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PERCEIVED STRESS AND BURNOUT The Mediating Role of Psychological, Professional Self-Care and Job Satisfaction as Preventive Factors in Helping Professions**

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Background: Stress and burnout are among the common causes of absenteeism and fluctuation of staff in European workplaces. Therefore, the demand for understanding the predictors of burnout in high risk professions has been growing. The aim of this study is to explore the link between perceived stress and the three dimensions of burnout (emotional exhaustion, depersonalization, and personal accomplishment) while considering the potential mediating role of self-care and job satisfaction that may prevent the transformation of stress into burnout.

Methods: A randomly selected group of Slovak social service professionals (N = 689; 618 women) from institutions in 8 districts in Slovakia described their levels of perceived stress, burnout, performed self-care and job satisfaction in self-reported questionnaires.

Results: The relationship between stress and emotional exhaustion is solely mediated by certain aspects of job satisfaction: salary, nature of work, and operating procedures. The relationship between stress and depersonalization is mediated by the nature of work, psychological self-care, and professional self-care. However, professional self-care does not prevent but rather facilitates the development of depersonalization in times of high perceived stress. The relationship between stress and personal accomplishment is mediated by psychological and professional self-care as well as by three factors of job satisfaction: co-workers, nature of work and job benefits. When stress increases, satisfaction with co-workers and nature of work prevent the decrease of personal accomplishment. However, job benefits, with increasing stress, may be related to a decrease in personal accomplishment at work.

Conclusion: Satisfaction with salary, nature of work, operating procedures and co-workers as well as psychological self-care may prevent the further development of burnout in times of high stress. Yet, professional self-care and job benefits may, in times of increased stress, potentially lead towards specific aspects of burnout (depersonalization and reduction of personal accomplishment).

Keywords: stress, burnout, job satisfaction, self-care, helping profession, social service, mental health

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1. Introduction

In the past 10 years, numerous studies and self-help books have been published about stress and burnout in the helping professions. These studies have emphasized the importance of personal resources and variability of self-care activities that could be beneficial (FIGLEY et al. 2013; NORCROSS & VANDENBOS 2018; TROTTER-MATHISON & SKOVHOLT 2014). Helping professionals work under demanding job conditions with a high level of responsibility (HAVRDOVÁ & ŠOLCOVÁ 2002), emotional strain (LLOYD et al. 2002), extraordinary emotional control and communication that needs to conform to ethical codex. Other possible stressors could also be poor supervision, conflicts in the workplace, a weak rewarding system, overworking (TILLEY & CHAMBERS 2003) or a discrepancy between ideals and work outcomes (LLOYD et al. 2002). Such job characteristics have been linked to the development of burnout syndrome (MASLACH et al. 2001; OGRESTA et al., 2008; SCHAUFELI & GREENGLASS 2001). However, the conditions in the field of social services are quite specific. Individuals working in this sphere may not be there for the salary or benefits, but rather for the nature of the work – the caring for others that may be experienced as rewarding in itself. While satisfaction with the nature of work is a strong motivator and engaging factor (HARTER et al. 2002), caring for others has also been identified as a risk factor for burnout (KALLIATH & MORRIS 2002).

COHEN and JANICKI-DEVERTS (2012) have assessed the levels of perceived stress across generations, races, and working groups in USA. Their study has revealed a continuing significant increase of perceived stress in the years from 1983 to 2006 to 2009. The current results from Slovakia have revealed that professionals working in social services experience higher levels of perceived stress on average (HRICOVÁ et al. 2017), especially when compared to the online accessible norms stated by Mind Garden (COHEN 1994), the publisher of the Perceived stress questionnaire. However, it seems that the publisher Mind Garden still offers non-updated norms closely related to COHEN and JANICKI-DEVERTS's (2012) results from 1983. On the other hand, the levels of burnout in helping professionals in Slovakia are not above average levels (KÖVEROVÁ & RÁZOVÁ 2017). The result of combined high perceived stress, yet not too high levels of burnout, could be related to the excessive turnover rate of helping professionals in social services that may leave this occupation before burnout symptoms fully develop. Therefore, there is an emerging quest for psychologists to identify the potential factors that could protect an individual from developing burnout in an environment that is already stressful. The aim of this study is to explore the possible role of job satisfaction and self-care in the stress-burnout relationship.

1.1. Stress and Burnout

Burnout can be defined as the state of physical, emotional, and mental exhaustion caused by long-term subsistence in extremely emotionally demanding work situations (SCHAUFELI & GREENGLASS 2001; KRISTENSEN et al. 2005). Burnout syndrome has been

described from the perspective of the tripartite component system that consists of emotional exhaustion, depersonalization, and reduced personal accomplishment. It can be understood as both a state with actual symptoms of physical and mental exhaustion or as a dynamic process (MASLACH & GOLDBERG 1998; SCHAUFELI & BUUNK, 2003). In the procedural approach, burnout syndrome develops in stages gradually due to increasing stress and the inability of a person to cope with their excessive workload (MASLACH et al. 2001; SCHAUFELI & BUUNK 2003). The relationship between chronic stress and burnout is positive but not straightforward. In other words, stress alone does not cause burnout (ROTHMANN et al. 2003; IACOVIDES et al. 2003). The environmental and personal triggers as well as inhibitors of burnout have been studied rigorously in previous studies. The Job Demands-Resources model (BAKKER & DEMEROUTI 2007; SCHAUFELI et al., 2009) and further Job Demands-Resources theory (BAKKER & DEMEROUTI 2014; 2017) assume that job demands may lead to energy depletion, exhaustion, and other health-related problems. Similarly, the Conservation of Resources (COR) theory (HOBFOLL 1989; HOBFOLL et al. 2018) suggests that the decrease of personal or job resources is connected to a steep increase of stress and could potentially lead to exhaustion. On the other hand, it has been found that satisfaction with personal or job resources might have a stress-reducing effect (HAKANEN et al. 2008; HOBFOLL 2018).

1.2. Job satisfaction

Job satisfaction represents the affective and cognitive response of an individual towards one's job situation (LOCKE 1976; SMITH et al. 1969). Two traditional approaches are used to assess job satisfaction – the global (overall, general) and the facet-type (sum of components or aspects). While facet-type job satisfaction may be beneficial for the assessment of specific areas of job satisfaction, the sum of these facets would not reflect overall job satisfaction. This is mostly due to the fact that each individual may perceive different facets as relevant or important.

1.3. Self-care

Self-care is a complex mix of physical, psychological, mental and spiritual activities that are performed by an individual with the aim of maintaining or improving health (CARROL et al. 1999), physical and psychological well-being and personal growth (GODFREY et al. 2011; LOVAŠ 2014). It is a self-regulated, deliberate, and aim-oriented activity (SEGALL & GOLDSTEIN 1989; LOVAŠ 2014). Self-care has been studied as a potential factor in preventing the development of negative outcomes in helping others such as burnout and compassion fatigue (ALKEMA et al. 2008; BARNETT et al. 2007; CARROL et al. 1999; GRINER 2013). Self-care activities are often encouraged due to their close link with compassion satisfaction and well-being (ALKEMA et al. 2008; RICHARDS et al. 2010). Therefore, self-care represents a natural starting point for the prevention of burnout syndrome or other negative consequences of helping professions (JONES 2005; MASLACH & GOLDBERG 1998).

1.4. The Present Study

The aim of this study is to analyze and identify the possible mediators between stress and the three factors of burnout in a specific sample of helping professionals. Three models have been created in order to examine the relationship between stress and these three aspects of burnout. This study attempts to explore the possible role of job satisfaction and self-care in the stress-burnout relationship. Although the relationship between stress and burnout has been previously studied, the possible mediating role of job satisfaction and performing self-care activities has not been empirically explored.

2. Materials and methods

2.1. Participants

The research sample comprised of 698 respondents from helping professions in the area of social services. Institutions that offer psychological support and social welfare services were randomly selected from a list on the Ministry of Labour, Social Affairs, and Family's website (Ministerstvo práce, sociálnych vecí a rodiny SR; <https://www.employment.gov.sk/en/>). The selection was done using a random number generator. There were 14 institutions from all 8 districts in Slovakia which were selected and recruited via e-mail and telephon communication. The contacted institutions that formally agreed to co-operate and were able to provide anonymity to the respondents, were sent the test batteries (pen-and-paper format). Research coordinators were present at the research locations and further explained the instructions. The response rate of the individuals from the institutions was 83.5%. All subjects participated voluntarily. The data collection was done from September 2015 to December 2016. The research was conducted as part of a large national study and received ethical approval. From the original sample ($N = 709$), 11 outliers were identified by the Mahalanobis' distances method and were subsequently excluded from further analysis. The final sample ($N = 698$) consisted of 618 women (88.5%), 74 men (10.6%) and 6 with no reported gender. The sample comprised of social workers $N = 188$; residential care providers $N = 191$; ergo, therapists $N = 97$ and providers of physical care $N = 222$ (nurses, physiotherapists, orderlies). The average age of the participants was 43.9 years ($SD = 10.4$). The participants received psychosocial support on a regular basis in the form of compulsory courses the state offered to these institutions.

2.2. Measures

Maslach Burnout Inventory – Human Services Survey (MBI-HSS; MASLACH et al. 1996). The inventory was translated in line with the purchased translation agreement (TA-673). The instrument consists of 22 items that measure three aspects of burnout syndrome; i.e. the level of emotional exhaustion (e.g. *I feel emotionally drained from*

my work'), depersonalization (e.g. *'I don't really care what happens to some recipients'*) and personal accomplishment (e.g. *'I feel I'm positively influencing other people's lives through my work'*). Respondents indicate the frequency of experiencing work-related feelings using a 7-point scale (0 = never; 6 = every day). The authors used positive scoring for personal accomplishment. Similarly, some meta-analyses (e.g. POGHOSYAN et al. 2009) have reported personal accomplishment as a positive criterion that decreases burnout. McDonald's omega reliability estimates were 0.89 for emotional exhaustion, 0.72 for depersonalization and 0.78 for personal accomplishment. The omega reliability has been preferred over alpha reliability indicator by several authors (CHO & KIM 2015; DUNN et al. 2014; TRIZANO-HERMOSILLA & ALVARADO 2016).

Perceived Stress Scale (PSS; COHEN et al. 1983). A Slovak translation (RÁCZOVÁ et al. 2018) of this 10-item measure was used to assess the level of perceived stress among helping professionals. Respondents are asked to indicate the frequency of their feelings and thoughts during the last month, on a 5-point scale (1 = never; 5 = very often); e.g. *'In the last month, how often have you felt nervous and "stressed"?'*. A higher score indicates a higher level of perceived stress. In the current study, the reliability (McDonald's omega) of the perceived stress scale was 0.79.

The Performed Self-Care Activities questionnaire (VSS; LICHNER 2017; LICHNER et al. 2018) is a 31-item questionnaire which measures performed activities in the sphere of self-care among helping professionals. Respondents are asked to answer how often they perform activities on a 5-point scale (1 = never; 5 = always). The questionnaire is comprised of four factors: psychological self-care (F1): maintaining a good atmosphere and relationships, positive thinking, control of emotions (e.g. *'I think positively'*), professional self-care (F2): education, professional growth, and self-development (e.g. *'To cope with the workload I use professional growth'*), health self-care (F3) (e.g. *'In the case of health problems, I visit a doctor'*), physical self-care (F4) (e.g. *'I play sports'*).

Previous research has revealed that activities in the sphere of professional and psychological self-care have the strongest relationship with burnout and other negative consequences from the helping professions (KÖVEROVÁ & RÁCZOVÁ 2017). Therefore, only these two selected factors were used in the current analysis. In this study, McDonald's omega reliability estimate for psychological self-care was 0.87 and 0.75 for professional self-care.

The Job Satisfaction Survey (JSS; SPECTOR 1985; 1997) is a 36-item multidimensional questionnaire. It consists of nine components: pay, promotion, supervision, fringe benefits (monetary and non-monetary benefits), contingent rewards (appreciation, recognition and rewards for good work), operating procedures (operating policies and procedures, administrative work), co-workers (their competence, sympathy), nature of work (job tasks themselves, perceived meaningfulness, joy from work) and communication within the organization (goals, assignments being well explained). The response format of the JSS is a 6-point scale (1 = highly disagree; 6 = highly agree). The reliability and validity of the translated scale has been tested on a large sample of

Table 1
Descriptive statistics and two-tailed Pearson correlation between used variables

	JSS					Self-care					MBI					Stress				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<i>JSS</i>																				
1 Pay	-	0.61***	0.67***	0.69***	0.22***	0.22***	0.32***	0.25***	0.43***	0.004	0.15***	-0.29***	-0.08*	0.07	-0.14***					
2 Promotion		-	0.58***	0.52***	0.19***	0.18***	0.25***	0.21***	0.34***	-0.01	0.13**	-0.18***	0.01	0.03	-0.05					
3 Benefits			-	0.60***	0.27***	0.28***	0.34***	0.27***	0.43***	-0.01	0.07	-0.26***	-0.13**	0.03	-0.16***					
4 Rewards				-	0.32***	0.24***	0.36***	0.25***	0.45**	-0.003	0.11**	-0.28***	-0.06	0.05	-0.15***					
5 Supervision					-	0.42***	0.46***	0.35***	0.20***	0.16**	0.09*	-0.27***	-0.17***	0.19***	-0.21***					
6 Coworkers						-	0.60***	0.37***	0.24***	0.15***	0.11**	-0.32***	-0.22***	0.25***	-0.37***					
7 Communication							-	0.60***	0.36***	0.46***	0.15***	-0.38***	-0.25***	0.21***	-0.39***					
8 Nature Of Work								-	0.38***	0.37***	0.38***	-0.52***	-0.37***	0.45***	-0.44***					
9 Operating Procedures									-	0.20***	0.34***	-0.32***	-0.13***	0.01	-0.21***					
<i>Self-care</i>										-										
10 Self-care F1											-	-0.20***	-0.26***	0.44***	-0.36***					
11 Self-care F2												-	-0.19***	0.39***	-0.28***					
<i>MBI</i>																				
12 Exhaustion																				
13 Depersonalisation																				
14 Personal Accomplishment																				
15 Perceived Stress																				
Mean	10.57	11.76	13.13	12.30	19.16	17.93	16.89	19.12	12.19	59.28	20.72	18.88	4.29	34.97	25.89					
Median	10.00	12.00	13.00	12.00	20.00	18.00	17.00	19.00	12.00	60.00	21.00	17.00	3.00	36.00	26.00					
SD	4.30	3.75	4.04	3.88	3.72	3.28	3.89	3.12	3.57	6.76	4.52	10.85	4.52	7.68	4.85					

professionals in helping occupations (MESÁROŠOVÁ 2016). The McDonald's omega reliability of the individual subscales in the current sample were: pay 0.77, promotion 0.73, supervision 0.75, fringe benefits 0.70, contingent rewards 0.70, operating procedures 0.71, coworkers 0.76, nature of work 0.72 and communication 0.72.

2.3. Data Preparation and Analytical procedures

The ordinary least squares regression analysis was used to compute the results of the three multiple mediation models. The models were tested in Process Macro 3.1 in SPSS (PREACHER & HAYES 2004) while the standardized effects were computed in Amos 21. The assumptions were tested in view of a 95% bias-corrected confidence interval based on 100,000 bootstrap samples. The correlation coefficients and alpha reliability were computed in SPSS 21.

3. Results

The correlation matrix (*Table 1*) shows that psychological and professional self-care are related to perceived stress in the helping professions. The factors of job satisfaction, with the exception of satisfaction with promotion ($r = -0.05$; $p = 0.19$), are also related to stress. As a result of satisfaction with promotion not being related to perceived stress, it has been excluded from the further path analysis. All factors of job satisfaction, as well as psychological and professional self-care, are related to the burnout factor of emotional exhaustion. With regard to the factors of burnout, the situation is different for depersonalization and personal accomplishment. Although psychological and professional self-care are related to emotional exhaustion and depersonalization (aspects of burnout), only some factors of job satisfaction are significantly related to these two aspects of burnout (*Table 1*). The descriptive statistics have revealed that the professional helpers in the sample seem to be satisfied with their supervision and management (89% were satisfied), co-workers (85.2%), communication at the workplace (73.6%) and nature of work (92.1%). However, it is important to mention that these professional helpers were often less satisfied in the dimensions of pay (only 17.3% were satisfied), promotion (21.2%), benefits (36.8%), rewards (26.6%) and operating procedures (25.2%).

3.1. Mediation model linking perceived stress and emotional exhaustion

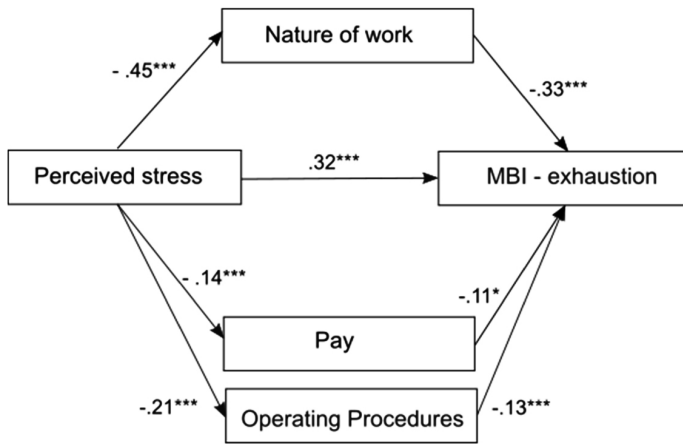
Perceived stress predicted 25.85% of the variability of MBI-emotional exhaustion. The total effect of the parallel multiple mediation analysis indicates that the model was significant $R^2 = 0.26$, $F(1.696) = 294.42$, $p < 0.001$. The direct effect (*Table 2*) of stress on emotional exhaustion was significant ($\beta = 0.317$; $p < 0.001$; 95% CI = 0.247, 0.384). The indirect effect of stress on emotional exhaustion was also significant ($\beta = 0.191$; $p < 0.001$; 95% CI = 0.145, 0.241). The relationship between stress and emotional exhaustion is partially mediated by factors of the JSS: satisfaction with

Table 2
Standardized Estimates of Direct and Total Indirect Effect of Stress in the Model
of Perceived Stress and MBI – Emotional Exhaustion (N=698)

<i>Effect</i>	<i>Standardized effects</i>	<i>95 % bias corrected CI for Bootstrapped Standard regression Weights</i>		<i>Bootstrap p</i>
<i>Total effect of stress on MBI-EE</i>	0.508	0.450	0.560	< 0.001
<i>Indirect effect</i>				
Stress → MBI-EE	0.191	0.145	0.241	< 0.001
<i>Direct effects</i>				
Stress → MBI-EE	0.317	0.247	0.384	< 0.001
PSS → Pay	-0.141	-0.214	-0.068	< 0.001
PSS → Benefits	-0.163	-0.237	-0.088	< 0.001
PSS → Rewards	-0.147	-0.224	-0.072	< 0.001
PSS → Supervision	-0.215	-0.291	-0.137	< 0.001
PSS → co-workers	-0.346	-0.413	-0.276	< 0.001
PSS → communication	-0.399	-0.468	-0.326	< 0.001
PSS → nature of work	-0.446	-0.502	-0.388	< 0.001
PSS → operating procedures	-0.213	-0.292	-0.132	< 0.001
PSS → psychological SC (F1)	-0.355	-0.415	-0.290	< 0.001
PSS → professional SC (F2)	-0.280	-0.349	-0.207	< 0.001
Pay → MBI-EE	-0.106	-0.195	-0.016	0.022
Benefits → MBI-EE	0.047	-0.042	0.134	0.307
Rewards → MBI-EE	-0.016	-0.106	0.078	0.752
Supervision → MBI-EE	-0.024	-0.105	0.056	0.551
co-workers → MBI-EE	-0.004	-0.077	0.070	0.936
communication → MBI-EE	-0.054	-0.131	0.026	0.176
nature of work → MBI-EE	-0.330	-0.405	-0.253	< 0.001
operating procedures → MBI-EE	-0.131	-0.199	-0.065	< 0.001
psychological SC (F1) → MBI-EE	0.067	-0.009	0.141	0.089
professional self-care (F2) → MBI-EE	-0.007	-0.080	0.066	0.842

Note: Bootstrap (10 000) 95% bias-corrected confidence intervals and Significance Levels. Confidence interval is significant when 0 is not included.

pay, nature of work and operating procedures (Table 2 and Figure 1). It was also found that increased stress is related to an increase in emotional exhaustion both directly and indirectly – through reduced satisfaction with pay, nature of work and operating procedures. The increase of perceived stress was related to a decline of satisfaction in the nature of the work, as well as satisfaction with pay, and operating procedures. However, satisfaction with the nature of work, pay, and operating procedures may buffer the development of emotional exhaustion (Table 2, Figure 1). The other factors of job satisfaction were not found to be significant mediators. Self-care activities were also not significant mediators. The assumptions were tested in view of a 95% bias-corrected confidence interval based on 100.000 bootstrap samples. All the direct and indirect effects are recorded in Table 2.



*p < 0.05; **p < 0.01; ***p < 0.001

Figure 1

Standardized effects in the Multiple mediation model predicting MBI – emotional exhaustion. Only significant mediators are defined.

The ratio of total indirect to direct effect: $R_M = 0.60$ (SE = 0.13; 95%CI = 0.40; 0.93) reveals that the indirect effect of stress on emotional exhaustion is 60% the size of the direct effect. From the total effect of stress on emotional exhaustion, in the presented model, the direct effect of stress determines emotional exhaustion more than the total indirect effect .

3.2. Mediation model linking perceived stress and depersonalization

The parallel multiple mediation analysis indicates that perceived stress predicts 9.72% of the variability of MBI-depersonalization. The total effect of the parallel multiple mediation analysis model was significant $R^2 = 0.10$, $F(10.696) = 80.43$,

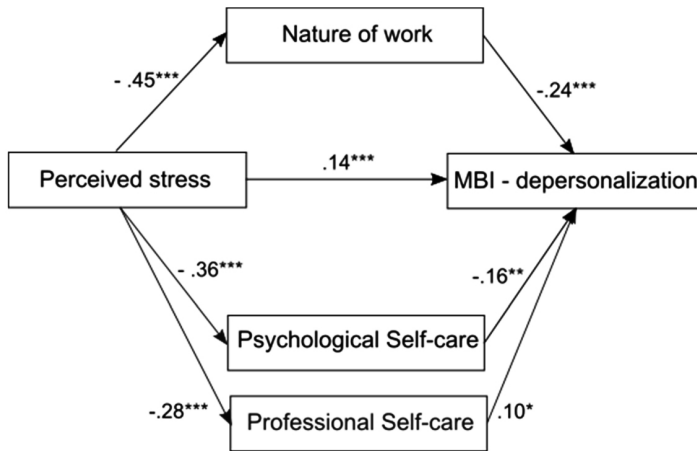
Table 3
Standardized estimates of total, direct, and indirect effects of stress in the Model
of Perceived stress and MBI – depersonalization (N=698)

<i>Effect</i>	<i>Standardized effects</i>	<i>95 % bias corrected CI for Bootstrapped Standard regression Weights</i>		<i>Bootstrap p</i>
<i>Total effect of stress on MBI-DP</i>	0.314	0.251	0.373	< 0.001
<i>Indirect effect</i>				
Stress → MBI-DP	0.179	0.131	0.232	< 0.001
<i>Direct effects</i>				
Stress → MBI-DP	0.135	0.056	0.212	< 0.001
PSS → Pay	-0.141	-0.214	-0.068	< 0.001
PSS → Benefits	-0.163	-0.237	-0.088	< 0.001
PSS → Rewards	-0.147	-0.224	-0.072	< 0.001
PSS → Supervision	-0.215	-0.291	-0.137	< 0.001
PSS → co-workers	-0.346	-0.413	-0.276	< 0.001
PSS → communication	-0.399	-0.468	-0.326	< 0.001
PSS → nature of work	-0.446	-0.502	-0.388	< 0.001
PSS → operating procedures	-0.213	-0.292	-0.132	< 0.001
PSS → psychological SC (F1)	-0.355	-0.415	-0.290	< 0.001
PSS → professional SC (F2)	-0.280	-0.349	-0.207	< 0.001
Pay → MBI-DP	0.022	-0.074	0.117	0.634
Benefits → MBI-DP	-0.068	-0.160	0.027	0.161
Rewards → MBI-DP	0.085	-0.015	0.181	0.089
Supervision → MBI-DP	0.002	-0.073	0.076	0.956
co-workers → MBI-DP	-0.017	-0.107	0.075	0.709
communication → MBI-DP	-0.087	-0.189	0.014	0.093
nature of work → MBI-DP	-0.243	-0.325	-0.154	< 0.001
operating procedures → MBI-DP	-0.039	-0.111	0.031	0.272
psychological SC (F1) → MBI-DP	-0.157	-0.245	-0.073	0.001
professional self-care (F2) → MBI-DP	0.104	0.025	0.180	0.010

Note: Bootstrap (10 000) 95% bias-corrected confidence intervals and Significance Levels.

$p < 0.001$. The results (Table 3, Figure 2) suggest that stress affects depersonalization both directly ($\beta = 0.135$; $p < 0.001$; 95%CI = 0.056, 0.212) and indirectly ($\beta = 0.179$; $p < 0.001$; 95%CI = 0.131, 0.232). The relationship between stress and depersonalization was partially mediated through one factor of the JSS: satisfaction with nature of work as well as both factors of self-care. The other factors of job satisfaction were not significant mediators in view of the 95% bias-corrected confidence interval based on 100.000 bootstrap samples. All direct and indirect effects are detailed in Table 3.

The indirect effect of stress on depersonalization is through decreased satisfaction with the nature of work and decreased psychological self-care. The satisfaction with the nature of work and performing psychological self-care are potential preventive factors in the development of depersonalization in times of high stress. On the other hand, professional self-care was negatively related to stress but positively related to depersonalization. Such results may suggest that with increased stress, performing professional self-care could potentially contribute towards depersonalization ($\beta = 0.104$; 95%CI = 0.025, 0.180; $p = 0.010$; Table 3, Figure 2)



* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Figure 2

Standardized effects in the Multiple mediation model predicting MBI – depersonalization. Only significant mediators are described. The model reveals the non-standardized effects.

3.3. Mediation model linking perceived stress and personal accomplishment

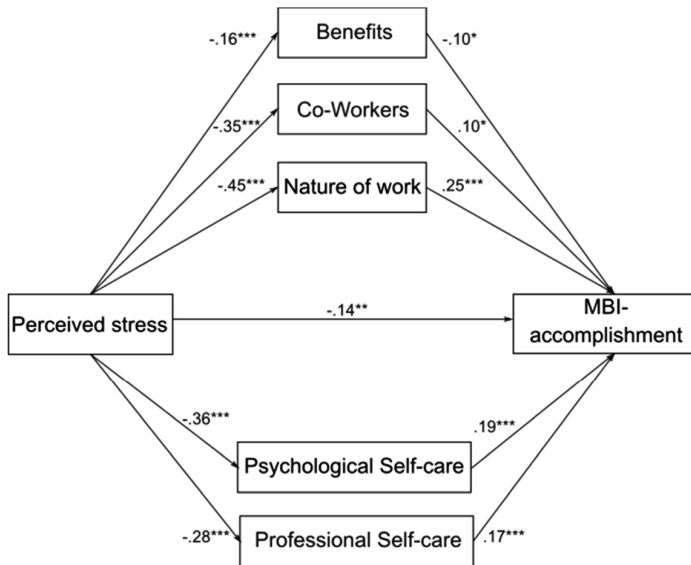
The results from the model indicate that stress predicts 13.4% of the variability of MBI-personal accomplishment. The total effect of the parallel multiple mediation analysis was significant $R^2 = 0.13$, $F(10.696) = 89.72$, $p < 0.001$. The direct effect of stress on personal accomplishment was significant and negative ($\beta = -0.135$; $p < 0.001$, CI = $-0.212, -0.056$). Thus, when perceived stress increases, an individual’s personal

Table 4
Standardized estimates of direct and total indirect effect of stress in the Model
of Perceived stress and MBI – personal accomplishment (N=698)

<i>Effect</i>	<i>Standardized effects</i>	<i>95 % bias corrected CI for Bootstrapped Standard regression Weights</i>		<i>Bootstrap p</i>
<i>Total effect</i>	-0.374	-0.443	-0.297	< 0.001
<i>Indirect effect</i>				
Stress → MBI-PA	-0.239	-0.296	-0.184	0.001
<i>Direct effects</i>				
Stress → MBI-PA	-0.136	-0.213	-0.056	0.001
PSS → Pay	-0.141	-0.213	-0.068	< 0.001
PSS → Benefits	-0.163	-0.237	-0.088	< 0.001
PSS → Rewards	-0.146	-0.222	-0.071	< 0.001
PSS → Supervision	-0.212	-0.287	-0.135	< 0.001
PSS → co-workers	-0.346	-0.413	-0.276	< 0.001
PSS → communication	-0.394	-0.463	-0.321	< 0.001
PSS → nature of work	-0.447	-0.504	-0.390	< 0.001
PSS → operating procedures	-0.219	-0.301	-0.136	< 0.001
PSS → psychological SC (F1)	-0.355	-0.415	-0.290	< 0.001
PSS → professional SC (F2)	-0.280	-0.349	-0.207	< 0.001
Pay → MBI-PA	0.044	-0.076	0.158	0.459
Benefits → MBI-PA	-0.098	-0.193	-0.001	0.047
Rewards → MBI-PA	-0.017	-0.121	0.089	0.784
Supervision → MBI-PA	0.027	-0.046	0.099	0.469
co-workers → MBI-PA	0.102	0.017	0.188	0.020
Communication → MBI-PA	-0.013	-0.109	0.088	0.800
nature of work → MBI-PA	0.252	0.159	0.341	< 0.001
operating procedures → MBI-PA	-0.065	-0.141	0.012	0.101
psychological SC (F1) → MBI-PA	0.190	0.101	0.275	< 0.001
professional self-care (F2) → MBI-PA	0.174	0.084	0.265	< 0.001

Note: Bootstrap (10 000) 95% bias-corrected confidence intervals and Significance Levels. Confidence interval is significant when 0 is not included.

accomplishment decreases. The indirect effect of stress on personal accomplishment was also significant ($\beta = -0.239$; $p < 0.001$, $CI = -0.212, -0.056$). The relationship between stress and MBI-personal accomplishment was partially mediated through the JSS factor of one’s satisfaction with co-workers, nature of work and benefits, as well as psychological and professional self-care (Table 4, Figure 3). The direct effects, as shown in Table 4, reveal that when perceived stress increases, an individual’s personal accomplishment decreases through the decrease of satisfaction with their co-workers, satisfaction with the nature of work, and the decline in both personal (F1) and professional self-care (F2). However, the effect of job benefits is different. Job benefits are negatively linked to stress ($\beta = -0.163$; 95% $CI = -0.237, -0.088$; $p < 0.001$) as well as being negatively related to personal accomplishment ($\beta = -0.098$; 95% $CI = -0.193, -0.001$; $p = 0.047$). The indirect effect of stress on personal accomplishment through satisfaction with job benefits (non-standardized) is significant and positive ($B = 0.03$, $SE = 0.01$, 95% $CI = 0.002; 0.06$). This result could indicate that with increasing stress, multiple job fringe benefits may contribute towards the decline of personal accomplishment. When stress levels rise, various fringe benefits offered by an organization could function as a hindrance to one’s personal accomplishment (MBI-PA). However, this effect may be specific for the sample of helping professionals in social services and will be discussed further.



* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Figure 3
Standardized effects in the Multiple mediation model predicting MBI – personal accomplishment. Only significant mediators are defined.

4. Discussion

The research into stress and burnout, as broad and diverse as it is, requires the development and testing of models that further explore the stress-burnout relationship. While it may not be possible to completely reduce stress in helping occupations, it may be possible to support self-care and areas of job satisfaction that prevent the development of emotional exhaustion, depersonalization, or support personal accomplishment in times of stress. The three described models explain which aspects of job satisfaction and self-care may mediate the effect of stress on particular aspects of burnout.

Stress, as a predictor in the development of emotional exhaustion, was solely mediated by the three factors of job satisfaction – satisfaction with pay, the nature of work and operating conditions. The work conditions in social services are characterized by low salaries and excessive administrative demands combined with a large number of clients and lack of time (LOVAŠOVÁ 2014; BALLY & ŠIŇANSKÁ 2014). The current study has supported these results – satisfaction with pay and satisfaction with operating conditions in the institution (administrative work, policies, and procedures) may in fact be protective factors in the development of emotional exhaustion. The nature of work was the strongest mediator between stress and emotional exhaustion. Satisfaction with the nature of work is related to perceived meaningfulness, pride or joy from job tasks. This corresponds to the findings from other studies (SHANAFELT 2009; ZAMMUNER et al. 2003) that have confirmed that people are able and willing to work under demanding conditions and high levels of stress if they feel that their work is meaningful and satisfying. The present results show that perceived meaningfulness and pleasure from one's work activities do not only decrease the risk of developing emotional exhaustion, but also decrease depersonalization and increase personal accomplishment in times of stress.

The relationship between stress and depersonalization was mediated by the nature of work as well as by both factors of self-care: psychological and professional. In times of increasing stress, those working in professional helping positions could decrease depersonalization by performing psychological self-care activities in the form of positive thinking, control of emotions or maintaining good relationships. On the other hand, in times of increasing stress levels, professional self-care (educational events, courses or congresses as forms of self-development, and self-education) may be perceived as too demanding and may contribute towards depersonalization.

The relationship between stress and personal accomplishment was significantly mediated by the factors of job satisfaction (fringe benefits, co-workers, nature of work) as well as the two factors of self-care: psychological and professional. Satisfaction with co-workers and the nature of work as well as performing psychological and professional self-care supports personal accomplishment in times of stress. However, the fringe benefits negatively relate to personal accomplishment with increasing perceived stress. The job benefits could potentially decrease feelings of personal accomplishment in times of high stress. One of the potential explanations

of this phenomenon could be that the fringe benefits in social service professions, as well as professional self-care, involve various educational and self-developmental events, courses or congresses that often require traveling and are time consuming. In addition, these job benefits often occur beyond working hours, during weekends and in some cases even during holidays. Although multiple studies have revealed that self-development in various forms could be beneficial for stress reduction, there may be cases when such job benefits are perceived as a hindrance – especially during times of an increase in perceived stress. In Slovakia, there are regular training sessions and professional development courses that have been mandatory for every professional helper since 2008. However, in practice, not all employers in helping professions offer the same quality of education for their employees and the sessions are often performed inside the organization with all co-workers. This may prevent employees from revealing certain problems which can further develop feelings of cynicism and alienation. Job benefits and professional self-care may be valuable in preventing stress, although in times of already increased stress, or when educational events are not performed well, it may contribute towards cynicism or reduced personal accomplishment. The results from this study support the findings of other studies (NIELSEN et al. 2006; AUST et al. 2010). These studies highlight the importance of screening for specific needs of individuals working for the organization as well as customizing and enhancing programs of intervention. The authors suggest that unfulfilled expectations about the usefulness of an intervention (or any educational or self-developmental event) may play a role in even worsening symptoms. The effect could be even more prominent in helping professionals who are constantly urged to self-develop and educate themselves, as suggested by the ethical code of conduct (American Counseling Association 2014). Such self-developmental and educational activities are time consuming. Scientists, as well as lawmakers in Slovakia, nowadays turn their interest to the protection of employees from dangers of changes in working environment (DOLOBÁČ & SEILEROVÁ 2018; SEILEROVÁ 2019), such as shifting working time and its relationship with stress. However, legislative authorities and internal policies have not yet developed mechanisms for protecting employees from institutional benefits happening beyond working hours. The results of this study suggest that it could be important to map the widely trending intervention and prevention courses, analyze the results, and identify possible clusters of individuals that may not benefit from such interventions. In addition, the results of this study may contribute to plausible explanations as to why stress-reducing interventions often have doubtful results or weak effect sizes of positive outcomes.

One of the limitations of this study could be the relatively simplified view of burnout as predicted by stress and only mediated by some self-care activities and areas of job satisfaction. This mechanism is most probably much more complex and not as straightforward and unidirectional as has been assumed. Moreover, from the two-factor theory of stress, it is known that not all stress contributes towards negative outcomes. Stress could also lead to personal growth and increased performance (CAVANAUGH et al. 2000; PODSAKOFF et al. 2005). This was partially supported by the

results of this study in the model of stress which predicted personal accomplishment, in which one of the indirect effects (through reducing job benefits) revealed a positive prediction of personal accomplishment. It can be hypothesized that when there are not too many time-consuming hindrances, stress could potentially lead towards personal accomplishment. However, it has to be noted that the study was cross-sectional and any causal relationships would have to be tested by a study with an experimental design. In future research, it will be possible to add also more specific demographical, socio-economical, and job specification variables into the analysis.

5. Practical application

The prolonged impact of the negative effects of burnout can threaten the physical and mental health of helping professionals. This study was conducted with the aim of exploring the role of psychological and professional self-care activities and job satisfaction variables as possible preventive mediators between stress and burnout.

The results indicate that organizations should support satisfaction with the nature of work as it could buffer the development of all three areas of burnout – emotional exhaustion, depersonalization and personal accomplishment. The nature of work in all the studied occupations is caring for others, which may not only be perceived as meaningful, but also as engaging and may prevent burnout from developing. In addition, burnout could be prevented by improving working conditions – by increasing salaries or decreasing the administrative workload and improving co-worker relationships. However, some of these issues may need to be negotiated at the level of government policy.

Psychological self-care, in the form of maintaining both a good atmosphere and good relationships at work, improving positive thinking, and enhancing emotional control, was significant in preventing emotional exhaustion and depersonalization and increasing personal accomplishment. Professional self-care, in the form of pursuing education and self-development, can prevent the development of depersonalization and support personal accomplishment. Specific self-care activities are in many forms very similar to coping strategies. However, coping is an individual's response solely to a stressor (FOLKMAN 2009), and self-care may or may not necessarily be conditioned by stress (GODFREY et al. 2010).

These promising results for the institutions may be achieved by offering effective prevention programs aimed at individuals before they have already perceived overly high levels of stress. The study has revealed that institutions and employees should respect the specific needs of professional helpers, the variability of their personal resources or family situations in order not to further increase their current levels of perceived stress. Various educational events and self-development benefits should be offered, rather than imposed on helping professionals, as they may potentially worsen some aspects of burnout in cases of already high levels of stress.

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