traumatic events, compared to those who have not, exhibited higher levels of negative consequences from secondary trauma exposure.

Empathy was found to be positively correlated with the severity of STS, but these relationships were limited to the emotional aspects of this variable, namely empathic concern and personal distress. This means that the tendency to feel compassion for those who have been harmed and the inclination to experience anxiety, distress, or discomfort in response to the intense harmful experiences of victims seem to contribute to the occurrence of negative consequences from secondary trauma exposure in police officers, as reflected in STS symptoms.

Job satisfaction was negatively correlated with secondary traumatic stress and with one aspect of empathy, namely personal distress. Howev-

er, the values of the obtained correlation coefficients are relatively low, indicating weak relationships between the variables. The predictors of STS turned out to be three variables: personal distress, personal trauma history, and job satisfaction, but their contribution to predicting the dependent variable is weak.

The results obtained, indicating positive relationships between empathy and STS, confirm the models developed by Figley et al. [14-15] and the model by Rauvola et al. [16]. They are also consistent with most of the data presented in the literature [19-24]. However, it is worth noting that only the emotional aspects of empathy are associated with STS. On the other hand, its cognitive aspect, which is perspective-taking, understood as the ability to "step outside oneself" in communication with others, does not show such associations. This is in line with Figley's assumptions [14], who emphasizes that it is emotional empathy, especially the empathic concern expressed by professionals, primarily psychotherapists, that is the main risk factor for secondary trauma.

Empathy displayed by police officers, much like by psychotherapists, seems to serve a paradoxical function. The work of police officers working with individuals who have experienced trauma requires empathy, including care for others, understanding their feelings, compassion, and shared emotional experience. On one hand, the level of empathy exhibited by police officers, especially empathic concern, may increase the effectiveness of the help they provide to clients. On the other hand, engaging empathically in helping others may expose them to a higher risk of developing STS. However, it should be noted that the level of empathy presented by the police officers in the study is relatively low, which may explain – at least partially – the relatively mild intensity of STS symptoms. It also suggests that exhibiting a not-too-high level of empathy may protect police officers working with individuals who have experienced trauma from developing STS.

The negative correlation between job satisfaction and STS found in the study is consistent with expectations and confirms similar correlations found in other groups of professionals exposed to secondary trauma [29-33]. It is also in line with the Ecological Framework of Trauma model by Dutton and Rubinstein [9].

Job satisfaction also serves as a negative predictor of STS, albeit a weak one. This means that, similar to empathy, the role of job satisfaction as a predictor of STS severity is limited. Job satisfaction does not mediate the relationship between empathy and STS, which may be due to the weak associations between them. It cannot be excluded that there is an inverse relationship between the variables, meaning that persistent STS symptoms reduce empathy and job satisfaction, including satisfaction from helping victims and those harmed. This could lead to the development of other negative consequences of occupational stress, such as compassion fatigue and burnout, which could, in turn, lower police officers' work effectiveness and lead to negative outcomes for their clients. It is also worth adding that the risk of secondary traumatic stress in police officers is increased by personal experience with traumatic events.

It is important to note some limitations of the conducted study. It was cross-sectional in nature, which does not allow for drawing conclusions about the causality of the observed relationships. The study group was not very large, meaning that the results cannot be generalized to the entire population of police officers working with individuals who have experienced trauma. It should also be noted that the overwhelming majority of the participants were men. The analyses did not take into account the type of traumatic events experienced by the clients or the timing of their occurrence. It is also worth emphasizing that police officers devote only part of their work time to helping individuals affected by trauma. The measurement tools used were self-reported, and the Job Satisfaction Scale refers to the general assessment of job satisfaction in the police, not satisfaction from helping those who have experienced trauma.

Despite the limitations presented, the study's results contribute new insights into the factors influencing the negative consequences of indirect trauma exposure among police officers. They highlight the significant—though limited—role of empathy and job satisfaction in the occurrence of secondary traumatic stress. It is important to emphasize that the analyses were conducted on a relatively rarely studied professional group, namely police officers. The research used a new tool for assessing the sever-

ity of STS symptoms among professionals exposed to indirect trauma, based on DSM-5 criteria, namely the Secondary Traumatic Stress Inventory.

The results obtained may serve as inspiration for further research on the significance of other factors that may either contribute to or protect against the negative consequences of indirect exposure to trauma. It would be useful to include indicators of cognitive processing of trauma, including cognitive coping strategies for trauma experienced by clients, as well as work engagement. Longitudinal studies would also be valuable to determine whether STS symptoms persist over time.

The results of the analyses could also be useful in developing preventive programs for police officers working with individuals who have experienced trauma. These programs should address the issue of empathy and its importance for the psychosocial functioning of officers. It would be beneficial to equip police officers with skills to distance themselves from the problems experienced by their clients (at least partially), establish healthy boundaries in relationships with others, and separate work from personal life. It is also important to focus on increasing job satisfaction, including by giving meaning and purpose to the work being done.

CONCLUSIONS

The obtained results allowed for the formulation of the following conclusions:

- Police officers exposed to secondary trauma exhibit relatively low levels of secondary traumatic stress (STS).
- STS is positively related to empathy and negatively related to job satisfaction.
- The predictors of STS are: personal distress, personal trauma history, and job satisfaction.
- Lower levels of empathy and higher job satisfaction may serve as protective factors against the development of negative consequences of secondary trauma exposure.
- It is important to develop and enhance skills in police officers exposed to secondary trauma for maintaining their mental health, as well as to increase job satisfaction, including satisfaction from helping victims.

REFERENCES

1. Figley CR. Compassion fatigue: Toward a new understanding of the cost of caring. In: Stamm BH, editor. Secondary traumatic stress. Towson, MD: Sidran Institute; 1999. p. 3–28.
2. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington, DC: APA; 2013.
3. McCann IL, Pearlman LA. Vicarious traumatization: A framework for understanding the psychological effects of working with victims. J Trauma Stress. 1990;3(1):131–149. https://doi.org/10.1002/jts.2490030110.
4. Khantzian E. The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. Harv Rev Psychiatry. 1997;4:231–244. https://doi.org/10.3109/10673229709030550.
5. MacEachern AD, Dennis AA, Jackson S. Secondary traumatic stress: Prevalence and symptomology amongst detective officers investigating child protection cases. J Police Crim Psychol. 2019;34:165–174. https://doi.org/10.1007/s11896-018-9277-x.
6. Tehrani N. Extraversion, neuroticism and secondary trauma in internet child abuse investigators. Occup Med. 2016;66(5):403–407. https://doi.org/10.1093/occmed/kqw004.
7. Bąk G, Ogińska-Bulik N. Wtórna traumatyzacja wśród funkcjonariuszy policji – konsekwencje i uwarunkowania. Warszawa: Difin; 2024.
8. Ogińska-Bulik N, Bąk G. Predictors of secondary posttraumatic growth among police officers exposed to secondary trauma. J Police Crim Psychol. 2023;38(4):996–1000. https://doi.org/10.1007/s11896-023-09586-2.
9. Dutton MA, Rubinstein FL. Working with people with PTSD: Research implications. In: Figley CR, editor. Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. New York: Brunner/Mazel Publishers; 1995. p. 82–100.
10. Bakker AB, Demerouti E. Job demands-resources theory: Taking stock and looking forward. J Occup Health Psychol. 2017;22(3):273. https://doi.org/10.1037/ocp0000056.
11. Acquadro D, Maran D, Zito M, Colombo L. Secondary traumatic stress in Italian police officers: The role of job demands and job resources. Front Psychol. 2020;11:1435. https://doi.org/10.3389/fpsyg.2020.01435.
12. Davis MH. Empathy. The ability to feel compassion. Gdańsk: GWP; 1999.
13. Omdahl BL, O'Donnell C. Emotional contagion, empathic concern and communicative responsiveness as variables af-

fecting nurses' stress and occupational commitment. J Adv Nurs. 1999;29(6):1351–1359. https://doi.org/10.1046/j.1365-2648.1999.01021.x.

14. Figley CR. Compassion fatigue: Psychotherapists' chronic lack of self-care. J Clin Psychol. 2002;58(1):1433–1441. https://doi.org/10.1002/jclp.10090.
15. Ludick M, Figley CR. Toward a mechanism for secondary trauma induction and reduction: Reimagining a theory of secondary traumatic stress. Traumatology. 2017;23(1):112–123. https://doi.org/10.1037/trm0000096.
16. Rauvola RS, Vega DM, Lavigne KN. Compassion fatigue, secondary traumatic stress, and vicarious traumatization: A qualitative review and research agenda. Occup Health Sci. 2019;3:297–336. https://doi.org/10.1007/s41542-019-00045-1.
17. Figley CR. Compassion fatigue as secondary traumatic stress disorder: An overview. In: Figley CR, editor. Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. New York: Brunner/Mazel Publishers; 1995. p. 1–20.
18. Turgoose D, Glover N, Barker C, Maddox L. Empathy, compassion fatigue and burnout in police officers working with rape victims. Traumatology. 2017. https://doi.org/10.1037/trm0000118.
19. Juczyński Z, Ogińska-Bulik N, Binnebesel J. Empathy and cognitive processing as factors determining the consequences of secondary exposure to trauma among Roman Catholic clergy. J Relig Health. 2022;1:1226–1241. https://doi.org/10.1007/s10943-021-01443-y.
20. MacRitchie V, Leibowitz S. Secondary traumatic stress, level of exposure, empathy and social support in trauma workers. S Afr J Psychol. 2010;40(2):149–158. https://doi.org/10.1177/008124631004000204.
21. Ogińska-Bulik N, Juczyński Z. Kiedy trauma innych staje się własną. Negatywne i pozytywne konsekwencje pomagania osobom po doświadczeniach traumatycznych. Warszawa: Difin; 2020.
22. Ogińska-Bulik N, Juczyński Z. Negative effects of indirect exposure to trauma among therapists working with addicted people who have experienced traumatic events – the role of empathy and secondary self-efficacy. Psychiatr Pol. (in print).
23. Thomas JT, Otis MD. Intrapsychic correlates of professional quality of life: Mindfulness, empathy, and emotional separation. J Soc Work Res. 2010;1(2):83–98. https://doi.org/10.5243/jsswr.2010.7.
24. Turgoose D, Maddox L. Predictors of compassion fatigue in mental health professionals: A narrative review. Traumatology. 2017;23(2):172–185. https://doi.org/10.1037/trm0000116.
25. O'Brien JL, Haaga DA. Empathic accuracy and compassion fatigue among therapist trainees. Prof Psychol Res Pract. 2015;46(6):414–420. https://doi.org/10.1037/pro0000037.
26. Wagaman MA, Geiger JM, Shockley C, Segal E. The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. Soc Work. 2015;60(3):201–209. https://doi.org/10.1093/sw/swv014.
27. Rayner S, Davis C, Moore M, Cadet T. Secondary traumatic stress and related factors in Australian social workers and psychologists. Health Soc Work. 2020; 45(2): 122–130. doi: 10.1093/hsw/hlaa001
28. Zalewska A. Skala Satysfakcji z Pracy – Pomiar poznawczego aspektu ogólnego zadowolenia z pracy. Acta Universitatis Lodziensis Folia Psychologica. 2003; 7: 49–60.
29. Gurowiec P, Ogińska-Bulik N, Michalska P, Kędra E, Skarbaliene A. The role of satisfaction with job and cognitive trauma processing in the occurrence of secondary traumatic stress symptoms in medical providers working with trauma victims. Front Psychol. 2022; 12: 753173. doi: 10.3389/fpsyg.2021.753173
30. Hinderer K, Von Rueden K, Friedmann E, McQuillan K, Gilmore R, Kramer B, et al. Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. J Trauma Nurs. 2014; 21: 160–169. doi: 10.1097/JTN.0000000000000055
31. Kelly LA, Lefton C. Effect of meaningful recognition on critical care nurses' compassion fatigue. Am J Crit Care. 2017; 26: 438–444. doi: 10.4037/ajcc2017471
32. Kelly L, Runge J, Spencer C. Predictors of compassion fatigue and compassion satisfaction in acute care nurses. J Nurs Scholarsh. 2015; 47: 522–528. doi: 10.1111/jnu.12162
33. Wang J, Chizimuzo O, He H, Feng F, Li J, Zhuang L, et al. Factors associated with compassion satisfaction, burnout, and secondary traumatic stress among Chinese nurses in tertiary hospitals: a cross-sectional study. Int J Nurs Stud. 2020; 102: 103472. doi: 10.1016/j.ijnurstu.2019.103472
34. Balinbin CBV, Balatbat KTR, Balayan ANB, Balcueva MIC, Balicat MGB, Balidoy TAS, et al. Occupational determinants of compassion satisfaction and compassion fatigue among Filipino registered nurses. J Clin Nurs. 2020; 29: 955–963. doi: 10.1111/jocn.15163
35. Kleis A, Kellog M. Recalling stress and trauma in the workplace: qualitative study of pediatric nurses. Pediatr Nurs. 2020; 46: 5–10.
36. Gurowiec P, Ogińska-Bulik N, Michalska P. The mediating role of job satisfaction in the relationship between social support and the consequences of secondary exposure to trauma among medical providers working with trauma victims. Int J Occup Med Environ Health. 2023; 36(4): 505–516.
37. Bride B, Kintzle S. Secondary traumatic stress, job satisfaction, and occupational commitment in substance abuse counselors. Traumatology. 2011; 17: 22–28.
38. Mehra V, Srivastava S. The role of empathy in leadership on employee satisfaction and organizational performance: a qualitative analysis. Econ Sci. 2024; 20(2): 107–115. Available from: https://economic-sciences.com

39. Nakamura YT, Milner J. Inclusive leadership via empathic communication. Organ Dyn. 2023; 52(1). doi: 10.1016/j.orgdyn.2023.100957
40. Raižiene S, Endriulaitiene A. The relations among empathy, occupational commitment, and emotional exhaustion of nurses. Medicina. 2007; 43(5): 425–431.
41. Yue Z, Qin Y, Li Y, et al. Empathy and burnout in medical staff: mediating role of job satisfaction and job commitment. BMC Public Health. 2022; 22: 1033. doi: 10.1186/s12889-022-13405-4
42. Weathers F, Litz B, Keane T, Palmier P, Marx B, Schnurr P, et al. The PTSD Checklist for DSM-5 (PCL-5). National Center for PTSD. 2013. Available from: http://www.ptsd.va.gov
43. Ogińska-Bulik N, Juczyński Z, Lis-Turlejska M, Merecz-Kot D. Polska adaptacja PTSD Checklist for DSM-5 (PCL-5). Przegl Psychol. 2018; 61(2): 281–285. Available from: http://www.kul.pl/files/714/2.61.2018_art5.pdf
44. Kaźmierczak M, Plopa M, Retkowski S. Skala wrażliwości empatycznej. Przegl Psychol. 2007; 50(1): 9–24.
45. Davis MH. A multidimensional approach to individual differences in empathy. JSAS Catal Sel Doc Psychol. 1980; 10: 85.
46. Diener E, Emmons RA, Larsen RJ, Griffin S. The Satisfaction with Life Scale. J Pers Assess. 1985; 49: 71–75.
47. Preacher K, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behav Res Methods. 2008; 40: 879–891. doi: 10.3758/brm.40.3.879