TEACHERS' WELL-BEING IN SLOVENIA: THE ROLE OF MINDFULNESS AND MINDFUL TEACHING

Ana Kozina
Educational Research Institute (Slovenia)

Abstract

The need to support teachers is more pressing every day as the teacher shortage is becoming an acute problem across Europe. One of the possible mechanisms leading to teachers leaving the profession are increased levels of stress and burnout. Stress influences processes crucial for successful teaching and learning, that is attention, decision making and the quality of relationships. The increase in reported emotional difficulties reflected in increased levels of stress and burnout in teachers across Europe adds to the importance of co conceptual understanding of the underlying processes as well as support mechanisms for teachers' well-being. As mindfulness has documented benefits for one's own well-being as well as on relationships with others, it is one of the possible mechanisms of support. In the present paper, we empirically test this hypothesis by analysing the predictive power of mindfulness for teachers' well-being, e.g., well-being and burnout, as well as behaviour in the classroom, e.g., mindful teaching. In addition, we test the indirect paths leading from mindfulness to selected outcomes through mindful teaching. We use data from the Slovenian sample of the project "HAND IN HAND: Empowering Teachers Across Europe to Deal with Social, Emotional and Diversity Related Career Challenges" (n = 272; 253 women). The teachers involved in the project "HAND IN HAND" were provided with a battery of measurement tools focusing on their social, emotional and diversity awareness competencies. In this paper, we will use the data from The Mindful Attention Awareness Scale, WHO-5 Wellbeing Scale, Mindfulness in teaching and Shirom-Melamed Burnout Questionnaire. The findings show significant direct paths from mindfulness to well-being, burnout and intrapersonal (and not interpersonal) dimension of mindful teaching. The indirect paths from mindfulness to wellbeing and burnout through mindful teaching were not significant.

Keywords: *Teachers, mindfulness, mindful teaching, burnout, well-being, Slovenia.*

1. Introduction

Teachers across Europe face a multitude of challenges associated with the characteristics of their profession, e.g., new skills requirements and rapid technological developments, challenges associated with their teaching and classroom interactions, e.g., discipline and increasing social and cultural diversity. The challenges faced by teachers are adding to the frequency and intensity of their emotional problems and increased levels of stress that are potentially leading to burnout. One mechanism for supporting teachers lies in promoting their social and emotional competencies as well as diversity awareness.

Possessing and developing teachers' social, emotional competencies and diversity awareness has proved to be important, both for the teachers themselves and for those with whom they are in close contact. One of the possible mechanisms of support for teachers' social, emotional competencies and diversity awareness is mindfulness (Roeser at al., 2012). Mindfulness disengages individual from automatic thoughts, habits and unhealthy behaviours and can therefore play a significant role in fostering self-determined behaviour regulation and well-being. Additionally, it contributes to well-being and satisfaction directly by higher quality or moment-to-moment experiences. With being more attentive and present one can fulfil basic psychological needs which then leads to higher wellbeing and life satisfaction and lower stress (Brown & Ryan, 2003). Mindfulness leads to stress reduction via: a) lowered stress reactivity by cultivating self-regulatory processes and coping mechanisms; and b) non-judgement and compassion in stressful situations (Roeser, 2016).

The importance of mindfulness in educational setting is described in the Theory of change model (Roeser et al, 2012). The model stresses the importance of mindfulness training in teachers' professional development. More specifically, mindfulness training, when high in quality and characterised by teacher engagement, triggers teachers' skills, such as emotional regulation, mindfulness and self-compassion, that

subsequently cause increases in their own well-being and, in turn, more positive and constructive processes in the classroom, e.g., classroom organisation, emotional support. The Roeser model is supported by research revealing that mindfulness training shows an improvement in mindfulness and a reduction in stress and burnout (Benn et al., 2012; Dave et al., 2020; Jennings et al., 2017; Roeser et al., 2013), as well as an improvement in teachers' competencies (Roeser et al., 2013). But even though mindfulness has been in a front row of research in recent years also in the educational setting (Schonert-Reichl & Roeser, 2017) it hasn't been property contextualised with measure focusing on the educational context. Therefore, in the current study we use a measure of mindfulness and teaching, that is how mindfulness is experienced in teaching (Frank et al., 2016). Mindfulness in teaching is characterised by two dimensions: intrapersonal and interpersonal. Intrapersonal dimension of mindfulness in teaching taps mindfulness directed towards ones' own experience. Interpersonal dimension considers ones' own awareness and behaviour towards others. More specifically it is described by a) listening with full awareness b) present-cantered awareness of emotions experienced by self and others in interaction c) openness, acceptance and receptivity to others' thoughts and feelings d) self-regulation that included low emotional and behavioural reactivity and low automaticity in responses to the everyday behaviour of others e) compassion to self and to others (Duncan et al, 2009; Frank et al., 2016).

In the current study we will firstly analyse paths leadings from mindfulness to selected teachers' outcomes: well-being, burnout, and teachers' behaviour: mindful teaching. Further on we will test indirect paths leading from mindfulness to selected teachers' outcomes (well-being and burnout) through teachers' behaviour (mindful teaching).

2. Method

2.1. Participants

The data from Slovene sample of the "HAND IN HAND: Empowering teachers across Europe to deal with social, emotional and diversity related career challenges (HAND:ET)" project (N = 264; 253 females; 207 teachers, 20 principals, 29 other school staff, 8 trainers) is used. On average they were 41,98 years old (SD = 7,67) and had 15.27 years of experiences teaching (SD = 8.91).

2.2. Instruments

Implementing HAND:ET project teachers were administered with a battery of measurement tools targeting their social, emotional competencies and diversity awareness competencies. In the current study we use: **The Mindful Attention Awareness Scale** (MAAS; Brown & Ryan, 2003) is a scale to assess dispositional mindfulness as a state of mind in which attention only observes what is happening in the present moment. It consists of 15 items on 6-point scale (alpha = 0.889). Low score represents high mindfulness. **WHO-5 Wellbeing Scale** (Topp et al, 2015) The World Health Organisation- Five Well-Being Index (WHO-5) is a short self-report questionnaire on the current well-being. It consists of 5 items on a 5-point scale (alpha = 0.897). High score represents high well-being. **Mindfulness in Teaching** (Frank et al., 2016) measures teachers' focus during instruction and daily school activities, emotional awareness, self-regulation, as well as responsivity and sensitivity during student–teacher interactions. It consists of 14 items on a 5-point scale measuring two dimensions: Intrapersonal mindfulness measures difficulty in remaining focused and present (alpha = 0.834) and Intrapersonal mindfulness that measures ability to respond to students in a controlled and positive manner (alpha = 0.708). High score represents high mindfulness in teaching. **Shirom-Melamed Burnout Questionnaire** (SMBQ) (Melamed et al., 1992) measures three dimensions of burnout: physical fatigue, cognitive weariness, and emotional exhaustion (alpha = 0.934). High score represents high level of burnout.

2.3. Procedure

This study is a part of the Erasmus+ project HAND in HAND: which included a field trial in five EU countries (Croatia, Slovenia, Portugal, Austria and Sweden). In September 2022, teachers completed a battery of questionnaires tapping into social, emotional, diversity awareness, and demographic information using online tools. Informed consents were gathered beforehand. For this study, we only present data from Slovenia for the selected measures. The original scales were translated into Slovenian using committee approach.

2.4. Data analyses

After examining descriptive statistics, correlations, and reliabilities using IBM SPSS Statistics 26, we conducted CFA (confirmatory factor analysis), and SEM (structural equation modelling) using Mplus (Version 8.1; Muthén & Muthén, 1998–2017). A maximum likelihood (ML) algorithm was used to handle

missing data and assess parameters in the model. Separate CFA models were conducted for each construct. If indicated by modification indices and justified by the content of the items, a correlation between these items was added. CFA models were brought into the mediation model in the second step. Item loadings were interpreted in accordance with Tabachnick and Fidell (2006), suggesting cut-off values of 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good), or 0.71 (excellent). Model fit was assessed with chi-square ($\chi 2$), comparative fit indices (CFI), root mean square error of approximation (RMSEA), and standardised root mean square residual (SRMR), following the recommendations by Hu and Bentler (1999) for a good fit: CFI > 0.95, RMSEA < 0.06, and SRMR < 0.08. For adequate fit, the following cut-off values were applied: CFI > 0.90, RMSEA < 0.08, and SRMR < 0.08 (Hair et al., 1998).

3. Results

Means, standard deviations, and correlations for the questionnaire mean scores are presented in Table 1 to provide a brief insight into the data; however, in the CFA and SEM analyses, questionnaire items were used as indicators of latent variables. Following the recommendation of Curran et al. (1996) for ensuring the multivariate normality required in SEM, no variables (items) needed to be transformed due to excessive skewness or kurtosis.

Table 1. Descriptive Statistics and Correlations across scales.

		M	*SD*	1	2	3	4
1	Mindfulness	2.92	0.71	-			
2	Mindful teaching: Intrapersonal	3.93	0.53	-.582**	-		
3	Mindful teaching: Interpersonal	4.03	0.52	-.129	.305**	-	
4	Well-being	3.70	0.97	-.259**	.115	.142*	-
5	Burnout	3.40	1.10	.442**	-.367**	-.076	-592**

Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

CFA models for each construct were examined. The items were used as indicators in the models. Fit indices are summarized in Table 2.

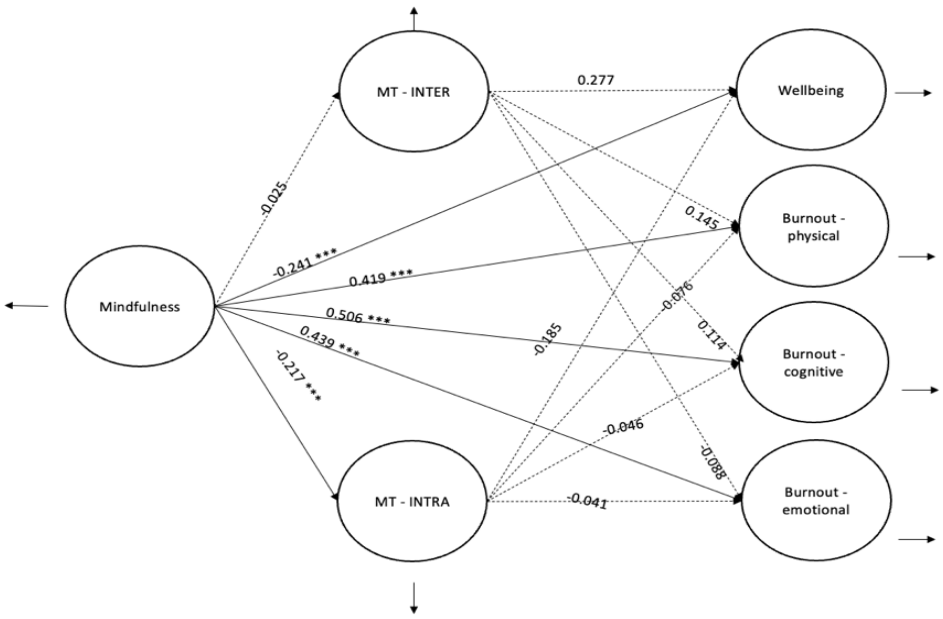
Table 2. Model Fit Indices for Latent Constructs.

Scale	$\chi 2$(df)		CFI	RMSEA [90% CFI]	SRMR
Mindfulness	285.652 (84)	***	.964	0.095 [0.083–0.108]	0.043
Mindful teaching	183.450 (76)	***	.997	0.073 [0.060–0.087]	0.019
Well-being	1.596 (2)	***	1.000	0.000[0.000–0.114]	0.004
Burnout	272.826 (70)	***	0.991	0.105 [0.092–0.118]	0.027

Notes: * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$.

Further on we investigated mediations models in which we analyse direct and indirect paths leading from mindfulness and mindful teaching to wellbeing and burnout. The model fits the data adequately: $\chi 2(1046) = 1637.220$, $p = .000$; CFI = .983; RMSEA = .046, 90% CI [.042, .051]; SRMR = .051.

*Figure 1. Relationships between Mindfulness, Burnout, Well-being and Mindfulness in Teaching: Structural Equation Model. The numbers present completely standardised coefficient estimates. Solid lines represent significant paths or correlations and dashed lines indicate non-significant paths or correlations. ***p < .001.*



There are significant direct paths leading from Mindfulness to Wellbeing, Mindfulness in Teaching – Intrapersonal dimension (and not Interpersonal dimension) and all dimensions of Burnout. The indirect path from Mindfulness through Mindfulness in Teaching (both dimensions) is not significant.

4. Conclusions

The current study explored the role of mindfulness in selected teachers' outcomes, well-being and burnout as well as teachers' behaviour, mindfulness in teaching. The increase in reported emotional difficulties shown in increased levels of stress and burnout in teachers across Europe (Roeser et al., 2012) adds to the importance of a conceptual understanding of the underlying processes as well as mechanisms to support teachers' well-being, such as mindfulness.

The findings show that mindfulness plays a significant role in teacher 's well-being in Slovenia. Higher mindfulness is significantly associated with higher well-being. One of the mechanisms contributing to well-being is higher quality or moment-to-moment experiences (Brown & Ryan, 2003) triggered by enhanced mindfulness. Further on, high mindfulness is associated with low level of all three measured dimensions of burnout. This finding is important as stress influences processes crucial for successful teaching and learning, such as attention (MacKenzie et al., 2007), decision-making (Shanafelt et al., 2003) and the quality of relationships (Durtschi et al., 2017). As for the connecting between mindfulness and mindfulness in teaching, a significant path was established leading from mindfulness to intrapersonal dimension of mindfulness in teaching and not to the interpersonal dimension of mindfulness in teaching. The indirect path from mindfulness to teacher's outcome through mindfulness in teaching was not significant as well. As there is conceptual overlap between mindfulness and mindfulness in teaching intrapersonal dimension the positive association was expected. The association between mindfulness and interpersonal dimension of mindfulness in teaching was not significant and this way our findings did not support the path from mindfulness to mindful behaviour in classroom. Further research in this direction is needed, especially in answering the question if mindfulness supports intrapersonal dimension of mindfulness in teaching what support interpersonal dimension of mindfulness in teaching? As relationships are core of educational process the interpersonal dimension is crucial.

Despite its limitation (cross sectional design, small sample size, reliance on self-report measures) the study does highlight important role of mindfulness for teachers' well-being, stress and burnout while the associations between mindfulness and mindful behaviour in classroom need to be explored further.

Acknowledgments

The study is a part of Erasmus K3 *HAND IN HAND: Empowering Teachers Across Europe to Deal with Social, Emotional and Diversity Related Career Challenges* and was supported by The Slovenian Research Agency as part of the project: *Positive Teacher Development Model - An interplay of the Individual (Motivational, Emotional, and Cognitive) and Contextual (School and System level) Assets during the School Year* [J5-50156].

References

Benn, R., Akiva, T., Arel, S., & Roeser, R. W. (2012). Mindfulness training effects for parents and educators of children with special needs. *Developmental Psychology, 48*(5), 1476-1487.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822-848.

Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods, 1*(1), 16-29.

Dave, D. J., McClure, L. A., Rojas, S. R., De Lavalette, O., & Lee, D. J. (2020). Impact of mindfulness training on the well-being of educators. *The Journal of Alternative and Complementary Medicine, 26*(7), 645-651.

Duncan, L. G., Coatsworth, J. D., & Greenberg, M. T. (2009). A model of mindful parenting: Implications for parent–child relationships and prevention research. *Clinical child and family psychology review, 12*(3), 255-270.

Durtschi, J. A., Soloski, K. L., & Kimmes, J. (2017). The dyadic effects of supportive coparenting and parental stress on relationship quality across the transition to parenthood. *Journal of Marital and Family Therapy, 43*(2), 308-321.

Frank, J. L., Jennings, P. A., & Greenberg, M. T. (2016). Validation of the mindfulness in teaching scale. *Mindfulness, 7*(1), 155-163.

Hair, J. F., Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis.* Prentice-Hall International.

Hu, L., & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*(1), 1-55.

Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., Cham, H., & Greenberg, M. T. (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.

Mackenzie, M. J., Carlson, L. E., Munoz, M., & Speca, M. (2007). A qualitative study of self-perceived effects of mindfulness-based stress reduction (MBSR) in a psychosocial oncology setting. *Stress and Health: Journal of the International Society for the Investigation of Stress, 23*(1), 59-69.

Melamed, S., Kushnir, T., & Shirom, A. (1992). Burnout and risk factors for cardiovascular diseases. Behavioral medicine, 18(2), 53-60.

Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide.* Muthén & Muthén.

Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., Oberle, E., Thomson, K., Taylor, C., & Harrison, J. (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. https://doi.org/10.1037/a0032093

Roeser, R. W. (2016). Processes of teaching, learning, and transfer in mindfulness-based interventions (MBIs) for teachers: A contemplative educational perspective. In K. A. Schonert-Reichl & R. W. Roeser (Eds.), *Handbook of mindfulness in education* (pp. 149-170). Springer.

Roeser, R. W., Skinner, E., Beers, J., & Jennings, P. A. (2012). Mindfulness training and teachers' professional development: An emerging area of research and practice. *Child Development Perspectives, 6*(2), 167-173.

Shanafelt, T. D., Sloan, J. A., & Habermann, T. M. (2003). The well-being of physicians. *American Journal of Medicine, 114*(6), 513-919.

Schonert-Reichl, K. A., & Roeser, R. W. (2017). *Handbook of Mindfulness in Education*. Springer.

Tabachnick, B. G., & Fidell, L. S. (2006). *Using multivariate statistics.* Allyn and Bacon.

Topp, C.W., Østergaard S. D., Søndergaard S., & Bech P. (2015). The WHO-5 Well-Being Index: A Systematic Review of the Literature. *Psychotherapy and Psychosomatics, 84*, 167-176.