STRENGTHENING TEACHERS' SOCIAL-EMOTIONAL SKILLS: THE PRELIMINARY RESULTS OF A MINDFUL-BASED PROTOCOL

SOSTENERE LE COMPETENZE SOCIO-EMOTIVE DEGLI INSEGNANTI: PRIMI RISULTATI DI UN PROTOCOLLO BASATO SULLA MINDFULNESS

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ABSTRACT
This contribution presents the results of an experimental study aimed at increasing the socio-emotional skills of teachers and educators through a mindful-based protocol. Teachers' social-emotional competence is important for mastering their profession's social and emotional challenges, preventing stress and burnout, and building positive teacher/student relationships. Psychometric questionnaires and an open-ended questionnaire were administered. The study's results highlight a positive influence on perceived stress and emotions management.

Questo contributo presenta i risultati di uno studio sperimentale volto ad aumentare le competenze socio-emotive di insegnanti ed educatori attraverso un protocollo basato sulla mindfulness. La competenza socio-emotiva degli insegnanti è importante per affrontare le sfide sociali ed emotive inerenti alla loro professione, prevenire lo stress e il burnout e costruire relazioni positive con gli studenti. Sono stati somministrati questionari psicometrici e un questionario a risposta aperta. I risultati dello studio evidenziano un'influenza positiva sullo stress percepito e sulla gestione delle emozioni.

KEYWORDS
Mindfulness, perceived stress, socio-emotional competence
Mindfulness, stress percepito, competenza socio emotiva

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Introduction[1]

Over the past two decades, there has been a significant focus on developing so-called 21st-century skills in education, particularly socio-emotional skills. They are central to human development due to their high predictive value for educational outcomes (OECD, 2015; Abrahams et al., 2019) and crucial for academic success and preparing students for future personal and professional challenges (OECD, 2015). Modern educational policies increasingly view socio-emotional skills as both essential outcomes and means of education, alongside traditional academic results like performance in mathematics, language, or science (Ayeni et al., 2024; Abrahams et al., 2019). International organisations such as the European Union and the World Health Organization have been working to emphasize the intentional development of these competencies. Research shows that socio-emotional skills can be developed at school through tailored programs or incorporated into regular classroom activities, enhancing the student's overall experience at school (Shriver & Weissberg, 2020; Abrahams et al., 2019). On the other hand, the teaching profession is considered one of the most emotionally demanding, which can affect teachers' mental health and well-being, often leading to stress and burnout (Ornaghi et al., 2023) and programs designed to improve teachers' stress management significantly reduce psychological distress and enhance emotion regulation (Valente, 2022; Conroy et al, 2019; Aspelin, 2019). Furthermore, it is important to consider that teachers are the ones who execute social-emotional learning programs for students (Schonert-Reichl, 2017; Lozano-Peña, 2021) and to be effective they need to be emotionally intelligent. In summary, socio-emotional competencies are critical not only for student development but also for teachers' well-being, helping them manage stress and prevent burnout. Therefore, integrating these skills into educational programs and teacher training is essential. The purpose of this paper is to explore the efficacy of a mindful-based educational program for teachers on socio-emotional competencies, particularly emotion regulation, decreasing stress levels and increasing the capacity for self-compassion and perception of self-efficacy.

[1] The manuscript is the result of a collective work by the authors whose specific contributions are as follows: Anna Maria Mariani Introduction & paragraphs 1, 2, 3; Silvia Ceccacci paragraph 4; Catia Giaconi Discussion & Conclusions.

1. The Socio-Emotional Competencies in Education

In the scientific literature, social and emotional competencies have been defined in various ways. Initially, they were described as the skills, motivations, knowledge, or abilities that a person needs to effectively and efficiently handle social and emotional situations (Bisquerra-Alzina et al., 2007; Elias et al., 1997). More recent definitions expand on this to include the ability to manage both personal and interpersonal social and emotional experiences effectively, promoting personal and collective well-being and prosperity (Collie, 2019). The prerequisites that allow people to succeed in social and emotional situations are awareness of one's own emotions and emotion regulation skills on the one hand and the awareness of other people's emotions and relationship management skills on the other hand (Boyatzis et al., 2000; Mayer et al., 2008; Nangle et al., 2010). As stated by Scheirlinckx et al. (2022), when defining teachers' socio-emotional skills (SEMS), it is important to consider the social role and requirements for teachers that are requested to facilitate and stimulate social learning skills in students and, given the multifaceted nature of teaching, to interact with various education stakeholders beyond students, such as colleagues and parents (Thompson et al., 2018). Jennings and Greenberg's (2009) Prosocial Classroom Model has social and emotional skills as its central concept. They use the definition developed by CASEL (2020) which involves five main emotional, cognitive, and behavioural skills: self-awareness, social awareness, responsible decision-making, self-management, and relationship management. The model suggests that teachers' social-emotional competence and well-being influence their classroom management strategies, relationships with students, and ability to implement socio-emotional learning (SEL) programs and practices.

2. Mindfulness for the growth of socio-emotional competence in teachers

Mindfulness-based interventions (MBIs) are growing rapidly in school environments as research has shown that they have positive implications for teachers (Lomas et al., 2017; Klingbeil and Renshaw, 2018; Zarate et al., 2019) and students (Dark-Freudeman et al., 2022; Gallo et al., 2023).

Mindfulness consists of being aware and attentive to the present moment, to one's thoughts, perceptions, actions, and emotions (Kabat-Zinn, 1990). In mindfulness meditation, attention is directed to the experience of the present moment with an attitude of curiosity, openness, acceptance, non-reactivity, and non-judgment (Bishop et al., 2004; Baer, 2003). It is a two-component construct that includes "the

self-regulation of attention so that it is maintained on immediate experience," accompanied by "a particular orientation toward one's experiences in the present moment, an orientation that is characterized by curiosity, openness, and acceptance" (Bishop et al., 2004).

Within the protocol validated by Kabat-Zinn, Mindfulness-Based Stress Reduction (MBSR), there are some meditations of Buddhist origin, other contemplative practices like yoga, and elements of cognitive therapies for stress management.

Some studies show the benefits of the MBIs with exercises on mindful attention, no-judgement and self-compassion on the socio-emotional competencies of teachers (Mariani, 2022; Hidajat et al., 2023). De Carvalho et al. (2021) reported a significant increase in teachers' emotional regulation competence, self-efficacy, and well-being as well as in teachers' classroom behaviours and students' engagement.

Scientific evidence indicates that these emotional changes are based on neural modifications. The reported effects highlight multiple brain areas involved in these changes, including the cerebral cortex, and grey and white matter, suggesting that meditation's effects may involve extensive brain connections (Tang et al., 2015). A meta-analysis by Fox et al. (2014) mentioned the effects of meditation on eight brain regions, such as the frontopolar cortex (related to increased awareness after meditation practice), sensory cortices and the insula (related to body awareness), the hippocampus (related to memory processes), the anterior cingulate cortex, the median cingulate cortex, and the orbitofrontal cortex (related to self and emotion regulation). Additionally, other studies have reported that mindfulness meditation affects the activation level of the amygdala with both positive and negative emotional stimuli (Allen et al., 2012; Desbordes et al., 2012; Kral et al., 2018).

3. The study

The study took place in a comprehensive institute situated in Macerata. The overall number of registered students in the school was 370. Teachers and educators of the institute were involved. Recruitment for teachers involves several steps. Expressions of interest were sought from school principals, teachers and educators. Those interested in participating signed informed consents. All participants were allowed to withdraw from the study at any stage. The intervention ran for the course of three months, from October to December 2023.

3.1. Research aim

This research focused on understanding the impact of a mindful-based protocol on teachers' social-emotional skills. Accordingly, the research hypothesis is stated as follows:

- A mindful-based protocol leads to an increase in the participants' capacity for emotional regulation, decreasing the level of stress and increasing the capacity for self-compassion and perception of self-efficacy.

3.2 Sample

A total of 12 people (11 women, 1 man) have been involved, aged between 41 and 65 years (M = 48.91; SD = 6.417). Among them, 10 are professors in lower secondary school, while 1 is an elementary school teacher and 1 is an educator in a lower secondary school. Only the educator has a bachelor's degree, while the others have master's degrees. Regarding marital status, 4 are married, 2 have a partner, 2 are divorced or separated, and 4 are unmarried.

3.3. Intervention

The mindful-based training program consisted of eight 2-hour sessions and one 4-hour session, held two weeks apart. They were all facilitated by one of the components of the research group, a psychologist and facilitator of mindfulness protocol.

All sessions had a part dedicated to emotional and body awareness through the practice of paying attention to one's breathing, body, and sensations and suspending judgment. According to Melnychuck et al. (2018), attention to breathing is particularly effective for regulating the production of norepinephrine, through the small area of the brain stem called the locus coeruleus, directly involved in the stress mechanism.

Then, each session focused on a specific topic related to the teacher's profession to raise awareness and reflect on own's teaching practice and potential improvements (Fig.1). In particular, the last three sessions were dedicated to learning and practising some tools and exercises for students to work on their socio-emotional competencies.

<table>
<tr><th>1</th><th>2</th><th>3</th><th>4</th><th>5</th><th>6</th><th>7</th><th>8</th></tr>
<tr><td>Introduction to mindfulness
The way of being</td><td>learning to stay and let go</td><td>to be and do the teacher</td><td>stress and reactivity or response to stress</td><td>Difficult communications</td><td colspan="3">Mindful teaching theory and exercises</td></tr>
<tr><td colspan="8">emotional and bodily awareness through the practice of paying attention to one's breathing, body, sensations and suspending judgment</td></tr>
</table>

Figure 1 – Mindful-based program

The ninth session was dedicated to mindful-based practice with students at school.

Between one session and another, the researcher assigned mindfulness exercises to train attention and awareness during daily life. They were asked to write a diary of the activities and sensations perceived in the experience.

3.4 Measures

Four questionnaires have been administered to participants before the beginning of the protocol (T1) and at the end of it (T2):

- The Perceived Stress Scale - PSS (Cohen et al., 1983; trad. Fossati A. 2010) measures the degree to which situations in a person's life are appraised as stressful. The items were constructed to tap the degree to which people who take the test find their lives unpredictable, uncontrollable, or overloaded.
- Teachers' Sense of Efficacy Scale - TSES (Tschannen-Moran et al., 2001): This scale measures people's evaluations of their likely success in teaching. It has been shown to represent three latent factors associated with three areas of teaching: efficacy for Classroom Management (CM), Efficacy to promote Student Engagement (SE), and Efficacy in using Instructional Strategies (IS).
- Self-Compassion Scale - SCS (Veneziani et al., 2017): composed of 26 items and 6 sub-scales (Self-Kindness, Self-Judgement, Common Humanity, Isolation, Mindfulness, and Over-Identification). Self-compassion is a useful emotional regulation strategy, in which painful or distressing feelings are not avoided but are instead held in awareness with kindness, understanding, and a sense of shared humanity.
- Emotion Regulation Skills Questionnaire - ERSQ (Berking, 2014). It measures a broad range of emotion regulation skills as described in the Adaptive Coping

with Emotions (ACE) model. It has 9 subscales: Attention toward feelings, Body perception of feelings, Clarity of feelings, Understanding of feelings, Acceptance of feelings, Resilience: Tolerate and endure feelings, Readiness to confront undesired emotions, Self-support and Modification.

Furthermore, at the end of the protocol and after the collection of quantitative data, a questionnaire was administered with open-ended questions, aimed at obtaining an evaluation of the experience by teachers to support the analysis of quantitative measures. Teachers were asked to reply to 3 questions as follows:

- How would you define the experience you had participating in the path?
- What benefits have you found in following the path?
- What suggestions for improvement would you give to the teacher for organizing a new edition?

4. Data Analysis

Paired Samples T-Test was performed on the data to test for the main effects of the intervention on the levels of stress, auto-efficacy (AE), emotion regulation (ER) and self-compassion (SC) reported by the participants, using SPSS Statistics v20.

Internal consistency of all the scores was high (Cronbach's on the pooled values: AE, $\alpha = .99$; ER, $\alpha = .89$; SC, $\alpha = .81$, PS= .77) (Fig. 2). Consequently, the score related to stress, auto-efficacy, emotion regulation and self-compassion before and after the intervention, have been calculated by averaging the respective item values per participant.

Cronbach's on the pooled values	
Teacher's Auto Efficacy (AE)	$\alpha = .99$
Emotion Regulation Skill (ER)	$\alpha = .89$
Self Compassion Scale (SC)	$\alpha = .81$
Stress Perception (SP)	$\alpha = .77$

Figure 2 – Cronbach's on the pooled values

The results indicated that there was a significant difference between the levels of stress reported by the participant before and after the intervention, $t(11) = 2.195$, $p = 0.039$ (Fig. 3). The level of stress perceived before the intervention ($M = 15.17$; $SD = 4.39$) was significantly higher than the level participants reported after ($M = 13.08$; $SD = 3.78$).

	T0	T1	
Stress Perception (SP)	M = 15.17	M = 13.08	$t(11) = 2.195$
	SD = 4.39	SD = 3.78	p= 0.039

Figure 3 – Stress Perception results

There were no significant differences between the levels of self-efficacy, emotion regulation and self-compassion reported by the participants before and after the intervention.

We also conducted a correlation matrix (Fig. 4) to determine whether relationships between the variables were considered. Pearson's correlation coefficients have been computed on the whole pool of data, using SPSS Statistics v20.

		Emotion Regulation	Self-Efficacy	Self-Compassion
Stress Perception	*r*	-.465*	-.311	-.511*
	p	.022	.140	.011
Emotion Regulation	*r*		-.065	.486*
	p		.761	.016
Self-Efficacy	*r*			.267
	p			.207

Correlation is significant at the 0.05 level (2-tailed)

Figure 4 – Correlation matrix

Results revealed a moderate and negative correlation between the stress level and the emotion regulation capability, r(24) = -.465, and a strong and negative correlation between the stress level and the self-compassion capability reported by the participants, r(24) = -.511. Both the relationships were statistically significant, $p < 0.05$ (see Table X). Stress and auto-efficacy were moderately and negatively correlated, although the relationship was not statistically significant, r(24) = -.311, $p > .05$.

There was also a moderate correlation between emotion regulation and self-compassion. The relationship was statistically significant, r(24) = -.486, $p < .05$.

As regards the analysis of the open-ended questionnaire, 9 participants gave their answers to the questions. We grouped the answers to the first two questions in a table and used them as support in reading the quantitative data (Fig. 5).

How would you define the experience you had participating in the path?	What benefits have you found in following the path?
Innovative, intimate, relaxing, stimulating, "smiling"	Self-awareness, ability to carve out time for me, tools and methodologies to instil calm both in myself and in the students, giving importance to time in its moments and emotions, sharing the course with teachers and educators of the school.
Edifying	Greater awareness during my work as a teacher. In addition to the useful material for working in class after having experienced it.
Different and interesting	I became more aware of what I do and of time
The experience was definitely positive, it allowed me to have a first approach to a practice that I did not know	Reflection on some daily experiences through other points of view; sharing the course with colleagues and living the various moments with them, with the possibility of comparing.
Useful and interesting.	Trying to improve myself, paying greater attention to myself and to the world around me.
Very formative	Greater awareness. Knowledge of other techniques and deepening of known ones
A sensational adventure within myself to know myself better	Relaxation, tranquility. Ability to recognize and manage emotions
It was a new experience that made me reflect on stopping to think and concentrate even in daily actions	Greater reflection and awareness
A splendid experience that helped me to rediscover myself	Being able to relax and concentrate more easily

Figure 5 – Answers to an open-ended questionnaire

The last question regarding suggestions to improve the training path highlighted the requirement for more time in terms of the length and duration of the sessions.

Discussion and Conclusions

In this paper, we investigated the effectiveness of a 9-session mindfulness-based program on socio-emotional competencies of a sample of teachers and educators of a comprehensive institute situated in Macerata. Consistent with the hypothesis, the MB program showed promising effectiveness in Perceived Stress Levels, but any significant effects in levels of other variables considered (TSES, SCS, ERSQ). The decrease in stress levels is in line with what has been highlighted by some studies reporting that an 8-week MBSR program can lower stress levels in adults (Türkoğlu & Kavuran, 2024; Mas-Cuesta et al., 2024) also bringing about changes in brain structure. The lack of influence on other variables leads us to think that more time is needed to acquire effective adaptive behaviours on emotion regulation and the sense of self-efficacy (Gharetepeh et al., 2015; Rastegar & Memarpour, 2009).
The comments given by the participants in the open-ended questionnaire provide us with elements to hypothesize that a longer period of training can support the

acquisition of adaptive responses to the challenging situations of the teaching profession by influencing personal self-efficacy and emotion regulation. Several limitations of this study and suggestions for future research should be acknowledged. Firstly, the study was constrained by the small, randomly composed sample of students who participated voluntarily. Additionally, there was no control group for comparing the observed effects.

The research group intends to continue this research line, bridging the limitations highlighted. The hope is that training on socio-emotional skills will be considered part of the training program for teachers and educators.

References

Abrahams, L., Pancorbo, G., Primi, R., Santos, D., Kyllonen, P., John, O. P., et al. (2019). Social-emotional skill assessment in children and adolescents: advances and challenges in personality, clinical, and educational contexts. *Psychol. Assess.* 31, 460–473. doi: 10.1037/pas0000591

Aldrup, K., Carstensen, B., Koller, MM., Klusmann, U. (2020). Measuring Teachers' Social-Emotional Competence: Development and Validation of a Situational Judgment Test, Front. Psychol. *Educational Psychology*, 11, https://doi.org/10.3389/fpsyg.2020.00892

Alzahrani A.M., Hakami A., AlHadi A., Batais M.A., Alrasheed A.A., Almigbal T.H. (2020). The interplay between mindfulness, depression, stress and academic performance in medical students: A Saudi perspective*. PLoS ONE*, 15, 4.

Aspelin, J. (2019). Enhancing pre-service teachers' socio-emotional competence. Int. J. Emot. Educ., 11, 153–168.

Ayeni, O.O., Chisom, O.N., Al Hamad, N.M., Osawaru, B., Adewusi, O.E. (2024). Enhancing STEM education through emotional intelligence and counseling techniques, *World Journal of Advanced Research and Reviews*, 21(02), 903–916

Baer, R.A. (2003). Mindfulness training as a clinical intervention: a conceptual and clinical review. *Clin Psychol Sci Pract*, 10: 125–43

Basso, J.C., McHale, A., Ende, V., Oberling, D.J., Suzuki, W.A. (2019). Brief, daily meditation enhances attention, memory, mood, and emotional regulation in non-experienced meditators, *Behavioural Brain Research*, 356, 208-220.

Berking M, Whitley B. (2014). Affect Regulation Training, In: J. GJ, editor. *Handbook of emotion regulation*, 2nd ed. New York, NY, US: Guilford Press, 529–547.

Bishop, S.R., Lau, M., Shapiro, S., et al. (2004). Mindfulness: a proposed operational definition. *Clin Psychol Sci Pract*, 11: 230–41.

Boyatzis, R. E., Goleman, D., and Rhee, K. S. (2000). Clustering competence in emotional intelligence: Insights from the emotional competence inventory (ECI), in The Handbook of Emotional Intelligence, eds R. Bar-On and J. D. A. Parker (San Francisco, CA: Jossey-Bass), 343–362.

CASEL. (2020). The CASEL guide to schoolwide social and emotional learning. Chicago, IL: Author. Retrieved from https://schoolguide.casel .org/13-casel-guide.pdf

Chambers, R., Gullone, E., Allen, N.B. (2009). Mindful emotion regulation: an integrative review. Clin. Psychol. Rev. 29, 560–572. doi: 10.1016/j.cpr.2009.06.005.

Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress, Journal of Health and Social Behavior, 24, 386-396. Trad. It. Fossati A. (2010) Vita-Salute San Raffaele University of Milano.

Conroy, M.A.; Sutherland, K.S.; Algina, J.; Ladwig, C.;Werch, B.; Martinez, J.; Jessee, G.; Gyure, M.; Curby, T. (2019). Outcomes of the BEST-in-CLASS intervention on teachers' use of effective practices, self-efficacy, and classroom quality. *School Psych. Rev*., 48,

31–45. [CrossRef]

Dallasheh, W., Zubeidat, I., Masri, S. (2021). Emotional intelligence, learning motivation and inclusion ability among Arab minority special education teachers in Israel. The Educational Review USA, 5, 9, 343–54. https://doi.org/10.26855/er.2021.09.004

Dark-Feudeman, A., Colby Jones, MA, Christian Terry, MA (2022). Mindfulness, anxiety, and perceived stress in university students: Comparing a mindfulness-based intervention (MBI) against active and traditional control conditions, *Journal of American College Health*, 70, 7, 2116-2125

De Carvalho, J.S., Oliveira, S., Roberto, M.S., Gonçalves, C., Bárbara, J.M., De Castro, A.F., Pereira, R., Franco, M., Cadima, J., Leal, T., Lemos, M.S., Marques-Pinto, A. (2021). Efects of a Mindfulness-Based Intervention for Teachers: a Study on Teacher

and Student Outcomes, Mindfulness, 12, 1719–1732, https://doi.org/10.1007/s12671-021-01635-3.

Durlak, J. A., Weissberg, R. P., Dymnicki, A., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1), 405-432.

European Commission (2013). Supporting Teacher Educators for Better Learning Outcomes. Available at:
http://ec.europa.eu/education/policy/school/doc/teachercomp_en.pdf

Gallo GG, Curado DF, Machado MPA, Espíndola MI, Scattone VV, Noto AR. (2023). A randomized controlled trial of mindfulness: effects on university students' mental health. *Int J Ment Health Syst*., 17, 1, :32. doi: 10.1186/s13033-023-00604-8. PMID: 37833796; PMCID: PMC10571349.

Gharetepeh, A., Safari, Y., Pashaei, T., Razaei, M., Kajbaf, M.B. (2015). Emotional intelligence as a predictor of self-efficacy among students with different levels of academic achievement at Kermanshah University of Medical Sciences, *J Adv Med Educ Prof*., 3, 2, 50-55.

Hidajat, TJ, Edwards, EJ, Wood, R, Campbell, M. (2023). Mindfulness-based interventions for stress and burnout in teachers: A systematic review, Teaching and Teacher Education, 134, 104303, https://doi.org/10.1016/j.tate.2023.104303

Hölzel, B.K., Lazar, S.W., Gard, T., Schuman-Olivier, Z., Vago, D.R., Ott, U. (2011). How does mindfulness meditation work? proposing mechanisms of action from a conceptual and neural perspective. Perspect. Psychol. Sci. 6, 537–559. doi: 10.1177/1745691611419671.

Jennings, P. A., & Greenberg, M. T. (2009). The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. Review of Educational Research, 79(1), 491-525. https://doi.org/10.3102/0034654308325693

Jiménez-Picón, N., Romero-Martín, M., Ponce-Blandón, J.A., Ramirez-Baena, L., Palomo-Lara, J.C., Gómez-Salgado, J. (2021). The Relationship between Mindfulness and Emotional Intelligence as a Protective Factor for Healthcare Professionals: Systematic Review, Int J Environ Res Public Health, 18, 10, 5491.

Kabat-Zinn, J. (1990). Full Catastrophe Living: The Program of the Stress Reduction Clinic at the University of Massachusetts Medical Center. New York, NY: Delta

Klingbeil, D. A., & Renshaw, T. L. (2018). Mindfulness-based interventions for teachers: A meta-analysis of the emerging evidence base. School Psychology Quarterly, 33(4), 501–511. https://doi.org/10.1037/spq0000291

Lomas, T., Medina, J. C., Ivtzan, I., Rupprecht, 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. https://doi. org/10.1016/j.tate.2016.10.008

Lozano-Peña, G., Sáez-Delgado, F., López-Angulo, Y., Mella-Norambuena, J. (2021). Teachers' Social–Emotional Competence: History, Concept, Models, Instruments, and Recommendations for Educational Quality. *Sustainability*, 13, 12142. https://doi.org/10.3390/su132112142

Mariani A.M. (2022). Attention to the body and movement in training of educators 0-6: first results of an experimental study, *Italian Journal of Health Education, Sports and Inclusive Didactics*, 6, 1, ISSN 2532-3296 ISBN 978-88-6022-436-1.

Mas-Cuesta, L., Baltruschat, S., Candido, A., Verdejo-Lucas, C., Catena-Verdejo, E., Catena, A. (2024). Brain changes following mindfulness: Reduced caudate volume is associated with decreased positive urgency, *Behavioural Brain Research*, 461, DOI: 10.1016/j.bbr.2024.114859

Mayer, J. D., Roberts, R. D., and Barsade, S. G. (2008). Human abilities: emotional intelligence. *Annu. Rev. Psychol*. 59, 507–536. doi: 10.1146/annurev.psych.59. 103006.093646

Melnychuk, M.C., Dockree, P.M., O'Connell, R.G., Murphy, P.R., Balsters, J.H., Robertson, I.H. (2018). Coupling of respiration and attention via the locus coeruleus: Effects of meditation and pranayama. *Psychophysiology*, 55, 9, e13091. doi: 10.1111/psyp.13091. Epub 2018 Apr 22. PMID: 29682753.

Nangle, D. W., Grover, R. L., Holleb, L. J., Cassano, M., and Fales, J. (2010). Defining competence and identifying target skills, in *Practitioner's Guide to Empirically Based Measures of Social Skills,* eds D. W.Nangle, D. J.Hansen, C. A. Erdley, and P. J. Norton (New York, NY: Springer Science+Business Media), 3–20.

OECD (2015). *Skills for Social Progress: The Power of Social and Emotional Skills* OECD Publishing.

Ornaghi, V., Conte, E., Cavioni, V., Farina, E., Pepe, A. (2023) The role of teachers' socio-emotional competence in reducing burnout through increased work engagement, *Front. Psychol.,* 14:1295365, doi: 10.3389/fpsyg.2023.1295365

Rajendran, P., Athira, B. K. Elavarasi, D. (2020). Teacher competencies for inclusive education: Will emotional intelligence do justice?, Shanlax International Journal of Education, 9, 1, 169–82.

Rastergar, M., Memarpour, S. (2009). The relationship between emotional intelligence and self-efficacy among Iranian EFL teachers, *System*, 37, 4, 700-707

Shriver, T., & Weissberg, R. (2020). A response to constructive criticism of social and emotional learning. *Phi Delta Kappan, 101*(7), 52–57

Skura, M., Swiderska, J. (2021). The role of teachers' emotional intelligence and social competencies with special educational needs students. European Journal of Special Needs Education, 37, 3, 401–16.

Taylor, R. D., Oberle, E., Durlak, J. A., and Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: a meta-analysis of follow-up effects. *Child Dev.* 88, 1156–1171. doi: 10.1111/cdev.12864

Thompson, I., Willemse, M., Mutton, T., Burn, K., and de Bruïne, E. (2018). Teacher education and family-school partnerships in different contexts: a cross-country analysis of national teacher education frameworks across a range of European countries. *J. Educ. Teach.* 44, 258–277. doi: 10.1080/02607476.2018.1465621

Thümmler R, Engel EM, Bartz J. Strengthening Emotional Development and Emotion Regulation in Childhood-As a Key Task in Early Childhood Education. Int J Environ Res Public Health. 19(7):3978. doi: 10.3390/ijerph19073978. PMID: 35409661; PMCID: PMC8998041.

Tschannen-Moran, M., Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct, Teaching and Teacher Education, 17, 783-805.

Türkoğlu, N., Kavuran, E. (2024). The Effect of Mindfulness-Based Stress Reduction Program on Stress and Quality of Life in Family Caregivers of Patients with Cancer: Randomized Controlled Trial, Mindfulness, 15, 1070–1079, https://doi.org/10.1007/s12671-024-02336-3

Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. The Future of Child., 27, 137–155. doi: 10.1353/foc.2017.0007

Tang, Y.Y, Holzel, B., Posner, M. (2015). The neuroscience of mindfulness meditation, Nature Reviews Neuroscience, AOP, published online, doi:10.1038/nrn3916

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education, 17,* 783-805.

Valente, S.N. (2022). Development of emotional intelligence in pre-service teachers to increase professional well-being. *Psychology and Behavioral Science International Journal, 18*(3), 555988, doi.org/10.19080/PBSIJ.2022.18.555988

Veneziani, C. A., Fuochi, G., Voci, A. (2017). Self-compassion as a healthy attitude toward the self: Factorial and construct validity in an Italian sample, Personality and Individual Differences, 119, 60-68. doi:10.1016/j.paid.2017.06.028

You T, Ogawa EF (2020), Effects of Meditation and Mind-Body Exercise on Brain-Derived Neurotrophic Factor: A Literature Review of Human Experimental Studies Sports Medicine and Health Science, https://doi.org/10.1016/j.smhs.2020.03.001.

Zarate, K., Maggin, D. M., & Passmore, A. (2019). Meta-analysis of mindfulness training on teacher well-being. Psychology in the Schools, 56(10), 1700–1715. https://doi.org/10.1002/pits.2230