

The Role of Mindfulness and Resilience in Predicting Job Burnout among Slovenian Primary School Teachers

Petra Dolenc

University of Primorska

petra.dolenc@pef.upr.si

The issue of mental health in the workplace is becoming an increasingly important area of research. Teachers, like other people-oriented professions, are particularly susceptible to burnout syndrome, thus it is important to investigate personal resources that mitigate employee burnout. The objective of this study was to examine the role of mindfulness and resilience in predicting teacher burnout in the workplace. The study included 194 Slovenian primary school teachers who completed the Brief Resilience Scale, the Copenhagen Burnout Inventory, and the Mindful Attention Awareness Scale. Results showed work experiences were positively associated with mindfulness and resilience but not with burnout. Regression analysis revealed that higher levels of mindfulness and resilience were significant predictors of lower levels of burnout ($R^2 = 0.441$, $F(1,192) = 69.91$, $p < 0.001$). The findings suggest that cultivating resilience and mindfulness may assist in preventing psychological distress and burnout in teachers.

Keywords: stress, burnout, mindfulness, resilience, teachers

Introduction

Mental health issues in the workplace are becoming increasingly important areas of research, as they have been recognized as a problem in most countries given their high social and economic burdens (Oliveira et al. 2023; Zweifel 2021). Mental health can be defined as a state of well-being in which an individual realizes his or her abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to the community (World Health Organization 2022). Mental health is more than the absence of mental illness; it exists on a complex continuum ranging from positive mental health to mental disorders with severe symptoms such as panic attacks and major depressive episodes. However, between these two extremes, an individual may experience mental health problems (e.g. difficulty coping with problems, sleep problems, poor self-esteem, etc.), which do not yet represent a clinically significant disturbance but can be a risk

factor for their occurrence (Jeriček Klanšček, Hribar, and Bajt 2017). The European Agency for Safety and Health at Work (Evropska agencija za varnost in zdravje pri delu n.d.) reports that occupational stress is one of the most important causes of health problems, affecting nearly a quarter of employees in the European Union. Poor mental health can be reflected in many adverse outcomes such as decreased productivity, absenteeism, reduced well-being, and work capacity of employees (Uribe et al. 2017). Moreover, mental health conditions are often a reason for quitting a job or even early retirement (Bajt, Jeriček Klanšček, and Britovšek 2015, 26).

Teaching is a well-known context for generating many emotional demands as it involves an ongoing and intense level of personal interactions with students, parents, and colleagues. Therefore, teachers are a professional category particularly exposed to psychosocial risk and burnout (Arvidsson et al. 2016; Schonfeld, Bianchi, and Luehring-Jones 2017) along with other people-oriented professions, such as human services and healthcare (Maslach and Leiter 2016). According to Horgan, Howard, and Gardiner-Hyland (2018), 25% of teachers describe their job as exhausting or extremely stressful.

Burnout can be defined as a psychological syndrome that develops in response to excessive and prolonged work stress that has not been successfully managed. It can be viewed as a process including different symptoms: physical/emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach and Leiter 2016). The burnout process often ends with aversion to everything, feelings of despair, and guilt (Korunka et al. 2010). For teachers, burnout is associated with various mental health issues, including psychosomatic symptoms, anxiety, and depression (Desouky and Allam 2017; Gibson and Carroll 2021), more frequent physical health problems (De Simone et al. 2016; Huyghebaert et al. 2018), a decline in self-efficacy (Capone, Joshanloo, and Park 2019) and job satisfaction (Skaalvik and Skaalvik 2015), and greater intention to leave the teaching profession (Rajendran, Watt, and Richardson 2020). Moreover, teacher burnout is also linked to poor quality of work and poor student outcomes (McLean and Connor 2015). Continued stress and nonadaptive coping strategies in teachers have a negative impact on teacher-student relationships, which can further contribute to worse academic achievement and lower the quality of motivation among students (Madigan and Kim 2021). In turn, poor interpersonal relationships between the teacher and students have adverse effects on the teacher's mental health and well-being (Herman, Hickmon-Rosa, and Reinke 2018; Spilt, Koomen, and Thijs 2011).

The burnout process is often described as a mismatch between high job and personal demands and low resources, most widely characterized by emotional exhaustion, depersonalization (a cynical attitude toward the job), and lack of personal accomplishment (Maslach and Leiter 2016). Several job demands have been identified as important for understanding burnout among teachers, including excessive workload, time pressure (Guidetti et al. 2018), student misbehaviour (Aloe et al. 2014), role ambiguity and role conflicts (Alyamy and Loh 2020). In terms of personal demands, some sociodemographic factors (e.g. being younger, having less work experience; Mousavy et al. (2012)) and personality traits (e.g. neuroticism; Genoud and Waroux (2021)) were found to increase teachers' likelihood of experiencing burnout. On the other hand, many resources associated with the work environment and personal characteristics of teachers were also studied (Bakker, Demerouti, and Sanz-Vergel 2014). Several authors indicated that perceived social support in the workplace is a valuable job resource for teachers (e.g. Langher, Caputo, and Ricci 2017) since it buffers the negative effects of demands on stress and burnout. In terms of individual-level resources, personality factors such as teaching efficacy (Eddy et al. 2020; Herman, Hickmon-Rosa, and Reinke 2018), emotional regulation, and subjective well-being (Carroll et al. 2022) were associated with reduced teacher burnout. According to Greenberg, Brown, and Abenavoli (2016), different coping strategies can be effective at preventing or reducing stress and burnout, including physical activity, psychological relaxation or meditation, cognitive behavioural approaches to improve active coping skills (e.g. cognitive restructuring), assertiveness training, and goal-setting.

Results from broader psychology literature indicate that mindfulness may be a highly valuable personal resource in dealing with stressful events and improving mental health (Abenavoli et al. 2013; Menardo et al. 2022). Mindfulness is often defined as a state of active, open attention to the present moment; being mindful means observing one's thoughts and feelings without judging them as good or bad, rather accepting them as they are (Brown and Ryan 2003). Research findings have shown that mindful states of teachers can be promoted through intervention programmes (Lensen et al. 2021; Roeser et al. 2013) such as mindfulness-based stress reduction (MBSR) developed by Kabat-Zinn (2003). MBSR programmes have been shown to be effective in improving emotional regulation skills. Teachers who possess these skills build more supportive relationships with their students, show more mental resilience, and experience more positive emotions and job satisfaction (Jennings et al. 2017). In a systematic review (Luken and Sammons 2016), six of the

eight studies demonstrated statistically significant decreases in job burnout after mindfulness training among health care professionals and teachers. In addition to state mindfulness, which assumes being mindful at a particular time, mindfulness can be considered also a dispositional trait that refers to the tendency to be mindful in everyday life, in which individuals may differ from one another (Brown and Ryan 2003).

Among the different personal resources, resilience is also recognized as an important protective factor that can significantly reduce stress and prevent the development of burnout in teachers (Richards et al. 2016). Resilience can be defined as an individual's ability to maintain relatively stable and healthy levels of functioning, and successfully cope with or recover from adverse situations (Connor and Davidson 2003; Fletcher and Sarkar 2013). Thus, resilience is associated with positive adaptations of the person, despite past and/or daily stressful circumstances or traumatic events (Luthar, Lyman, and Crossman 2014). Resilient teachers are thus able to persist through difficulties and to cope effectively in various stressful situations while balancing their needs and those of their students (Gloria, Faulk, and Steinhardt 2013). The concept of resilience helps us understand why some teachers overcome adversity and others succumb to the challenges of their profession. Despite the fact that some personal characteristics are significantly related to resilience such as persistence, passion, optimism, and life satisfaction (Fleming, Mackrain, and LeBuffe 2013, 388), resilience is not an innate quality; rather, it can be understood as a dynamic construct that emerges within the interplay between personal behaviours and skills (e.g. self-esteem and communication skills) and social environment (e.g. social support and resources available in the workplace and life). Therefore, resilience can be nurtured and developed (Richards et al. 2016). A recent systematic review that analysed scientific outputs published between 2016 and 2020 has shown that teachers who present high levels of resilience manage to satisfactorily tackle the difficult situations they are faced with at work. According to González-Valero and colleagues (2021), this can be achieved through the cognitive reframing of potentially threatening situations into personal challenges and growth.

Although past studies have recognized the importance of personal resources such as resilience and mindfulness in reducing the risk of burnout, there is a lack of such research in Slovenia. Additionally, previous studies have mainly examined the effect of a single psychological construct on burnout; however, there has been less research on the contribution of both constructs in predicting burnout. The latter was investigated with respect to certain professional groups such as first responders and health profession-

als (Kaplan et al. 2017; Montero-Marin et al. 2015) but not education professionals. Therefore, the objective of this study was to investigate the level of burnout, resilience, and mindfulness among primary school teachers and the relationship between these variables. The main goal was to examine the degree to which mindfulness and resilience together predict work-related burnout in teachers. We were also interested in finding out how teaching experience is related to burnout, mindfulness, and resilience. Previous findings have yielded inconclusive results regarding the relationship between teacher burnout and length of service: some report a positive correlation (Dias, Peixoto, and Cadime 2021), others a negative one (Turtulla 2017), and still others no correlation (Galanakis et al. 2020).

Since two instruments (for assessing burnout and resilience) were translated into Slovenian for this study, we also verified their factor structure.

Methods

Participants

The study included 194 teachers (1st to 5th grade) employed in primary schools in various Slovenian statistical regions. The age of the participants was between 24 and 57 years ($M = 37.34$; $SD = 9.59$), and their work experience in education ranged between 1 and 35 years ($M = 12.63$; $SD = 8.94$). The research sample consisted of 97.4% women.

Instruments

In addition to sociodemographic data (gender, age, years of employment at current organization), participants completed the following measurement tools:

- *The Mindful Attention Awareness Scale (MAAS)* (Brown and Ryan 2003) is a 15-item scale designed to assess a core characteristic of dispositional mindfulness, namely, open or receptive awareness of and attention to what is taking place in the present. Response options ranged from 1 (almost never) to 6 (almost always). Example items include 'I find it difficult to stay focused on what's happening in the present,' 'I could be experiencing some emotion and not be conscious of it until some time later,' and 'I do jobs or tasks automatically, without being aware of what I'm doing.' Responses were averaged to create a composite score of mindfulness. Higher scores indicated higher levels of mindfulness. The original MAAS (Brown and Ryan 2003) and other language adaptations of the scale (Kotzé and Nel 2016; Soler et al. 2012) showed strong psy-

chometric properties within different samples. The Slovenian version of MAAS was used in our study, showing adequate validity and reliability (Simčič 2022, 81–82).

- *The Brief Resilience Scale* (BRS) (Smith et al. 2008) was used to measure trait resilience. The scale includes six items (three positively worded and three negatively worded) that participants rate on a 5-point scale from 1 – strongly disagree to 5 – strongly agree (an example item: ‘I tend to bounce back quickly after hard times’). Responses to these six items are averaged to create a composite score of resilience. Higher scores indicated higher levels of resilience. In the original study Cronbach’s alpha ranged from 0.80 to 0.91 over four samples (Smith et al. 2008). Validity and reliability have been confirmed in many studies (Kyriazos et al. 2018).
- *The Copenhagen Burnout Inventory* (Kristensen et al. 2005) is one of the most commonly used instruments for measuring burnout. Although it measures various aspects of burnout, only the work-related burnout subscale (CBI-W) was used in this study since it refers to the degree of physical and mental exhaustion that an individual can perceive in the workplace (examples of items: ‘Is your work emotionally exhausting?’ and ‘Are you exhausted in the morning at the thought of another day at work?’). Participants answered the seven items of the CBI-W subscale using a 5-point scale (from 1 – never to 5 – always). A higher overall score means a higher burnout rate. The authors of the original questionnaire reported good internal consistency, ranging from 0.85 to 0.87 (Kristensen et al. 2005). It has also been validated in various cultural contexts (Berat, Jelić, and Popov 2016; Papaefstathiou et al. 2019).

The Slovenian translations of the BRS and the CBI-W were made following the back-translation method. The original English scales were initially translated into the Slovenian language by the author of this study and a native Slovenian speaker, fluent in English and psychological terminology. These versions were then translated back to English by an independent translator familiar with both languages. The original scales and back-translations were compared by the author and translators. After resolving minor differences, consensus on the final version of the instruments was reached.

Procedure

The invitation to participate in the study was sent by e-mail to primary school teachers. They were also asked to share the invitation with their professional

colleagues. Data were collected through an online questionnaire, which included an introductory speech on the purpose of the study and instructions for completing the questionnaire. The study was conducted in accordance with the principles of the Declaration of Helsinki and its later amendments, and the American Psychological Association's Ethical Principles of Psychologists and Code of Conduct. All participants provided informed consent to participate in this study.

Statistical Analysis

Data were analysed by using IBM SPSS Statistics 27. To explore the factor structure of the Slovenian versions of the BRS and CBI-W scales, exploratory factor analysis (EFA) was performed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity were used to determine whether the data set was appropriate for factor analysis. Reliability of the instruments was measured using Cronbach's alpha (α) and McDonald's omega (ω) coefficients. Descriptive statistics were presented, including means, standard deviations, maximum and minimum values. To determine the differences in resilience, work-related burnout, and mindfulness of the participants regarding their work experience, the Kruskal-Wallis nonparametric test was calculated using eta squared (η^2) as the effect size measure (ES) with small $\eta^2 \geq 0.01$; medium $\eta^2 \geq 0.06$; large $\eta^2 \geq 0.14$). Post-hoc comparisons were performed using the Mann-Whitney test with Bonferroni correction with r being calculated as the ES. Thresholds for r were set to small $r \geq 0.1$; medium $r \geq 0.3$; large $r \geq 0.5$. Associations between the variables were calculated using the Spearman correlation coefficient. Multiple regression analysis was used to verify the predictive value of resilience and dispositional mindfulness on work-related burnout.

Results

A preliminary analysis was conducted to check the suitability of the data for further statistical processing. There were no missing values, which means that the participants fully completed the measurement scales.

In addition to the Slovenian form of the MAAS, which has demonstrated adequate validity, the factor structure of the Slovenian versions of BRS and CBI-W was determined using EFA. The KMO measure of sampling adequacy for the six items of the BRS was 0.87 and Bartlett's test of sphericity was significant ($\chi^2 = 642.53, p < 0.001$), indicating that correlations were appropriate for factor analysis. Both the eigenvalue criterion and the scree plot indicated a one-factor solution that accounted for 61.20% of the total variance, with item

Table 1 Reliability for BRS, CBI-W and MAAS Scales

Item	α	ω
BRS	0.81	0.80
CBI-W	0.93	0.93
MAAS	0.90	0.89

Notes BRS – Brief Resilience Scale, CBI-W – Copenhagen Burnout Inventory, MAAS – Mindful Attention Awareness Scale.

Table 2 Descriptive Statistics and Reliability of the BRS, CBI-W and MAAS Scales

Item	Min	Max	M	SD	$pK - S^{\#}$
BRS	1.67	4.67	3.56	0.73	<0.001
CBI-W	1.00	4.86	2.43	0.88	<0.001
MAAS	1.93	5.93	4.37	0.84	0.200

Notes BRS – Brief Resilience Scale, CBI-W – Copenhagen Burnout Inventory, MAAS – Mindful Attention Awareness Scale, # – significance of the Kolmogorov-Smirnov test.

loadings ranging from 0.56 to 0.80. EFA was also used to determine the factor structure of the CBI-W scale. The value of the KMO was 0.90, indicating the suitability of the respondent data for factor analysis. Bartlett's test was significant ($\chi^2 = 964.84, p < 0.001$). A single-factor solution accounted for 71.27% of the total variance with item loadings ranging from 0.75 to 0.86.

The reliability coefficients of the instruments are presented in table 1. Alpha and omega coefficients were above 0.80 for all three scales, indicating their appropriate internal consistency in the sample of Slovenian teachers.

Basic descriptive statistics for the studied variables are presented in table 2. According to arithmetic means, participants reported a relatively low level of work-related burnout ($M = 2.43, SD = 0.88$) and a relatively high level of mindfulness ($M = 4.37, SD = 0.84$), whereas the resilience score was slightly above the midpoint of the rating scale ($M = 3.45, SD = 0.73$). The Kolmogorov-Smirnov test revealed that most of the data did not follow a normal distribution, therefore nonparametric statistics were performed in further analyses.

The Kruskal-Wallis test (table 3) revealed differences in mindfulness between work experience groups ($p = 0.014$), with medium ($\eta^2 = 0.062$) effect size. Pairwise comparison tests showed that teachers with 0–5 years of experience reported significantly lower levels of mindfulness compared to those with 21 and more years of experience ($U = 462.5, Z = -3.923, p < 0.001, r = 0.42$). There were also significant differences in resilience among groups of teachers ($p = 0.046; \eta^2 = 0.041$). Teachers with 0–5 years of experience reported significantly lower levels of resilience compared to those longest in the ser-

Table 3 Differences in Resilience, Work-Related Burnout, and Dispositional Mindfulness According to Work Experiences of the Participants

Item	Work experience (years)	<i>N</i>	<i>M</i>	<i>SD</i>	<i>H</i>	<i>p</i>	χ^2
BRS	0–5	49	3.36	0.70	5.07	0.046	0.041
	6–10	47	3.56	0.74			
	11–20	51	3.61	0.71			
	>21	47	3.71	0.84			
CBI-W	0–5	49	2.55	0.83	3.04	0.386	0.012
	6–10	47	2.31	0.80			
	11–20	51	2.50	0.95			
	>21	47	2.38	0.96			
MAAS	10–5	49	4.09	0.80	10.35	0.014	0.062
	6–10	47	4.36	0.88			
	11–20	51	4.39	0.82			
	>21	47	4.66	0.83			

Notes BRS – Brief Resilience Scale, CBI-W – Copenhagen Burnout Inventory, MAAS – Mindful Attention Awareness Scale.

Table 4 Regression Analyses Results in Predicting Work-Related Burnout

Item	<i>B</i>	β	<i>t</i>
Mindfulness	–0.237	–0.459	–6.60**
Resilience	–3.259	–0.337	–5.36**

Notes ** $p < 0.001$.

vice ($U = 847.0$, $Z = -2.239$, $p < 0.05$, $r = 0.28$). No significant differences were found in work-related burnout ($\eta^2 = 0.012$) according to the length of service.

Spearman correlation analyses showed that the studied psychological variables were significantly correlated with each other. Specifically, work-related burnout was negatively correlated with mindfulness ($r = -0.62$, $p < 0.001$) and resilience ($r = -0.54$, $p < 0.001$), while there was a positive correlation between mindfulness and resilience ($r = 0.45$, $p < 0.001$).

To determine the predictive value of mindfulness and resilience, we used multiple regression analyses with the enter method. Preliminary analyses showed that all the assumptions for performing the regression were met, as tolerance (0.76) and the variance inflation factor (1.31) indicated that multicollinearity was not a concern. Since none of the sociodemographic factors (age and length of service) were significantly associated with burnout, they were not included as control variables in subsequent analyses.

Results in table 4 indicated that both mindfulness ($\beta = -0.46$, $p < 0.001$)

and resilience ($\beta = -0.34, p < 0.001$) were negatively associated with burnout. These predictors together explain 44% of the variance in work-related burnout among teachers ($R^2 = 0.441, F(1,192) = 69.91, p < 0.001$).

Discussion

The purpose of this study was to investigate the relationships between mindfulness, resilience, and work-related burnout in primary school teachers. Specifically, we aimed to determine the combined effect of mindfulness and resilience on burnout. First, a preliminary study was conducted to verify the psychometric characteristics of the instruments used in the study. The Slovenian versions of the BRS, CBI-W, and MASS scales have demonstrated adequate validity and reliability.

Teachers in our sample reported a relatively low level of work-related burnout. Instead, they showed moderate and high levels of resilience and mindfulness, respectively. Our results are in line with the findings of a recent study (Markelj, Kovač, and Jurak 2023) where burnout was not pronounced among participating primary school teachers; however, a greater sense of burnout was found among teachers at the end of the school year compared to the beginning of the year.

Significant associations were found among the three constructs: teachers with higher perceived burnout reported lower levels of mindfulness and resilience, while there was a positive association between the latter. These results are comparable to previous findings among healthcare and education professionals (Kriakous, Elliott, and Owen 2019; Menardo et al. 2022).

In our study, work-related burnout was not statistically related to length of service of participants, which is consistent with the findings of Galanakis et al. (2020), who reported that years of service do not affect the degree of stress and burnout experienced by teachers. On the contrary, some studies reported a positive correlation between burnout and the length of work experience (Dias, Peixoto, and Cadime 2021), while others found a negative correlation, indicating high risk of burnout among less experienced teachers (Turtulla 2017).

However, some researchers describe this relationship as a 'magical curve'; Antoniou, Ploumpi, and Ntalla (2013) found that teachers with 11–15 years of teaching experience are more likely to have emotional exhaustion due to working conditions than those with 1–10 years or more than 15 years of experience.

Significant differences were found in teachers' resilience and mindfulness according to their teaching experience. Novice teachers (with up to 5 years of

teaching experience) show lower levels of resilience and mindfulness compared to those with the longest tenure. These results are consistent with the findings of Flores-Buils, Caballer-Miedes, and Mateu-Pérez (2022), who assumed that more experienced teachers have more opportunities to develop resilience in school than other teachers with less experience. Associations with mindfulness have been shown to be more complex. Some authors distinguish between two aspects of teachers' mindfulness (Frank, Jennings, and Greenberg 2016): the intrapersonal dimension, which is related to attentional experience directed at oneself, and the interpersonal dimension, which requires the capacity of empathy and receptivity in relationships with students. In a recent study conducted on a large sample of Spanish teachers in different education stages, work experience was negatively related to intrapersonal mindfulness and positively to interpersonal mindfulness. The authors described teachers with greater experience as more likely to activate their 'automatic pilot' and therefore not as focused as those who are at the beginning of their teaching career. In contrast, they observed higher interpersonal mindfulness in teachers with greater experience, indicating that they are more aware of their relationships with students and receptive to their demands (Moyano et al. 2021). When comparing the results of different studies, it is important to consider the measurement tools used to assess mindfulness. In our research, we used the MAAS scale to measure mindfulness as a trait, in terms of one's predisposition to be mindful in daily life, while the results of the aforementioned study (Moyano et al. 2021) refer to the state of mindfulness (using the Mindfulness in Teaching Scale), which is specifically related to experiences teachers have in the classroom. Inconsistencies in research results can be explained to some extent by different aspects of mindfulness.

Regression analysis determined a combined effect of mindfulness and resilience on work-related burnout in primary school teachers – higher levels of resilience and mindfulness were significant predictors of lower levels of burnout. Although the two constructs made significant relative contributions to the prediction of burnout, mindfulness has a slightly stronger predictive value. Thus, cultivating resilience and mindfulness may assist in preventing psychological distress and burnout in education professionals. Our findings are supported by other previous studies (Abenavoli et al. 2013; González-Valero et al. 2021; Luken and Sammons 2016).

The results of the current study have great application value as they represent a good starting point for planning and promoting preventive activities and programmes among Slovenian teachers in order to maintain or im-

prove psychological well-being and reduce mental health problems at work. Practicing mindfulness and resilience can be extremely useful not only for in-service teachers but especially for pre-service teachers and those at the beginning of their professional careers. Namely, novice teachers have lower levels of mindfulness and resilience compared to their more experienced colleagues, and at the same time, they face many new demands and challenges in the educational process. Although both interventions could constitute possible tools to combat burnout, mindfulness appears to be a better intervention for preventing its initial stages, by reducing negative arousal states, and thereby perceived overload, whereas resilience seems to be more effective for treating its advanced stages, by encouraging positive emotions, personal strength engagement and motivation that enables an individual to better recover from adversity (Montero-Marin et al. 2015).

Interventions based on mindfulness and resilience can have a direct impact on stress and burnout, as well as indirect influence, through changing levels of positive and negative emotionality (Menardo et al. 2022; Moyano et al. 2021). Promoting emotional regulation abilities through mindfulness-based interventions is especially important for primary and secondary school teachers, who are emotionally more involved in their teaching than teachers in higher education as they are in the classroom with the students five days a week. Teachers with good emotional regulation capacities have a better insight into their own emotions and thoughts and regulate them effectively while teaching, which can be reflected in decreased emotional exhaustion and physical fatigue (Carroll et al. 2022; Donker et al. 2020), which are symptoms of burnout.

Further research could therefore examine the mediating role of emotional regulation in the relationship between protective factors such as mindfulness and resilience and burnout in Slovenian teachers. Also, future research could address burnout in the teaching profession concerning certain sociodemographic variables (e.g. gender, teachers of different educational stages, teachers working with special education students) and personality characteristics (e.g. neuroticism and perfectionism) that were not considered in our study.

Conclusion

Given the detrimental impact of work-related burnout, it is necessary to investigate and encourage those personal resources that mitigate employee burnout. The present study expands knowledge about the connection between mindfulness, resilience, and burnout and provides evidence that re-

silience and mindfulness significantly contribute to the prediction of burnout among Slovenian primary school teachers. The results point to the importance of including these psychological factors in stress/burnout prevention programmes in teacher education.

References

- Abenavoli, R. M., P. A. Jennings, M. T. Greenberg, A. R. Harris, and D. A. Katz. 2013. 'The Protective Effects of Mindfulness against Burnout Among Educators.' *Psychology of Education Review* 37 (2): 57–69.
- Aloe, A. M., S. Shisler, B. D. Norris, A. B. Nickerson, and T. W. Rinker. 2014. 'A Multivariate Meta-Analysis of Student Misbehavior and Teacher Burnout.' *Educational Research Review* 12 (5): 30–44.
- Alyamy, K. F., and S. C. Loh. 2020. 'Factors Predicting Teacher Burnout: The Moderation Role of Perceived Social Support.' *Journal of Special Needs Education* 10:50–69.
- Antoniou, A. S., A. Ploumpi, and M. Ntalla. 2013. 'Occupational Stress and Professional Burnout in Teachers of Primary and Secondary Education: The Role of Coping Strategies.' *Psychology* 4 (3): 349–355.
- Arvidsson, I., C. Håkansson, B. Karlson, J. Björk, and R. Persson. 2016. 'Burnout among Swedish School Teachers: Cross-Sectional Analysis.' *BMC Public Health* 16 (1): 823.
- Bajt, M., H. Jeriček Klanšček, and K. Britovšek. 2015. *Duševno zdravje na delovnem mestu*. Ljubljana: Nacionalni inštitut za javno zdravje.
- Bakker, A. B., E. Demerouti, and A. I. Sanz-Vergel. 2014. 'Burnout and Work Engagement: The JD-R approach.' *Annual Review of Organizational Psychology and Organizational Behavior* 1 (1): 389–411.
- Berat, N., D. Jelić, and B. Popov. 2016. 'Serbian Version of the Work Burnout Scale from the Copenhagen Burnout Inventory: Adaptation and Psychometric Properties.' *Applied Psychology* 9 (2): 177–198.
- Brown, K. W., and R. M. Ryan. 2003. 'The Benefits of Being Present: Mindfulness and its Role in Psychological Well-Being.' *Journal of Personality and Social Psychology* 84 (4): 822–848.
- Capone, V., M. Joshanloo, and M. S. A. Park. 2019. 'Burnout, Depression, Efficacy Beliefs, and Work-Related Variables among School Teachers.' *International Journal of Educational Research* 95:97–108.
- Carroll, A., K. Forrest, E. Sanders-O'Connor, L. Flynn, J. M. Bower, S. Fynes-Clinton, A. York, and M. Ziaei. 2022. 'Teacher Stress and Burnout in Australia: Examining the Role of Intrapersonal and Environmental Factors.' *Social Psychology of Education* 25 (5): 441–469.
- Connor, K. M., and J. R. T. Davidson. 2003. 'Development of a New Resilience Scale: The Connor Davidson Resilience Scale (CD-RISC).' *Depression and Anxiety* 18 (2): 76–82.

- De Simone, S., G. Cicotto, and L. Lampis. 2016. 'Occupational Stress, Job Satisfaction and Physical Health in Teachers.' *European Review of Applied Psychology* 66 (2): 65–77.
- Desouky, D., and H. Allam. 2017. 'Occupational Stress, Anxiety and Depression among Egyptian Teachers.' *Journal of Epidemiology and Global Health* 7 (3): 191–198.
- Dias, P. C., R. Peixoto, and I. Cadime. 2021. 'Associations Between Burnout and Personal and Professional Characteristics: A Study of Portuguese Teachers.' *Social Psychology of Education* 24 (4): 965–984.
- Donker, M. H., M. C. Erisman, T. van Gog, and T. Mainhard, 2020. 'Teachers' Emotional Exhaustion: Associations with Their Typical Use of and Implicit Attitudes Toward Emotion Regulation Strategies.' *Frontiers in Psychology* 11:867.
- Eddy, C. L., F. L. Huang, D. R. Cohen, K. M. Baker, K. D. Edwards, K. C. Herman, and W. M. Reinke. 2020. 'Does Teacher Emotional Exhaustion and Efficacy Predict Student Discipline Sanctions?' *School Psychology Review* 49 (3): 239–255.
- Evropska agencija za varnost in zdravje pri delu. N.d. 'Psihosocialna tveganja in stres na delovnem mestu.' <https://osha.europa.eu/sl/themes/psychosocial-risks-and-stress>.
- Fleming, J. L., M. Mackrain, and P. A. LeBuffe. 2013. 'Caring for the Caregiver: Promoting the Resilience of Teachers.' In *Handbook of Resilience in Children*, edited by S. Goldstein and R. B. Brooks, 387–397. New York: Springer.
- Fletcher, D., and M. Sarkar. 2013. 'Psychological Resilience: A Review and Critique of Definitions, Concepts and Theory.' *European Psychologist* 18 (1): 12–23.
- Flores-Buils, R., A. Caballer-Miedes, and R. Mateu-Pérez. 2022. 'Resilience in Teachers: Validation of the Spanish Version of the CD-RISC10© Scale in Early Childhood, Primary and Special Education Teachers.' *International Journal of Environmental Research and Public Health* 19:11020.
- Frank, J. L., P. A. Jennings, and M. T. Greenberg. 2016. 'Validation of the Mindfulness in Teaching Scale.' *Mindfulness* 7 (1): 155–163.
- Galanakis, M., E. Alexandri, K. Kika, X. Lelekanou, M. Papantonopoulou, D. Stougiannou, and M. Tzani. 2020. 'What Is the Source of Occupational Stress and Burnout?' *Psychology* 11 (5): 647–662.
- Genoud, P. A., and E. L. Waroux. 2021. 'The Impact of Negative Affectivity on Teacher Burnout.' *International Journal of Environmental Research and Public Health* 18:13124.
- Gibson, S., and C. Carroll. 2021. *Stress, Burnout, Anxiety and Depression: How They Impact on the Mental Health and Wellbeing of Teachers and on Learner Outcomes*. London: Education Support.
- Gloria, C. T., K. E. Faulk, and M. A. Steinhardt. 2013. 'Positive Affectivity Predicts

- Successful and Unsuccessful Adaptation to Stress.' *Motivation and Education* 37 (1): 185–193.
- González-Valero, G., F. Zurita-Ortega, S. San Román-Mata, and P. Puertas-Moleiro. 2021. 'Effect Relationship of Burnout Syndrome and Resilience with Implicit Factors in the Teaching Profession: A Systematic Review.' *Revista De Educación* 394. <https://recyt.fecyt.es/index.php/Redu/article/view/90203>.
- Greenberg, M. T., J. L. Brown, and R. M. Abenavoli. 2016. 'Teacher Stress and Health Effects on Teachers, Students, and Schools.' Issue Brief, Edna Bennett Pierce Prevention Research Center, Pennsylvania State University, University Park, PA.
- Guidetti, G., S. Viotti, P. Gil-Monte, and D. Converso. 2018. 'Feeling Guilty or Not Guilty. Identifying Burnout Profiles among Italian Teachers.' *Current Psychology* 37 (4): 769–780.
- Herman, K. C., J. Hickmon-Rosa, and W. M. Reinke. 2018. 'Empirically Derived Profiles of Teacher Stress, Burnout, Self-Efficacy, and Coping and Associated Student Outcomes.' *Journal of Positive Behavior Interventions* 20 (2): 90–100.
- Horgan, K., S. Howard, and F. Gardiner-Hyland. 2018. 'Pre-service Teachers and Stress During Microteaching: An Experimental Investigation of the Effectiveness of Relaxation Training with Biofeedback on Psychological and Physiological Indices of Stress.' *Applied Psychophysiology and Biofeedback* 43 (3): 217–225.
- Huyghebaert, T., N. Gillet, N. Beltou, F. Tellier, and E. Fouquereau. 2018. 'Effects of Workload on Teachers' Functioning: A Moderated Mediation Model Including Sleeping Problems and Overcommitment.' *Stress and Health* 34 (5): 601–611.
- Jennings, P. A., J. L. Brown, J. L. Frank, S. Doyle, Y. Oh, R. Davis, D. Rasheed, A. DeWeese, A. A. DeMauro, H. Cham, and M. T. Greenberg. 2017. 'Impacts of the CARE for Teachers Program on Teachers' Social and Emotional Competence and Classroom Interactions.' *Journal of Educational Psychology* 109 (7): 1010–1028.
- Jeriček Klanšček, H., K. Hribar, and M. Bajt. 2017. *Skrb za duševno zdravje tudi na delovnem mestu*. Ljubljana: Nacionalni inštitut za javno zdravje.
- Kabat-Zinn, J. 2003. 'Mindfulness-Based Interventions in Context: Past, Present, and Future.' *Clinical Psychology: Science and Practice* 10 (2): 144–156.
- Kaplan, J. B., A. L. Bergman, M. Christopher, S. Bowen, and M. Hunsinger. 2017. 'Role of Resilience in Mindfulness Training for First Responders.' *Mindfulness* 8 (5): 1373–1380.
- Korunka, C., S. Tement, C. Zdrehus, and A. Borza. 2010. 'Burnout: Definition Recognition and Prevention Approaches.' BOIT. https://www.bridgestoeurope.com/wp-content/uploads/2020/03/BOIT_theoretical_abstract_2705.pdf.

- Kotzé, M., and P. Nel. 2016. 'The Psychometric Properties of the Mindful Attention Awareness Scale (MAAS) and Freiburg Mindfulness Inventory (FMI) as Measures of Mindfulness and their Relationship with Burnout and Work Engagement.' *SA Journal of Industrial Psychology* 42 (1): 1366.
- Kriakous, S. A., K. A. Elliott, and R. Owen. 2019. 'Coping, Mindfulness, Stress, and Burnout among Forensic Health Care Professionals.' *Journal of Forensic Psychology Research and Practice* 19 (2): 128–146.
- Kristensen, T. S., M. Borritz, E. Villadsen, and K. Christensen. 2005. 'The Copenhagen Burnout Inventory: A New Tool for the Assessment of Burnout.' *Work and Stress* 19 (3): 192–207.
- Kyriazos, T. A., A. Stalikas, K. Prassa, M. Galanakis, V. Yotsidi, and A. Lakioti. 2018. 'Psychometric Evidence of the Brief Resilience Scale (BRS) and Modeling Distinctiveness of Resilience from Depression and Stress.' *Psychology* 9 (7): 1828–1857.
- Langher, V., A. Caputo, and M. E. Ricci. 2017. 'The Potential Role of Perceived Support for Reduction of Special Education Teachers' Burnout.' *International Journal of Educational Psychology* 6 (2): 120–147.
- Lensen, J. H., S. Stoltz, M. Kleinjan, A. Speckens, J. T. Kraiss, and R. Scholte. 2021. 'Mindfulness-Based Stress Reduction Intervention for Elementary School Teachers: A Mixed Method Study.' *Trials* 22 (1): 826.
- Luken, M., and A. Sammons. 2016. 'Systematic Review of Mindfulness Practice for Reducing Job Burnout.' *American Journal of Occupational Therapy* 70 (2). <https://doi.org/10.5014/ajot.2016.016956>.
- Luthar, S. S., E. L. Lyman, and E. J. Crossman. 2014. 'Resilience and Positive Psychology.' In *Handbook of Developmental Psychopathology*, edited by M. Lewis and K. Rudolph, 125–140. Boston, MA: Springer.
- Madigan, D. J., and L. E. Kim. 2021. 'Does Teacher Burnout Affect Students? A Systematic Review of its Association with Academic Achievement and Student-Reported Outcomes.' *International Journal of Educational Research* 105 (2): 101714.
- Maslach, C., and M. P. Leiter. 2016. 'Understanding the Burnout Experience: Recent Research and its Implications for Psychiatry.' *World Psychiatry* 15 (2): 103–111.
- McLean, L., and C. M. Connor. 2015. 'Depressive Symptoms in Third-Grade Teachers: Relations to Classroom Quality and Student Achievement.' *Child Development* 86 (3): 945–954.
- Markelj, N., M. Kovač, and G. Jurak. 2023. 'The Dynamics of Burnout among Slovenian Primary School Teachers over the School Year in Relation to Their Perceptions of Various Predictors of Burnout in the School Context.' *Frontiers in Psychology* 14:1108322.
- Menardo, E., D. Di Marco, S. Ramos, M. Brondino, A. Arenas, P. Costa, C. Vaz de Carvalho, and M. Pasini. 2022. 'Nature and Mindfulness to Cope with Work-

- Related Stress: A Narrative Review.' *International Journal of Environmental Research and Public Health* 19 (10): 5948.
- Montero-Marin, J., M. Tops, R. Manzanera, M. M. Piva Demarzo, M. Álvarez de Mon, and J. García-Campayo. 2015. 'Mindfulness, Resilience, and Burnout Subtypes in Primary Care Physicians: The Possible Mediating Role of Positive and Negative Affect.' *Frontiers in Psychology* 6:1895.
- Mousavy, S., N. S. Thomas, J. Mukundan, and V. Nimehchisalem. 2012. 'Burnout among Low and High Experienced Teachers.' *International Journal of Applied Linguistics and English Literature* 1 (4): 24–29.
- Moyano, N., M. C. Perez-Yus, P. Herrera-Mercadal, M. Navarro-Gil, S. Valle, and J. Montero-Marin. 2021. 'Burned or Engaged Teachers? The Role of Mindfulness, Self-Efficacy, Teacher and Students' Relationships, and the Mediating Role of Intrapersonal and Interpersonal Mindfulness.' *Current Psychology* 42:11719–11732.
- Oliveira, de C., M. Saka, L. Bone, and R. Jacobs. 2023. 'The Role of Mental Health on Workplace Productivity: A Critical Review of the Literature.' *Applied Health Economics and Health Policy* 21 (2): 167–193.
- Papaefstathiou, E., A. Tsounis, M. Malliarou, and P. Sarafis. 2019. 'Translation and Validation of the Copenhagen Burnout Inventory amongst Greek Doctors.' *Health Psychology Research* 7 (1): 7678.
- Rajendran, N., H. M. Watt, and P. W. Richardson. 2020. 'Teacher Burnout and Turnover Intent.' *The Australian Educational Researcher* 47 (3): 477–500.
- Richards, K. A. R., C. Levesque-Bristol, T. J. Templin, and K. C. Graber. 2016. 'The Impact of Resilience on Role Stressors and Burnout in Elementary and Secondary Teachers.' *Social Psychology of Education* 19 (3): 511–536.
- Roeser, R. W., K. A. Schonert-Reichl, A. Jha, M. Cullen, L. Wallace, R. Wilensky, E. Oberle, K. Thomson, C. Taylor, and J. Harrison. 2013. 'Mindfulness Training and Reductions in Teacher Stress and Burnout: Results from Two Randomized, Waitlist Control Field Trials.' *Journal of Educational Psychology* 105 (3): 787–804.
- Schonfeld, I. S., R. Bianchi, and P. Luehring-Jones. 2017. 'Consequences of Job Stress for the Mental Health of Teachers.' In *Educator Stress, An Occupational Health Perspective*, edited by T. M. McIntyre, S. E. McIntyre and D. J. Francis, 55–73. Cham: Springer.
- Simčič, B. 2022. 'Preverjanje merskih značilnosti instrumentov na pedagoškem področju: primer merjenja čuječnosti.' PhD diss., Univerza na Primorskem.
- Skaalvik, E. M., and S. Skaalvik. 2015. 'Job Satisfaction, Stress and Coping Strategies in the Teaching Profession – What Do Teachers Say?' *International Education Studies* 8 (3): 181–192.
- Smith, B. W., J. Dalen, K. Wiggins, E. Tooley, P. Christopher, and J. Bernard. 2008. 'The Brief Resilience Scale: Assessing the Ability to Bounce Back.' *International Journal of Behavioral Medicine* 15 (3): 194–200.

- Soler, J., R. Tejedor, A. Feliu-Soler, J. C. Pascual, A. Cebolla, J. Soriano, E. Alvarez, and V. Perez. 2012. 'Psychometric Properties of Spanish Version of Mindful Attention Awareness Scale (MAAS):' *Actas Espanolas de Psiquiatria* 40 (1): 19–26.
- Spilt, J., H. Koomen, and J. Thijs. 2011. 'Teacher Wellbeing: The Importance of Teacher-Student Relationships.' *Educational Psychology Review* 23 (4): 457–477.
- Turtulla, S. 2017. 'Examining Levels of Job Burnout among Teachers Working in Kosova in Terms of Different Variables.' *European Journal of Multidisciplinary Studies* 2 (6): 285–297.
- Uribe, J. M., D. M. Pinto, A. I. Vecino-Ortiz, C. Gómez-Restrepo, and M. Rondón. 2017. 'Presenteeism, Absenteeism, and Lost Work Productivity among Depressive Patients from Five Cities of Colombia.' *Value in Health Regional Issues* 14:15–19.
- World Health Organization. 2022. 'Mental Health.' June 17. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>.
- Zweifel, P. 2021. 'Mental Health: The Burden of Social Stigma.' *International Journal of Health Planning and Management* 36 (3): 813–825.

Vloga čuječnosti in osebne prožnosti pri preprečevanju poklicne izgorelosti učiteljev osnovne šole

Problematika duševnega zdravja na delovnem mestu predstavlja vse pomembnejše področje raziskovanja. Poklicne skupine, ki se soočajo z intenzivnim in odgovornim delom z ljudmi, so še posebej dovzetne za razvoj sindroma izgorelosti, kar velja tudi za pedagoške delavce. Zato je pri njih še posebej pomembno raziskati individualne vire, ki varujejo pred pojavom izgorelosti. Namen raziskave je bil preučiti vlogo čuječnosti in osebne prožnosti pri napovedovanju izgorelosti učiteljev. V raziskavo je bilo vključenih 194 slovenskih osnovnošolskih učiteljev, ki so izpolnili Kratko lestvico osebne prožnosti, Kopenhagenski vprašalnik izgorelosti ter Lestvico čuječe pozornosti in zavedanja. Rezultati so pokazali, da so delovne izkušnje učiteljev pozitivno povezane s čuječnostjo in z osebno prožnostjo, ne pa tudi z izgorelostjo. Na podlagi regresijske analize ugotavljamo, da višje izražena čuječnost in osebna prožnost pri učiteljih pomembno napovedujeta nižjo raven izgorelosti ($R^2 = 0,441$, $F(1,192) = 69,91$, $p < 0,001$). Uvajanje praks čuječnosti ter osebne prožnosti v vzgojo in izobraževanje lahko učinkovito prepreči nastanek psiholoških stisk ter izgorelosti pri pedagoških delavcih.

Ključne besede: stres, izgorelost, čuječnost, osebna prožnost, učitelji