

## Mediating Role of Teachers' Effective Communication Skills in the Relationship between Interpersonal Mindfulness and Subjective Well-Being

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**Abstract:** The purpose of this study is to determine whether teachers' effective communication skills were a mediator in the relationship between interpersonal mindfulness and subjective well-being. Three hundred and fifteen teachers participated in this study, which was designed as a correlational model. The Personal Information Form, Interpersonal Mindfulness Scale-TR (IMS-TR), Effective Communication Skills Scale (ECSS), Positive and Negative Affect (PANAS), and Life Satisfaction Scale (LSS) were used to collect data. To determine the mediating role of effective communication skills in the relationship between interpersonal mindfulness and subjective well-being the bootstrapping method was applied. The results revealed that the indirect effect of interpersonal mindfulness on subjective well-being via effective communication skills was statistically significant. Effective communication skills were a mediator in the relationship between interpersonal mindfulness and the subjective well-being of teachers. Consequently, interpersonal mindfulness may enhance effective communication skills and, owing to this, rising subjective well-being may grow stronger.

**Keywords:** interpersonal mindfulness, effective communication, subjective well-being, bootstrapping.

### Introduction

Having many duties and responsibilities increases the stress and burnout levels of teachers nowadays. Teachers are becoming increasingly stressed as a result of the tough demands of their jobs, and this stress and burnout can have a negative impact on their health, well-being, professional performance, classroom environment and also students' well-being (de Carvalho et al., 2021). However, we know that teachers with high levels of subjective well-being, which is the scientific equivalent of the concept of happiness, provide an effective learning environment and classroom management and have good teacher-student relations. Teachers' roles are crucial and foster children's academic learning and social-emotional well-being (Flook et al., 2013). Oberle and Schonert-Reichl (2016) stated that teachers' burnout negatively affects not only personal health but also educational systems and cultures around the world. Teachers may be able to manage daily demands and avoid burnout by promoting their own well-being.

In the teaching profession, mindfulness practices are beneficial in managing job-related stress and burnout (Flook et al., 2013; Tarrasch et al., 2020). Lomas et al. (2017) support their findings that while



mindfulness interventions reduced stress, strain, anxiety, depression, burnout, distress, and anger, it increased well-being and satisfaction among pre-service and in-service teachers.

## **Teachers' Interpersonal Mindfulness**

Kabat-Zinn (1994), who is a pioneer of contemporary adaptations of mindfulness, defined mindfulness as “paying attention in a particular way: on purpose, in the present moment and non-judgmentally” (p. 4). Internal and interpersonal mindfulness are two types of mindfulness. Kohlenberg et al. (2015) argue that internal mindfulness includes the individual's attention to inner life, the present moment, awareness, accepting without judgment and not acting reactively. Interpersonal mindfulness, on the other hand, refers to a person's ability to sustain moment-to-moment awareness when engaging with others, to be aware of his/her own thoughts, feelings, body sensations, and internal experiences during the interaction process, as well as paying attention to external experiences (Pratscher et al., 2019).

As a result of the increase in research on the concept of mindfulness, studies have revealed its importance in certain relationships, such as parenthood (Duncan, 2007), marriage (Deniz et al., 2020), friendship (Pratscher et al., 2018), and teaching (Frank et al., 2016). Interpersonal mindfulness contributes to the development of the individual's relationships in business as well as family life (Stahl & Goldstein, 2010). Since the more mindfulness people have, the more they communicate effectively (Pratscher et al., 2018). Effective communication is crucial for the learning environment, and close relationships with people increase subjective well-being (Buss, 2000).

Happy people are successful, self-developing, and healthier (Lyubomirsky et al., 2005). Therefore, it is important for teachers to be happy. Teachers' well-being is not only important for their mental health and personal development but also for the development of students, the teacher-student relationship, and an active learning environment in the classroom. Therefore, it is important to determine what affects teachers' well-being and to examine the variables that could be beneficial for students. Development and learning are important to teachers and students. On the development and change of the world, online learning has been included as well as face-to-face and innovative interactions will continue to be included in learning environments in the coming years. As Hammerness et al. (2012) argue, teachers should be adaptive experts who can adapt themselves and the learning environment efficiently and effectively. Contrary to these predictions, online technologies increase emotional engagement in online learning environments despite the physical separation between students and teachers (Chih-Yuan Sun & Rueda, 2012). Teachers who feel good support effective learning paths for both face-to-face and online and, thus, adapt to evolving educational processes. In this respect, it can be said that teachers' high subjective well-being could facilitate their individual development, teacher-student relationships in both face-to-face and online learning process, and their adaptation to innovative conditions. For this reason, it is important to determine the factors that affect teachers' well-being.

## **Research Questions**

This study aimed to examine the level of contribution of interpersonal mindfulness to effective communication and how this affected teachers' subjective well-being. In this respect, the research

question was, “Is there a mediation role of effective communication skills in the relationship between interpersonal mindfulness and subjective well-being of teachers?”

## Methods

### Research Methodology

This study employed a correlational design, which is used to examine whether two or more variables are related (McMillan & Schumacher, 2006). Correlational design was used to reveal whether there was a mediation role of effective communication in the relationship between interpersonal mindfulness and subjective well-being in the study.

### Participants

The population of the study was teachers who were working at pre-schools, primary schools and high schools in Bolvadin, Sandıklı and Dinar regions of Afyonkarahisar, Turkey. In these regions there were 204 schools in total. Since the Turkish Education System is centralised and teachers’ assignments to the schools are changeable day by day, the teacher population in any city is not definite or stable. Therefore, the population in this study was an *infinite population*. A convenience sample of 315 teachers took part in this study. According to the convenience sampling method, subjects were selected on the basis of being accessible (McMillan & Schumacher, 2006). Demographic information of the participants was reported as shown in Table 1.

**Table 1: Demographic Information of Sample**

Categories	f	%	Categories	f	%
<b>Gender</b>			<b>Branch</b>		
Female	181	57.5	Primary School teaching	46	14.6
Male	134	42.5	Turkish Language teaching	40	12.7
Total	315	100	Science teaching	36	11.4
<b>Seniority</b>			English Language teaching	33	10.5
1-5 years	105	33.3	Vocational education teaching	31	9.8
6-10 years	64	20.3	Mathematics teaching	23	7.3
11-15 years	40	12.7	Social sciences teaching	22	7.0
16-20 years	45	14.3	Religious and moral education teaching	19	6.0
21 and above years	61	19.4	Psychological counseling and guidance	16	5.1
Total	315	100	Pre-school teaching	14	4.4
			Others	35	11.1
			Total	315	100

According to Table 1, the sample consisted of 181 females (57.5%) and 134 males (42.5%). In addition, 105 participants (33.3%) had 1-5 years of experience, 64 participants (20.3%) had 6-10 years of experience, 40 participants (12.7%) had 11-15 years of experience, 45 participants (14.3%) had 16-20 years of experience and, lastly, 61 participants (19.4%) had 21 or more years of experience in the teaching profession. In addition, 46 participants (14.6%) were primary school teachers, 40 (12.7%) were Turkish Language teachers, 36 (11.4%) were science teachers, 19 (6.0%) were religious and moral education teachers, 16 (5.1%) were psychological counselors and 14 (4.4%) were pre-school teachers. In addition, 35 participants (11.1%) belonged to other branches, such as geography teaching, mentally

handicapped teaching, technology and design teaching, office management teaching, electronic teaching and music teaching.

### **Data Collection Tools**

#### *Personal Information Form*

The Personal Information Form was created by the researchers to collect demographic information, such as gender, seniority and the branch of the teachers who took part in the study.

#### *Interpersonal Mindfulness Scale-TR (IMS-TR)*

IMS-TR was developed by Erus and Tekel (2020). It has 13 items and two factors: *awareness* and *being in the moment*. According to exploratory factor analysis result, the two factors explained 50.65% of the total variance. Internal consistency coefficient of the scale calculated by Cronbach alpha was found to be between .71 and .85 in the factors, and .82 for the overall scale.

#### *Effective Communication Skills Scale (ECSS)*

The Effective Communication Skills Scale developed by Buluş et al. (2017) consists of 34 items and five factors: *ego supportive language*, *active-participative listening*, *self-recognition/self-disclosure*, *empathy*, and *I-language*. Exploratory factor analysis was performed to reveal the structure of the scale. Chronbach's alpha coefficients for the total scale was .82.

#### *Measuring Subjective Well-Being*

Data collection tools for life satisfaction, and positive and negative emotions (Diener, 1984), which are dimensions of subjective well-being, were used for measuring subjective well-being. To calculate the subjective well-being, life satisfaction and positive emotion points should be summed up and negative emotion points should be subtracted from the total points.

The Positive and Negative Affect (PANAS) developed by Watson et al. (1988), and adapted to Turkish by Gençöz (2000), was used to measure the emotional dimension of subjective well-being. The scale consists of a total of 20 items, 10 items measuring *positive affect* and 10 items measuring *negative affect*. The Cronbach alpha internal consistency coefficient was .83 for negative affect and .86 for positive affect.

The Life Satisfaction Scale (LSS) was developed by Diener et al. (1985) and was adapted into Turkish by Dağlı and Baysal (2016). The Life Satisfaction Scale measured the general life satisfaction of individuals. The one-dimensional scale consists of five items. As a result of the exploratory factor analysis, it was found that 68% of the total variance was explained. The Cronbach's alpha internal consistency coefficient of the scale was .88.

### **Data Collection and Analysis**

Data was collected via the internet during the spring term in 2021. The participants shared the URL that was generated using Google Forms. The link contained informed consent, which included the purpose of the research, information about data privacy, contact information for the researchers and instructions for the data collection tools.

Data was analysed with IBM SPSS 21. Demographic information of the participants was analysed using descriptive statistics. Before conducting bootstrapping analyses, the suitability of the data set

was examined by Mahalanobis distance analysis, which was conducted to discard extreme values from the data set. As Tabachnick and Fidell (2013) suggested, two data with a chi-square value below  $p < .001$  were excluded from the data set. Finally, 315 data were included in the analyses. After normality test, Pearson product moment analysis was conducted to reveal the relationships between the variables. Finally, for analysing the mediating role of effective communication skills in the relationship between interpersonal mindfulness and subjective well-being, the bootstrapping method was used. Bootstrapping is widely conducted to assess the mediation models by increasing the number of samples (MacKinnon, 2008).

### Ethical Clearance

The authors have no funding to disclose. All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional research committee, and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The authors declare they have no conflict of interest. Informed consent was obtained from all individual adult participants included in the study.

### Findings

The bootstrapping method was used to examine the mediating role of teachers' effective communication skills in the relationship between interpersonal mindfulness and subjective well-being. But before the mediating analysis, to reveal the relationships between the variables, the Pearson product moments analysis was conducted, and the results are presented in Table 2.

**Table 2: The Relationships between Effective Communication Skills, Interpersonal Mindfulness and Subjective Well-Being and Descriptive Statistics**

Scales	Correlations			Descriptive Statistics		
	1	2	3	N	$\bar{x}$	Sd
1. Effective communication skills	1	.66**	.53**	315	133.27	13.91
2. Interpersonal mindfulness		1	.45**	315	51.83	5.28
3. Subjective well-being			1	315	30.25	10.44

\*\* $p < .001$

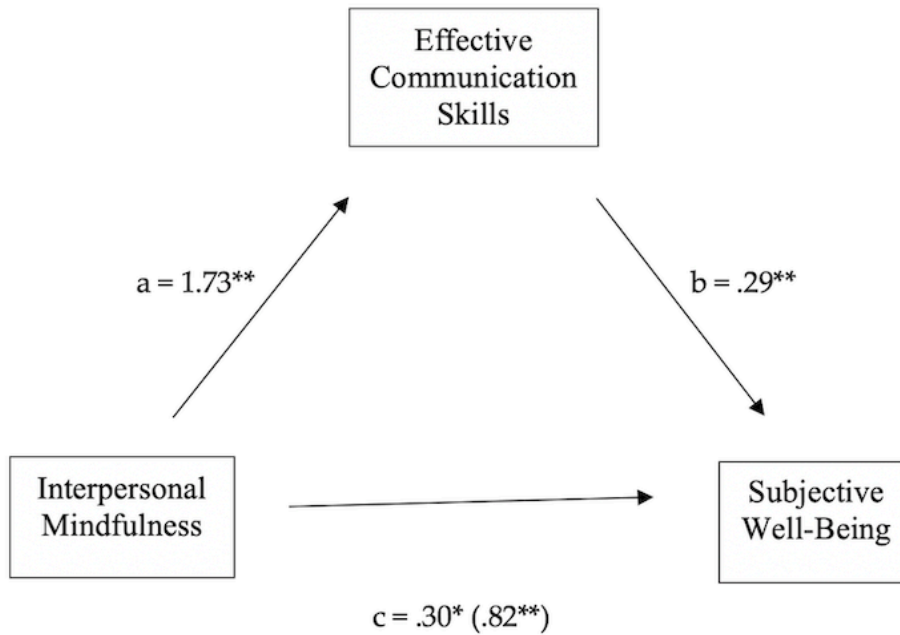
Table 2 reveals that there were significant positive relationships between effective communication skills and interpersonal mindfulness ( $r = .66$ ), effective communication skills and subjective well-being ( $r = .53$ ) and interpersonal mindfulness and subjective well-being ( $r = .45$ ). Since the a-path from interpersonal mindfulness to effective communication skills and the b-path from effective communication skills to subjective well-being were significant, bootstrapping analyses with bias-corrected confidence estimates were conducted (Preacher & Hayes, 2004). The indirect effects' .95% confidence interval was calculated using 5,000 bootstrap resamples in the study (Preacher & Hayes, 2008). The results of the bootstrapping analysis are presented in Table 3.

**Table 3: Path Values and Indirect Effects of the Model**

	Path Coefficient		Bootstrap Indirect Affect		
	To subjective well-being	To effective communication skills	Bootstrap Value (Standard Error Value)	95% Confidence intervals level LLCI ULCI	
From interpersonal mindfulness	.82**	1.73**			
From effective communication skills	.29**				
IM → ECS → SWB			.27 (.04)	.18	.36

\*\* $p < .001$ , IM = Interpersonal Mindfulness, ECS = Effective Communication Skills, SWB = Subjective Well-Being, LLCI = lower limit of confidence interval, ULCI = upper limit of confidence interval

According to Table 3, interpersonal mindfulness positively related with effective communication skills ( $B = 1.73, t(310) = 15.35, p = .001$ ). In addition, effective communication skills were positively related with subjective well-being ( $B = .29, t(309) = 6.51, p = .001$ ). Lastly, the results of the mediation analysis confirmed the mediating role of effective communication skills in the relationship between interpersonal mindfulness and subjective well-being ( $B = .27; CI = .18 \text{ to } .36$ ). Furthermore, results revealed that the direct effect of interpersonal mindfulness on subjective well-being became lower but were still significant ( $B = .30, t(310) = 2.54, p = .011$ ) when controlling for effective communication skills, which suggested a mediation. The results are presented in Figure 1 below.



\* $p < .05$ , \*\* $p < .001$

**Figure 1: Indirect and direct effect of interpersonal mindfulness on subjective well-being**

According to Figure 1, teachers' interpersonal mindfulness level predicted their effective communication skills, and this prediction could contribute to their subjective well-being level. Variables explained 28% of the variance of subjective well-being and the model was significant [ $F(2, 310) = 235.82; p < .000$ ].

## Discussion

As a result of the study, effective communication skills were seen to be a mediator in the relationship between interpersonal mindfulness and the subjective well-being of teachers. Consequently, interpersonal mindfulness may help people communicate more effectively, and, as a result, their subjective well-being may improve. When research with teachers was examined, Molloy Elreda et al. (2019) found that interpersonal mindfulness buffers against the effects of high stress. Ma et al. (2021) also found that teachers' mindfulness in teaching was negatively correlated with burnout. According to Hwang et al. (2017) mindfulness interventions improve the well-being of in-service teachers by lowering negative outcomes, such as perceived stress, burnout, and anxiety.

Interpersonal mindfulness is associated with the positive and functional relationships of the individual (Pratscher et al., 2018; Pratscher et al., 2019). Being mindful while in social interaction increases effective communication (Pratscher et al., 2018). Mindfulness in the communication process ensures meaningful and satisfying interaction (Stahl & Goldstein, 2010). Interpersonal mindfulness has important qualities that contribute to relationships. These qualities include being open to people's thoughts, trying to understand them as they are, being able to understand the feelings of others, putting yourself in the place of the other person, being empathetic, showing compassion to other people, enjoying the happiness and joy of other people, being calm, moderate and wise (Stahl & Goldstein, 2010). Kohlenberg et al. (2015) argue that mindfulness increases social interaction and establishes close relationships, but interpersonal mindfulness increases it much more significantly. In line with the literature, the contribution of interpersonal mindfulness to effective communication is understandable. Frank et al. (2016) state that interpersonal mindfulness is related to the teacher-student relationship, which causes teachers to feel more competent in education, both behaviourally and socially and emotionally. Since the universal aim of education requires a positive relationship between teachers and students (Tarrasch et al., 2020), mindfulness improves the relationship between the teacher and the student and contributes more to the academic life of the student (Bambaeroo & Shokrpour 2017).

Mindfulness prevents the individual from reacting quickly and without thinking automatically during interpersonal interaction, instead mindfulness allows people to be in the present moment and remain non-judgmental. It improves the ability to respond more helpfully and regularly and provides effective communication (Kozlowski, 2013). In other words, interpersonal mindfulness provides effective communication by using mindfulness in the interaction process (Pratscher et al., 2019; Stahl & Goldstein, 2010). It can be said that it is crucial for teachers to communicate effectively not only face-to-face but also online.

The measures taken during the Covid-19 process have further accelerated the transfer of education to online platforms, although the effect of technology on the educational process is a sign of the times. With the restriction of close contact, mobility, usage of public transportations and common areas during the pandemic process, the online process in education has been rapidly entered. Internet

technologies have important learning opportunities to engage people and enhance their lives, but they can also have negative impacts if attention is not paid to human-centered well-being (Henriksen et al., 2022). While many areas of social life have been restructured around digital communication, workplace digitisation has been accelerated during the pandemic (Wrede et al., 2023). Home-office and workplace digitisation came with some disadvantages such as job ambiguity and stress.

One of the most common stressors was found to be job ambiguity, while the most common indicator of a stressor was found to be a technology (Ayyagari et al., 2011). In home-offices, workers lost the boundaries between private life and work in addition to the multitude of communication channels (Wrede et al., 2023). So do teachers. Due to the transition to distance education and the growth of technological trends, teachers have reported increased technology-related stress (Beames et al., 2021). Even before the pandemic many teachers were unfamiliar with the methodology or technology of online teaching. Although they learned how to teach online, they had to meet increased demands (Sokal & Eblie Trudel, 2020). Stress about how to teach online was combined with a lack of infrastructure, support and resources. Therefore, it can be said that especially with the pandemic period, the technology-based teaching process has negatively affected teachers mentally (Beames et al., 2021). A meta-analysis study examining the effects of mindfulness-based interventions on educators in schools found that mindfulness practices were effective in reducing teachers' stress, anxiety, depression, and burnout (Zarate et al., 2019). These interventions can be online or within a mobile application, in addition to face-to-face. It can be thought that teachers' well-being and effective communication with their students will be increased by software programmes on interpersonal awareness practices, which have been found to be effective.

Tuan (2022) found that dispositional mindfulness and interpersonal mindfulness were predictive for proactive coping for techno-stress. Dispositional and interpersonal mindfulness were identified as crucial personal antecedents in coping with techno-stress. A teacher with an increased level of mindfulness uses their communication skills more effectively when communicating with students through technology, and this increases their contribution to students' learning processes as well as supporting their own well-being. Supporting the well-being of the teacher is an important part of the education and training process. Henriksen et al. (2022) recommended that in teacher training, the development of curricula should support teachers' well-being as well as helping them learn skills to support students' well-being. In this context, it can be suggested to increase interpersonal mindfulness skills in order to reduce teachers' technology-based stress. Thus, the well-being of the teacher, whose stress is reduced, increases, and this brings a healthier teacher-student relationship. A teacher with a high level of well-being and interpersonal mindfulness is a teacher who is open to improvement and being more effective. The mental and psychological health of teachers is of primary importance for the effective continuation of face-to-face and online education.

### **Implications for Learning for Development**

Considering teachers' place at the center of learning, efforts to increase their levels of mindfulness, communication skills, and well-being are seen as an important effort to transform education into learning for development. There is much evidence that mindfulness enhances well-being but additional research is needed to prove its effects on cognition, learning, teaching, and behavior. Therefore, the place of mindfulness in education and the processes it is related to should be made



clear, and research on it should be accelerated (Weare, 2019). Research on the relationship between teachers' interactional characteristics and classroom quality and their relationships with students is essential. In this research teacher interaction was examined through interpersonal mindfulness and effective communication and it was found that this relationship can contribute to teacher well-being. Interaction directly facilitates a healthy and productive relationship with the student. This relationship can lead to healthy and developmental learning environments. A high level of teacher well-being can also lead to effective learning environments. Jennings (2015) pointed out that mindfulness can support teachers' social and emotional competence and well-being, improve their classroom performance and personally support the development of the learning process in the classroom. Research on teachers' ability to facilitate students' adaptation and development to the serious challenges of a rapidly changing world is promising. As technology and environmental conditions change, teachers' contribution to educational processes may vary. For example, today, the education process is offered in online and face-to-face environments. A teacher's high level of well-being can ensure that he or she is open to development and learning, and at the same time, high communication skills can enable him or her to present the online learning environment in a functional way. In this respect, it is thought that interpersonal mindfulness interventions offered to teachers and pre-service teachers would be effective for their development. This research is cross-sectional and focused only on the mediating role of effective communication between interpersonal mindfulness and well-being. The results of the study have resulted in a national evaluation. Similar research can be planned, and the results can be generalised by working in different groups. Studies can also examine the relationship between teachers' level of mindfulness and well-being and student characteristics (learning motivation, development, etc.) and can be evaluated in terms of learning for development.

In future studies, it can be investigated to what extent the mindfulness practices applied to teachers affect their interaction with students and teacher well-being. At the same time, the contribution of teachers' development to the students' learning development, learning motivation, well-being, and teacher-student relationship can be revealed through experimental research results. It can be said that teachers, whose interpersonal mindfulness levels can be high, are happier than before, which is essential, firstly, for their own development and, secondly, for reflections on the education process. As a result, they could adapt themselves to different environments and communicate with students face-to-face and online much more effectively. Through such research, it can be revealed how the teachers' characteristics (mindfulness, communication, and well-being) contribute to students' learning experience and development on learning platforms where technology is used, rather than how they contribute.

## References

- Ayyagari, R., Grover, V., & Purvis, R. (2011). Technostress: Technological antecedents and implications. *MIS Quarterly*, 35(4), 831. <https://doi.org/10.2307/41409963>
- Bambaerero, F., & Shokrpour, N. (2017). The impact of the teachers' non-verbal communication on success in teaching. *Journal of Advances in Medical Education & Professionalism*, 5(2), 51-59.
- Beames, J.R., Christensen, H., & Werner-Seidler, A. (2021). School teachers: The forgotten frontline workers of Covid-19. *Australasian Psychiatry: Bulletin of Royal Australian and New Zealand College of Psychiatrists*, 29(4), 420-422.
- Buluş, M., Atan, A., & Erten Sarıkaya, H. (2017). Effective communication skills: A new conceptual framework and scale development study. *International Online Journal of Educational Sciences*, 9(2), 575-590.

- Buss, D.M. (2000). The evolution of happiness. *American Psychologist*, 55(1), 15-23.
- Chih-Yuan Sun, J., & Rueda, R. (2012). Situational interest, computer self-efficacy and self-regulation: Their impact on student engagement in distance education. *British Journal of Educational Technology*, 43(2), 191-204.
- Dağlı, A., & Baysal, N. (2016). Adaptation of the Satisfaction with Life Scale into Turkish: The study of validity and reliability. *Electronic Journal of Social Sciences*, 15(59), 1250-1262.
- de Carvalho, J.S., Oliveira, S., Roberto, M.S., Gonçalves, C., Bárbara, J.M., de Castro, A.F. (2021). Effects of a mindfulness-based intervention for teachers: A study on teacher and student outcomes. *Mindfulness*, 12(7), 1719-1732.
- Deniz, M.E., Erus, S.M., & Batum, D. (2020). Examining marital satisfaction in terms of interpersonal mindfulness and perceived problem solving skills in marriage. *International Online Journal of Educational Sciences*, 12(2), 69-83.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575.
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Duncan, L.G. (2007). *Assessment of mindful parenting among parents of early adolescents: Development and validation of the interpersonal mindfulness in parenting scale*. [Unpublished Doctoral Dissertation, Pennsylvania State University.]
- Erus, S.M., & Tekel, E. (2020). Development of Interpersonal Mindfulness Scale-TR (IMS-TR): A validity and reliability study. *European Journal of Educational Research*, 9(1), 103-115.
- Flook, L., Goldberg, S.B., Pinger, L., Bonus, K., & Davidson, R.J. (2013). Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind, Brain & Education*, 7(3), 182-195.
- Frank, J.L., Jennings, P.A., & Greenberg, M.T. (2016). Validation of the Mindfulness in Teaching Scale. *Mindfulness*, 7(1), 155-163.
- Gençöz, T. (2000). Positive and negative affect schedule: A study of validity and reliability. *Turkish Journal of Psychology*, 15(46), 19-26.
- Hammerness, K., Darling-Hammond, L., & Bransford, J. (2012). How teachers learn and develop. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do*. Jossey-Bass, 358-389.
- Henriksen, D., Gruber, N., & Woo, L. (2022). Looking to the future from the present: A call for well-being and mindfulness in education. *Journal of Technology and Teacher Education*, 30(2), 145-154.
- Hwang, Y.S., Bartlett, B., Greben, M., & Hand, K. (2017). A systematic review of mindfulness interventions for in-service teachers: A tool to enhance teacher wellbeing and performance. *Teaching and Teacher Education*, 64, 26-42.
- Jennings, P. (2015). Early childhood teachers' well-being, mindfulness, and self-compassion in relation to classroom quality and attitudes towards challenging students. *Mindfulness*, 6, 732-743.  
<https://doi.org/10.1007/s12671-014-0312-4>
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hyperion.
- Kohlenberg, R.J., Tsai, M., Kuczynski, A.M., Rae, J.R., Lagbas, E., Lo, J., & Kanter, J.W. (2015). A brief, interpersonally oriented mindfulness intervention incorporating: Functional Analytic Psychotherapy's model of awareness, courage and love. *Journal of Contextual Behavioral Science*, 4(2), 107-111.
- Kozlowski, A. (2013). Mindful mating: Exploring the connection between mindfulness and relationship satisfaction. *Sexual and Relationship Therapy*, 28(1-2), 92-104.
- Lomas, T., Medina, J.C., Ivtzan, I., Rupperecht, S., & Eiroa-Orosa, F.J. (2017). The impact of mindfulness on the wellbeing and performance of educators: A systematic review of the empirical literature. *Teaching and Teacher Education*, 61, 132-141.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803-855.

- Ma, Y., Wang, F., & Cheng, X. (2021). Kindergarten teachers' mindfulness in teaching and burnout: The mediating role of emotional labor. *Mindfulness* 12(3), 722-729.
- MacKinnon, D.P. (2008). *Introduction to statistical mediation analysis*. Routledge.
- McMillan, J.H., & Schumacher, S. (2006). *Research in education: Evidence-based inquiry*. Pearson Higher Ed.
- Molloy Elreda, L., Jennings, P.A., DeMauro, A.A. Mischenko, P.P., & Brown, J.L. (2019). Protective effects of interpersonal mindfulness for teachers' emotional supportiveness in the classroom. *Mindfulness*, 10(3), 537-546. <https://doi.org/10.1007/s12671-018-0996-y>
- Oberle, E., & Schonert-Reichl, K.A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine*, 159, 30-37. <https://doi.org/10.1016/j.socscimed.2016.04.031>
- Pratscher, S.D., Rose, A.J., Markovitz, L., & Bettencourt, A. (2018). Interpersonal mindfulness: Investigating mindfulness in interpersonal interactions, co-rumination, and friendship quality. *Mindfulness*, 9(4), 1206-1215.
- Pratscher, S.D., Wood, P.K., King, L.A., & Bettencourt, B.A. (2019). Interpersonal mindfulness: Scale development and initial construct validation. *Mindfulness*, 10(6), 1044-1061.
- Preacher, K.J., & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731.
- Preacher, K.J., & Hayes, A.F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Sokal, L., & Eblie Trudel, L. (2020). How to prevent teacher burnout during the coronavirus pandemic. *The Conversation*. <https://theconversation.com/how-to-prevent-teacher-burnout-during-the-coronavirus-pandemic-139353>.
- Stahl, B., & Goldstein, E. (2010). *A mindfulness-based stress reduction workbook*. A New Harbinger Publication.
- Tabachnick, B.G., & Fidell, L.S. (2013). *Using multivariate statistics: International edition*. Pearson.
- Tarrasch, R., Berger, R., & Grossman, D. (2020). Mindfulness and compassion as key factors in improving teacher's well being. *Mindfulness* 11(2), 1049-1061.
- Tuan, L.T. (2022). Employee mindfulness and proactive coping for technostress in the COVID-19 outbreak: The roles of regulatory foci, technostress, and job insecurity. *Computers in Human Behavior*, 129, 107148. <https://doi.org/10.1016/j.chb.2021.107148>
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Weare, K. (2019). Mindfulness and contemplative approaches in education. *Current Opinion in Psychology*, 28, 321-326. <https://doi.org/10.1016/j.copsyc.2019.06.001>
- Wrede, S.J., Esch, T., & Michaelsen, M.M. (2023). Mindfulness in the digital workplace: An explorative study of the compatibility of mindfulness and technology. *Research Square (pre-print)*. <https://doi.org/10.21203/rs.3.rs-2459776/v1>
- Zarate, K., Maggin, D.M., & Passmore, A. (2019). Meta-analysis of mindfulness training on teacher well-being. *Psychology in the Schools*, 56: 1700-1715.

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