

Emotional intelligence developing training program's impact on teachers' psycho-emotional state

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Abstract. Teachers' profession is widely described as a mentally challenging one, often leading to burnout. As emotional exhaustion is higher among representatives of this occupation in comparison to other highly emotionally challenging professions, it is important to help teachers gain necessary skills and tools in order to maintain good emotional and overall wellbeing, and effectively cope with daily stressors. The aim of the study described in this paper was to assess the impact of a 5-module emotional intelligence developing training program on teachers' psycho-emotional health. Study sample consisted of 45 teachers, who took part in the study, filling in the research questionnaires before and after the completion of the designed training program. Participants were asked to subjectively rate their level of stress and other parameters, defining their subjective wellbeing. Results of the study revealed that after completing the training program, participants indicated a statistically significantly lower level of stress ($p < 0.01$). Also, participants' subjective evaluation of the quality of their social relationships and their overall wellbeing was significantly higher ($p < 0.01$) after the training program completion.

Keywords: emotional intelligence, emotional competences, teachers, inner coherence, psycho-emotional state, wellbeing.

1. Introduction

Interest in teachers' health and wellbeing has been increasing over the past decades, mostly encouraged by a significant increase in sick leave, job quitting and burnouts among teachers across different countries [1]. It is in fact commonly known that teaching is a process followed by daily emotional interactions and is being exposed to various cultural, societal, and social aspects. Scientific literature describes teaching as a mentally challenging occupation [2], demanding and often leading to burnout [1], which is often a consequence of intense work-related stress that becomes chronic. Indeed, emotional exhaustion turned out to be higher among this profession representatives in comparison to other highly emotionally challenging occupations [3].

One of the significant factors, distinguishing teaching as a profession accompanied with high psycho-emotional stress is that teachers' daily roles include a huge variety of different tasks and multifactorial demands [4]. As teaching is a complex occupation, studies addressing teaching-related health and wellbeing outcomes require likewise complex attitude and multidimensional approaches and views. This is also in accordance with a general perception of the concept of human health, which already back in 1946 was described by the World Health Organization as being an overall psychological and social wellbeing, and not merely the absence of illness [5]. Since the dissemination of such view, a more holistic approach towards health and wellbeing has been prevailing. And today it has become a common sense to include complex

approaches when addressing health and wellbeing issues.

Scientific studies on teachers' health and wellbeing discussed previously, suggest that there is a huge need for intervention or support programs that would help teachers in strengthening their inner resources and in gaining skills how to overcome daily demands and cope with highly stressful situations. One of such ways is helping to develop emotional-social competences, or, in general, emotional intelligence (EI). EI has been described by different models, however, three main models are proposed in scientific literature: mixed, ability and trait models [6]. Mixed models explain EI as a combination of emotional competences and personality traits such as assertiveness and optimism [7]. The Bar-On model [8] explains EI as a set of multifactorial components, including emotional and social skills that determine how people understand themselves and others, express themselves and respond to various daily situations.

According to Pennsylvania university researchers, developing social and emotional competences at educational institutions is a key factor in building supportive environment [9], which is mostly about being respectful, caring, and welcoming. Another study [10] has also shown similar results, additionally finding that there is a statistically significant relationship between the level of emotional competences and happiness. A recent study [2] found evident links between emotional traits and mental health, work-related psychological resilience, life satisfaction, distancing ability and experience of social support.

Not only there has been scientific proofs that teachers' emotional and social competences have significant impact on their resilience to stress and overall wellbeing and health, but there have already been positive experiences in applying various training programs to help teachers raise their abilities and emotional-social competences. Past studies have shown that it is possible to improve employees' EI through appropriate training [11-13]. Discussing specifically the academic context, it was found that group based EI training helped to improve participants' skills in emotion identification and management [14, 15]. In another study by Nelis et al. [16] it was found that EI training helped significantly improve general emotional skills, which had a positive impact on psychological wellbeing, subjective health perception and quality of social connections. In general, many studies have already shown successful results after specific trainings, proving that the level of EI can be developed through training programs [11-13, 17-21].

The aim of this study was to determine if an EI developing and inner coherence raising program, officially registered at Kaunas Education Innovation Center as the Program for the Improvement of Inner Coherence for Teachers and other Representatives of Highly Responsible Professions, could improve emotional health and overall wellbeing among teachers in Lithuania. Inner coherence in our context was understood as, in a general sense, inner state of balance [6], and mental resilience was perceived as better mental skills in coping with challenges.

2. Research organization and methods

Total 45 teachers (2 males, 43 females) from different Lithuanian primary schools, progymnasiums, gymnasiums, special needs and secondary schools across 21 Lithuanian cities took part in the study.

Participants were gathered after disseminating a public invitation across social networks for teachers to take part in the project Improving Inner Coherence as a way to Improve Psycho-Emotional Climate in a Work Team, partially financed by the Lithuanian Public health promotion fund. The main inclusion criterion was that each participant had to be currently working as a teacher in any Lithuanian secondary school. Participants received training program, consisting of 16-hour online materials, 16-hour live seminar and 8-hour practice. The created training program was posted on Moodle – a course management system. Participants had to learn assigned theoretical knowledge and perform practical tasks, to acquire necessary skills, oriented to maintain inner coherence, raise mental resilience and better cope with stress. The program consisted of five different modules:

3. EI development and stress coping

This module focuses on explaining the concept of EI, its mechanisms and relationship to individual emotion comprehension, expression, regulation, and daily responses to stressful situation. Scientific literature clearly proves significant impact of the level of EI on ability to cope with stress and anxiety [22], on maintaining healthy relationships [9], on perception of happiness and overall wellbeing [23]. These and other scientific data are explained during this module, to show the importance of developing EI. Practical tasks are assigned to help train practical skills in emotion identification, comprehension, response analysis and acquiring constructive response actions. Stress mechanisms are also explained during this model, helping to comprehend and analyze individual ways of responding to stressors. The module includes instruction in positive emotion refocusing and emotional restructuring techniques intended to prevent overreactive stress responses, increase emotional stability, reinforce healthy patterns of mental, emotional, and physiological activity [24], and maintain inner coherence.

4. Effective communication

The core focus of the model is to help strengthen active listening skills. Active listening is the highest and most effective level of listening, considered as well to be a special communication skill and a great strategy for having effective communication [25]. Learners of the model are exposed to observations and perception of their listening through four categories, proposed by Hunsaker and Alessandra [26]: non-listening, marginal listening, evaluative listening, and active listening. Practical exercises of this model are designed to help trainees discover their actual listening level in different environments and situations, as well as enforce necessary changes towards more effective social connection. The learning material is supported as well with tools to train self-awareness. Self-awareness allows an individual to reflect on their hidden features of self-thoughts, feelings, and beliefs [27]. Together with active listening self-awareness are suggested as modifiable factors affecting empathy [28].

5. EDEN method

This module focuses on training participants specific physical movements, based on Energy psychology (EP), that uses imaginal and narrative-generated exposure, along with interventions that reduce hyperarousal through acupressure and related techniques [29]. EP has been referred to as “acupuncture without needles” in treating mental health disorders. The efficacy of acupressure (a non-needle form of acupuncture) is well known and widely used.

According to Donna Eden, the founder of the Eden Method, Daily Energy Routine (DER) which was presented during this module, is a complete approach for helping our body's energy systems to thrive. It leads these systems to work in harmony with one another and with the body's physical structure [29].

6. Effective breathing

For neurons to function well, they need energy (produced from glucose and oxygen) and stimulation from sensory systems (visual, vestibular, somatosensory systems) [30, 31]. Breathing is important not only for physiological functions of the body, but also for our cognitive abilities [32, 33]. As a result, this module pays special attention to train participants efficient breathing and proper biomechanics of the respiratory system, in order to achieve that the main respiratory muscles work in harmony, and the body is not in a hyperventilated state [34- 36]. Various exercises are used for the tongue, throat, intercostal muscles, diaphragm, for instance, specific position of the tongue – if it is resting at the upper palate, helps to ease breathing through the nose. Self-massage with supposed sounds, vibration elements that stimulate the main parasympathetic

nervous system – the vagus nerve – are also very important [37, 38] and, therefore, included in this module.

The second part of the program focuses on training somatosensory systems (proprioception, vestibular apparatus, visual system). Research shows that these systems are very closely related not only to constant physical balance of our body, but also to stress responses, memory, cognitive abilities, general psychological state [39-41].

7. Mindfulness

Finally, the fifth element of this training is mindfulness training. Currently, there is broad and increasing scientific literature showing that mindfulness training is an effective tool in tackling a variety of issues, including anxiety, depression relapse, burnout, etc. [42, 43]. Among others, it is also effective in boosting subjective wellbeing, increasing the frequency of positive emotions and improving working memory [44, 45]. These effects are observed among diverse populations, with a large number of studies being targeted at teachers [46-48]. During this module, participants were introduced to both theoretical and practical material to acquire the basics of mindfulness training. Participants were led through a series of beginner meditative practices (such as breath meditation, thought and emotion meditation).

In the second part of this module, the concept and practice of self-compassion was introduced. Self-compassion is an emerging topic of practice and research, developed among others by Kristin Neff and Chris Germer [49], aimed at addressing self-critical thinking and encouraging the acquisition of emotion-regulation skills such as an ability to calm oneself in the face of suffering [50, 51]. Scientific literature reveals that it can increase wellbeing, social connectedness, reduce anxiety, depression and stress [49]. Participants were introduced to theoretical elements of the training and were guided through a series of meditations/exercises aimed at increasing their skill of self-compassion (e.g., meditation of dealing with difficult emotions).

To evaluate the impact of the training program on participants' overall health and wellbeing, each participant filled in a questionnaire before and after the completion of the program. The questionnaire consisted of six questions. First question asked the participants to subjectively rate the level of stress they were feeling at the moment of filling the questionnaire from 0 to 10 (0 = no stress at all; 10 = extremely high level of stress). The second question asked in the same form to rate the perceived stress during the whole last month.

In addition to stress level evaluation, participants were asked to provide their answers to four questions regarding their overall wellbeing, namely – physical vitality, emotional vitality, social connectedness, and overall wellbeing. Participants had to provide rankings on a five-point Likert scale. These questions were constructed cooperating with the HeartMath Institute research director Rollin McCraty. This constructed 4-item scale was previously used and described in [53], where its internal consistency was reported as 0.852. The Cronbach's alpha for the present study described in this manuscript was 0.807.

8. Results

For the comparison of participants answers to the first two questions (regarding subjective stress level) before and after the training program implementation, Wilcoxon signed-rank test was applied (Table 1).

As it may be seen in Table 1, a statistically significant difference was found when assessing participants current level of stress (Question No. 1) ($p < 0.05$).

No statistically significant difference was found when comparing participants' answers to the second question – regarding subjectively perceived stress level through the last month – before and after the training implementation.

For the analysis of the next four questions, Pearson's chi-squared test was applied. The results are shown in Table 2.

Table 1. Data on the comparison of the first two questions before and after the delivery of the training program ($n = 45$)

Question	p	Sum of ranks
No 1. Please rate (from 0 to 10) the level of stress you are feeling right now?	0.0002059	2497.5
No 2. Please rate (from 0 to 10) the level of stress you have experienced during the last month?	0.75055	2087

Table 2. Data on the comparison of the four questions on subjective overall wellbeing before and after the delivery of the training program ($n = 45$)

Question	p	χ_2
No 3. Physical vitality – what is the current level of your physical energy?	0.2715	14.4732
No 4. Emotional vitality – what are you feeling right now?	0.2796	9.7969
No 5. Social connectedness – what is the current quality of your social relationships?	0.0000389	36.0406
No 6. Overall wellbeing – how do you feel about your life right now?	0.001664	26.5415

As the data in Table 2 reveals, a statistically significant difference was found when assessing last two questions – regarding quality of social relationships and overall wellbeing ($p < 0,05$). Participants, when evaluating their social relationships and overall wellbeing after the program delivery, showed higher results (see Tables 3 and 4, respectively), which suggests that after the training program participants were feeling significantly more positive about their social connections and overall wellbeing in comparison to their state before the training program.

Table 3. Frequency distribution – Social connectedness

Social connectedness before the program delivery	Count (% of total)	Social connectedness after the program delivery					Total
		1	2	3	4	5	
2	0 (0 %)	0 (0 %)	0 (0 %)	1 (2.2 %)	0 (0 %)	1 (2.2 %)	
3	0 (0 %)	1 (2.2 %)	1 (2.2 %)	0 (0 %)	0 (0 %)	2 (4.4 %)	
4	0 (0 %)	0 (0 %)	3 (6.7 %)	12 (26.4 %)	0 (0 %)	15 (33.3 %)	
5	0 (0 %)	0 (0 %)	2 (4.4 %)	13 (28.9 %)	12 (26.4 %)	27 (60 %)	
Total	0 (0 %)	1 (2.2 %)	6 (13.3 %)	26 (57.8 %)	12 (26.4 %)	45 (100 %)	

Table 4. Frequency distribution – Overall wellbeing

Overall wellbeing before the program delivery	Count (% of total)	Overall wellbeing after the program delivery					Total
		1	2	3	4	5	
2	0 (0 %)	0 (0 %)	1 (2.2 %)	0 (0 %)	0 (0 %)	1 (2.2 %)	
3	0 (0 %)	2 (4.4 %)	0 (0 %)	1 (2.2 %)	0 (0 %)	3 (6.7 %)	
4	0 (0 %)	1 (2.2 %)	6 (13.3 %)	4 (8.9 %)	1 (2.2 %)	12 (26.7 %)	
5	0 (0 %)	0 (0 %)	7 (15.6 %)	12 (26.4 %)	10 (22.2 %)	29 (64.4 %)	
Total	0 (0 %)	1 (2.2 %)	6 (13.3 %)	26 (57.8 %)	12 (26.4 %)	45 (100 %)	

Data on the other two questions regarding subjectively perceived physical vitality and emotional vitality did not reveal statistically significant differences before and after the program delivery.

9. Conclusions

All participants of the study underwent a 5-module training program, designed to develop their emotional intelligence and gain necessary skills to better cope with daily stressors in their everyday working environment and overall life situations. When evaluating the impact of the delivered training program on teachers' emotional health and wellbeing, it was found that their subjectively perceived stress level decreased statistically significantly ($p < 0.01$), and their subjective evaluation of the quality of social relationships and overall wellbeing improved significantly ($p < 0.01$). Consequently, it can be noted that the designed training program helped

reach significant positive changes in the participants' subjective emotional status by not avoiding or eliminating objective stressors or challenges, but the way they perceived them and regulated their responsive reactions to those stressors.

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Roza Joffe-Luiniene received her Ph.D. degree in Public Health in 2020. Currently works as a lecturer, psychologist and junior researcher at the Lithuanian University of Health Sciences. Also, provides trainings for various companies on emotional intelligence, stress coping, conflict resolutions. etc. Main research interests include emotional state, emotional intelligence, links between physiology and psychological processes. Roza Joffe-Luiniene designed and prepared one of the five course modules, called EI development and stress coping, also arranged the research questionnaire, performed statistical analysis of the obtained data, and organized writing of the manuscript.



Artiomas Sabajevas, ICF certified coach, ISEI certified emotional intelligence practitioner, has a master's degree in distance learning technologies, certified teacher in non-formal education and andragogy, social entrepreneur, alumni of the EIT HEALTH Innostar program. In 2016 Artiomas was awarded as a 1st prize winner of the social innovation contest in Lithuania, organized by the Swedish fund "Reach for Change". His idea to establish specialized highly effective transformational programs for school-aged children with overweight or obesity, was recognized as most promising and worth special investment from the side of the fund. Artiomas Sabajevas designed and prepared a course module Effective communication and contributed to the writing of the manuscript.



Evelina Vainoriene is a Lecturer, holistic health (Holobody) trainer and Coach (2021), massage therapist (2021). Since 2018 Evelina is actively engaged in emotional qualification building projects, aiming to combine body, mind, energy and emotional intelligence techniques to improve school aged children and adults wellbeing. Evelina Vainoriene designed and prepared a course module EDEN method and contributed to the writing of the manuscript.



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Aleksandr Miskelovic is a psychologist and mindfulness trainer. He received his Clinical Psychology Master's degree in 2019 at the University of Leiden (Netherlands). He is accredited as a mindfulness trainer by Dutch Association of Mindfulness Trainers (VMBN; Cat. 1 Reg. 20181245) and provides both one-on-one and group trainings as well as participating in collaborative projects. He is also working in therapy settings in a private practice in the Netherlands. Aleksandr Miskelovic designed and prepared a course module Mindfulness and contributed to the writing of the manuscript.



Ruta Milisauskiene, who obtained a Computer Science qualification (1988) and a master's degree in Education (2004), applies her knowledge in distance learning (DL) research and development activities: research tools development, research organization, development of methodologies, and learning content, development of curricula and distance learning courses, DL process mentoring. Rūta is working as a project researcher in Social Projects Institute: collaborating on national and international educational and social projects and developing learning content for adult training and adapting it to distance learning. Ruta Milisauskiene gathered the study group, performed all organizational and technical tasks related to transferring the course to the Moodle platform, and contributed to the writing of the manuscript.



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