BURNOUT SYNDROME IN SLOVAK TEACHERS IN RELATION TO SELECTED VARIABLES OF THE JOB DEMAND RESOURCES MODEL

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Abstract. The aim of this paper is to explore and analyse the prevalence of risk factors (and factors) associated with burnout among Slovak teachers. The research sample consists of 274 respondents: teachers, school principals, and other pedagogical staff. We used the Job Demand Resources Model (JD-R model), which suggests that the interplay between job demands and resources determines the overall impact on employee well-being. Jobs with high demands and low resources are likely to lead to burnout and health issues, while jobs with high demands but sufficient resources can lead to positive outcomes such as increased motivation and job satisfaction. Investigating burnout in teachers is essential for promoting the well-being of educators, maintaining a high-quality education system, and ensuring positive outcomes for both teachers and learners. Based on the Job Demand Resources Model, this study aims to analyse the relationship between selected variables and burnout syndrome among Slovak teachers.

Keywords: Burnout, Job Demand Resources Model, Risk Factors, Teachers, Well-being

Introduction

Educators and also teacher at higher education institutions have become more concerned about burnout syndrome in recent years. (Naidoo-Chetty & Plessis, 2021). This can be attributed to a variety of factors, including high job demands, limited job resources, and the impact of external variables such as student/pupil performance. Teacher burnout is a critical issue affecting the well-being of educators, with implications for both the teachers themselves and their students/pupils. Stress, anxiety, and depression are linked to higher levels of teacher burnout. Several studies (Bakker et al., 2004, Huang et al., 2015) have investigated the relationship between burnout and various factors, employing the Job Demands-Resources model as a theoretical framework. The demands placed on teachers, such as expanding class sizes and increased workload, have been identified as key contributors to burnout (Hakanen et al., 2006). According to the

Job Demands-Resources model, job resources play a crucial role in preventing the health-impairment process and promoting employee well-being (Hakanen et al., 2006). These resources include support from their colleagues and supervisors, opportunities for professional development, autonomy in decision-making, and a positive work environment (Nahrgang et al., 2011). The aim of this paper is to explore and analyse the prevalence of risk factors (and factors) associated with burnout among Slovak teachers.

Burnout Syndrome in Slovak Teachers

Burnout syndrome among Slovak teachers is a significant issue that needs to be addressed. Teachers are overworked, suffer from the low social status of the profession, and lack the help of professionals such as teaching assistants, social educators, school psychologists and special educators in schools. These factors contribute to high job demands and limited job resources, which increase the risk of burnout among Slovak teachers.

In the Slovak research (Žitniaková Gurgová & Behúňová, 2017), teachers most often consider the presence of a pupil with special needs, frequent legislative changes, and the social evaluation of their work to be extremely stressful in their work. Teachers describe their further education, salary conditions, holding multiple positions or working overtime as very stressful. Teachers considered the following to be common manifestations of stress physical exhaustion, mental exhaustion, susceptibility to illness, pain headaches and internal tension. Thus, symptoms that may indicate an increased risk of burnout syndrome. 36% of teachers show a critical level of burnout (Žitniaková Gurgová & Behúňová, 2017).

In research on burnout syndrome of Slovak grammar schoolteachers (Hennelová & Preisingerová, 2012), the negative relationship between emotional exhaustion and reduced personal satisfaction was confirmed. As emotional exhaustion increased, teachers' personal satisfaction decreased. In the thematic area of gender differences, the hypothesis of a higher level of depersonalization scores for males compared to females was confirmed.

Reducing stress and burnout in teachers has been shown to have positive effects on their well-being, commitment to their work, and level of distress. (Carroll et al., 2021). Additionally, teacher well-being has been linked to student outcomes, highlighting the importance of addressing burnout not only for teachers' sake but also for the benefit of their students (Ross et al., 2011). Teacher self-efficacy has been found to be a predictor of psychological well-being, highlighting the importance of empowering teachers and building their confidence in their professional roles (Cansoy et al., 2020).

Methodology

The main objective of the pilot quantitative study is to identify and analyse the prevalence of risk factors associated with burnout syndrome among Slovak teachers. The partial research objectives are:

- Determine the extent of job requirements and resources of the respondents.
- Determine the extent of burnout syndrome among the respondents.
- Analyse the relationship between job requirements and resources and the burnout syndrome among the respondents.

The main research tool used was an electronic questionnaire consisting of three parts. In the first part, respondents provided basic sociodemographic characteristics, including gender, age, highest education attained, current job position, and length of experience. The second part of the questionnaire consisted of the Work-related version of the Burnout Assessment Tool (BAT) (Schaufeli, Witte & Desart, 2020), mapping core symptoms (exhaustion, mental distance, cognitive impairment, emotional impairment) and secondary symptoms (psychological complaints, psychosomatic complaints). The third part was based on the Job Demand Resources (JDR) concept (Bakker & Demerouti, 2017), focusing on nine areas – work overload, emotional, mental and physical demands, role conflict, harassment, role clarity, team spirit, bureaucracy, personal conflict, and reciprocity. The individual variables of both BAT and JDR were scaled on a 5-point Likert scale (1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = always).

The research sample consisted of 266 respondents (n=226 females, n=40 males) aged 24 to 66 years (M=43), with the most numerous group being respondents aged 40 to 49 years (n=117).

The largest part of the research sample consisted of respondents in the position of teacher (n=225), the remaining part consisted of respondents in the position of teacher's assistant and tutor (n=21), psychologist and special educator (n=9) and technical and economic workers (n=6). More than half of the respondents (60.9%) also hold a managerial position in their job.

Research results

The results of the research are presented in the context of the main objective and partial objectives mentioned above.

• Job Demands and Resources of Teachers

Table 1 documents the state of job demands and resources of our respondents. For their assessment, we used the JDR questionnaire, focusing on 9 selected areas, namely work overload, emotional, mental, and physical demands, role conflict, harassment, role clarity, team spirit, bureaucracy, personal conflict,

and reciprocity. In each area, respondents could provide their response on a Likert scale ranging from 1 (never) to 5 (always). In analysing the obtained research data, we employed one-dimensional descriptive methods, and the results are presented in the following frequency table:

	n	Me	Std. Deviation		
	11	Statistic	Std. Error	Sid. Deviation	
work overload	265	3,378	,0488	,7949	
emotional mental-physical demands	265	3,309	,0376	,6126	
role conflict	265	2,574	,0533	,8674	
role clarity	265	4,429	,0503	,8194	
harrassment	264	1,104	,0169	,2752	
personal conflict	264	1,64	,052	,843	
team spirit	265	4,113	,0527	,8586	
red tape (bureaucracy)	264	3,0196	,05798	,94199	
reciprocity	265	2,98	,078	1,267	

Table 1 Descriptive Statistics JDR (made by authors)

The above table shows that respondents in the work overload domain on average reported that they experience work overload "sometimes" (M=3.378; SD=.7949). The responses to the specific questions in this area showed that 40.91% of the respondents often have too much work to do and also that 45.28% of the respondents often have to do multiple tasks at the same time.

The qualitative requirements comprising emotional, mental, and physical requirements were reported by respondents on a scale averaging "sometimes" (M=3.309; SD=.0376). We assume that, given the nature of the work for both pedagogical and non-pedagogical staff, only 8% mentioned the physical demands of their work. Frequent emotional demands at work were declared by 46.2% of respondents, and frequent mental demands were expressed by 84.6% of respondents.

The other two JDR items focused on examining job roles, specifically their clarity and the incidence of conflict between multiple roles. The mean of the respondents' answers shows that role conflict rarely occurs (M=2.574; SD=.0533) and complementary to this, role clarity occurs frequently (M=4.429; SD=.0503). The majority of respondents (67.3%) indicated that they never or rarely encounter incompatible demands placed on their position. Most respondents also confirmed that they are clear enough about what they are supposed to do at work (88.7%) and what is expected of them at work (88.7%).

The research data recorded, on average, a low occurrence of harassment (M=1.104; SD=.0169) and personal conflicts in the workplace (M=1.64; SD=.052). A detailed analysis of the data shows that 3.8% of respondents often or always experience personal conflicts in the workplace, and 11.3% of respondents are frequently exposed to discrimination, bullying, threats of violence, or unwanted sexual attention in the workplace.

Workplace relationships were also associated with the item "team spirit," where the majority of respondents indicated that they feel good in their team (81.2%) and that there is usually a good atmosphere in their work team (79.3%).

Another explored area was bureaucracy, referring to the execution of professional organizational and administrative tasks. In this area, we asked our respondents about compliance with rules, regulations, and procedures in their employment. Regarding the frequent presence of unnecessary rules, procedures, and regulations, 29.3% of respondents expressed encountering them often, and an additional 29.3% mentioned encountering such rules only sometimes. At the same time, 45.9% of respondents stated that even though they encounter unnecessary regulations in their job, these rules do not hinder them in performing their work.

The last area of the JDR questionnaire focused on mapping reciprocity, i.e., the relationship between expended work effort and the reward received for the job done. 39.1% of the respondents stated that they receive sufficient value for the work they do, while 35.7% disagreed with this statement, and 24.8% of respondents expressed uncertainty.

• Teachers' burnout syndrome

To investigate the extent of burnout syndrome among Slovak teachers, we chose the Burnout Assessment Tool (BAT) as a research tool, currently used as an alternative to previously used tools, which we are currently adapting and validating in Slovakia.

According to the BAT concept, burnout syndrome is composed of several components, including core symptoms (exhaustion, mental distance, cognitive impairment, emotional impairment) and secondary symptoms (psychological complaints, psychosomatic complaints). Each of these components contains between 5 and 8 questions that respondents could answer using a Likert scale ranging from 1 (never) to 5 (always).

The analysis of the obtained empirical data was carried out using onedimensional descriptive methods, the results of which are presented in the following table:

From the above data, we can see that symptoms of burnout syndrome rarely or never occur in the sample of teachers we studied (M=1.979; p=.0308). Despite this low prevalence of burnout syndrome, in the next section we discuss the analysis between the above JDR results and the BAT results.

Table 2 Descriptive Statistics BAT (made by authors)

N	Valid	266				
	Missing	0				
Mean		1,979				
Std. Error	of Mean	,0308				
Median		1,924				
Mode		1,5 ^a				
Std. Devia	ition	,5019				
Skewness		,677				
Std. Error	of Skewness	,149				
Kurtosis		,163				
Std. Error	of Kurtosis	,298				
a. Multiple r	a. Multiple modes exist. The smallest value is shown					

• The correlation between job demands and burnout syndrome

Table 3 shows the correlation coefficients between the selected variables of the JD-R model and the individual components of burnout syndrome found among Slovak teachers.

Table 3 Correlation coefficients between selected variables of the JD-R model and BAT (made by authors)

		exhaustion	mental	cognitive	emotional	psychological	psychological	burnout
			distance	impairment	impairment	distress	complaints	S
work overload	r	,516**	,388**	,348**	,291**			,506**
	p	,000	,000	,000	,000	,000	,000	,000
Overload	N	265	265	265	265	265	265	265
emotional	r	,387**	,190**	,158**	,172**	,256**	,285**	,327**
mental-	p	,000	,002	,010	,005	,000	,000	,000
physical demands	N	265	265	265	265	265	265	265
	r	,406**	,453**	,303**	,323**	,375**	,370**	,472**
role conflict	p	,000	,000	,000	,000	,000	,000	,000
	N	265	265	265	265	265	265	265
	r	,158*	,273**	,112	,058	,203**	,143*	,203**
harrassment	p	,010	,000	,070	,351	,001	,020	,001
	N	264	264	264	264	264	264	264
role clarity	r	-,190**	-,255**	-,238**	-,195**	-,214**	-,147*	-,256**
	p	,002	,000	,000	,001	,000	,017	,000
	N	265	265	265	265	265	265	265
	r	-,354**	-,386**	-,177**	-,268**	-,376**	-,257**	-,392**
toom animit	p	,000	,000	,004	,000	,000	,000	,000
team spirit	N	265	265	265	265	265	265	265
	N	265	265	265	265	265	265	265

personal conflict	r	,221**	,281**	,206**	,324**	,257**	,162**	,299**
	p	,000	,000	,001	,000	,000	,008	,000
	N	264	264	264	264	264	264	264
reciprocity	r	-,224**	-,210**	-,075	-,122*	-,195**	-,181**	-,225**
	p	,000	,001	,223	,047	,001	,003	,000
	N	265	265	265	265	265	265	265
red tape (bureaucracy)	r	,408**	,385**	,297**	,291**	,327**	,340**	,437**
	p	,000	,000	,000	,000	,000	,000	,000
	N	264	264	264	264	264	264	264

R=Pearson correlate; p=Sig.(2-tailed); N=sample size

From the provided data, it can be inferred that individual components of burnout syndrome are in a moderately strong to strong positive correlation with work overload, emotional, mental, and physical demands, role conflict, and bureaucracy. There is a less strong positive correlation with the variables of harassment and personal conflict. A moderately strong to strong negative correlation is associated with the team spirit and reciprocity variables, and a weaker negative relationship is observed between burnout and role clarity.

Conclusion

The main objective of our pilot study was to determine and analyse the prevalence of risk factors associated with burnout syndrome among Slovak teachers. To achieve this goal, we employed basic descriptive statistical methods and conducted a correlation analysis of data obtained through an electronic questionnaire divided into two key segments – job demands (JDR) and burnout syndrome (BAT). Based on the pilot study conducted, several factors were found to be associated with burnout syndrome among Slovak teachers. The findings of this study support the job demands-resources model, which proposes that job demands and resources have different effects on burnout. We consider the key findings of this pilot study to be the identification of a moderately strong to strong correlation between the occurrence of burnout syndrome and risk factors influencing its prevalence. These factors include work overload, emotional and mental demands, role conflict in the workplace, and personal conflicts among teachers.

The research results indicate that more than a third of teachers frequently have too much work in their profession, and almost half of the surveyed teachers often have to perform multiple tasks simultaneously. The research findings also highlight the fact that their work overload is compounded by the mental and emotional demands required by their job. In other research it was found out, teacher burnout has been associated with increased levels of attrition, stress, and decreased job satisfaction (Pillay et al., 2005). The workload model that neglects the welfare of faculty members contributes to stress and burnout, emphasizing the

need to prioritize teacher well-being in academic settings (Roos & Borkoski, 2021).

Based on our findings, we would like to call for the need for prevention and intervention aimed at preventing and reducing burnout syndrome among teachers, both on the part of teachers themselves and their employers. Addressing teacher burnout is crucial for promoting the well-being of educators and improving student outcomes.

In conclusion, we would like to note that a significant limitation of the conducted study is the size of the examined sample. In the future, it would be necessary to conduct such research on a larger and more representative sample of respondents.

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References

- Bakker, A. B., & Demerouti, E. (2017). Job demands—resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83–104. DOI: https://doi.org/10.1002/hrm.20004
- Cansoy, R., Parlar, H., & Türkoğlu, M. (2020). A predictor of teachers' psychological well-being: teacher self-efficacy. *International Online Journal of Educational Sciences*, 12(4). DOI: https://doi.org/10.15345/iojes.2020.04.003
- Carroll, A., York, A., Fynes-Clinton, S., Sanders-O'Connor, E., Flynn, L., Bower, J., Forrest, K., & Ziaei, M. (2021). The downstream effects of Teacher Well-Being Programs: Improvements in teachers' stress, cognition and Well-Being benefit their students. *Frontiers in Psychology, 12.* DOI: https://doi.org/10.3389/fpsyg.2021.689628
- Hakanen, J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495–513. DOI: https://doi.org/10.1016/j.jsp.2005.11.001
- Hennelová, K., & Preisingerová, M. (2012). Syndróm vyhorenia u učiteľov gymnázií v kontexte demografických premenných. In Psychológia práce a organizácie 2012 (pp. 102–110). UPJŠ.
- Huang, J., Wang, Y., & You, X. (2015). The Job Demands-Resources Model and Job Burnout: The Mediating role of personal resources. *Current Psychology*, 35(4), 562–569. DOI: https://doi.org/10.1007/s12144-015-9321-2
- Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71–94. DOI: https://doi.org/10.1037/a0021484

- Naidoo-Chetty, M., & Du Plessis, M. (2021). Job demands and job resources of academics in higher education. *Frontiers in Psychology*, 12. DOI: https://doi.org/10.3389/fpsyg.2021.631171
- Pillay, H., Goddard, R., & Wilss, L. (2005). Well-being, burnout and competence: implications for teachers. *Australian Journal of Teacher Education*, 30(2). DOI: https://doi.org/10.14221/ajte.2005v30n2.3
- Schaufeli, W., De Witte, H., & Desart, S. (2020). *Manual Burnout Assessment Tool (BAT) Version 2.0.* Belgium: Unpublished internal report.
- Roos, B. H., & Borkoski, C. (2021). Attending to the Teacher in the Teaching: Prioritizing Faculty Well-Being. *Perspectives of the ASHA Special Interest Groups*, 6(4), 831–840.
- Ross, S., Romer, N., & Horner, R. (2011). Teacher well-being and the implementation of school-wide positive behavior interventions and supports. Journal of Positive Behavior Interventions, 14(2), 118-128.
- Žitniaková Gurgová, B., & Behúňová, L. (2017). Stresory a syndróm vyhorenia v práci učiteľa ZŠ. *Pedagogika.sk*, 8(2), 92–108. Retrieved from: http://www.casopispedagogika.sk/rocnik-8/cislo-2/studia-gurgova.pdf