

Mindfulness Based Education for emotional awareness
and prevent burn-out syndrome: an educational experience
with teachers from kindergarten to high school*
Mindfulness Based Education per la consapevolezza emotiva
e la prevenzione della sindrome da burn-out:
un'esperienza educativa con gli insegnanti dalla scuola dell'Infanzia
alla scuola superiore di Secondo grado

Maria Buccolo

Sapienza University of Rome – maria.buccolo@uniroma1.it

Valerio Ferro Allodola

eCampus University, Novedrate (CO) – valerio.ferroallodola@uniecampus.it

ABSTRACT

Mindfulness is the interconnection between the ability to direct attention to the present moment (self-regulation of attention) and the attitude connected to this moment, characterized by curiosity, openness and acceptance. Clinical efficacy of mindfulness has been demonstrated over the past two decades. Its potential within both nursing contests and formal learning for adult education has recently been investigated.

Aims of the research: to evaluate and describe the effects of a professional training for teachers of all levels, examining the pedagogical implications, in terms of personal transformation and in the professional context.

Methodology: the research presents and discusses - through the data emerging from a questionnaire - the professional training of n. 57 teachers entitled «Take the Next Step - Conscious Learning». The course was structured inspired by the Mindfulness-Based Stress Reduction (MBSR) program and the work of Jon Kabat-Zinn and Saki Santorelli of the Center for Mindfulness in Medicine, Health Care and Society University of Massachusetts (USA).

Results: the data showed that the teachers participating in the training course understood its meaning, usefulness and the importance of the experiential and reflective-transformative nature of the tools presented.

Conclusions: the possible implications of the results of this study concern the ability to use and promote the mindfulness techniques beyond clinical effectiveness, as important tools for growth and development within formal learning contexts.

La mindfulness è l'interconnessione tra la capacità di dirigere l'attenzione sul momento presente (autoregolazione dell'attenzione) e l'atteggiamento a esso connesso, caratterizzato da curiosità, apertura e accettazione. Negli ultimi decenni è stata dimostrata l'efficacia clinica della mindfulness e re-

* The research is the result of a joint work of the two authors. However, the Introduction and paragraphs 3 are attributed to Maria Buccolo, paragraphs 1 and 2 to Valerio Ferro Allodola. The Conclusions are common to the authors

centemente è stato studiato il suo potenziale all'interno sia dei contesti di cura sia di apprendimento formale per la formazione degli adulti.

Finalità della ricerca: valutare e descrivere gli effetti di un percorso di formazione professionale dei docenti di ogni ordine e grado, esaminando le implicazioni pedagogiche, in termini di trasformazione personale e nel contesto professionale.

Metodologia: la ricerca presenta e discute - attraverso i dati emersi da un questionario - il percorso formativo di n. 57 docenti che hanno partecipato al corso di formazione dal titolo «Fai il passo successivo – Apprendimento consapevole». Il corso è stato strutturato ispirandosi al programma Mindfulness-Based Stress Reduction (MBSR) e al lavoro di Jon Kabat-Zinn e Saki Santorelli del Center for Mindfulness in Medicine, Health Care and Society University of Massachusetts (USA).

Risultati: i dati hanno mostrato che i docenti partecipanti al percorso formativo hanno compreso il suo significato e utilità, nonché l'importanza della natura esperienziale e riflessivo-trasformativa degli strumenti presentati.

Conclusioni: le possibili implicazioni dei risultati di questo studio riguardano la capacità di utilizzare e promuovere l'uso delle tecniche di mindfulness oltre l'efficacia clinica, come strumenti importanti per la crescita e lo sviluppo all'interno di contesti di apprendimento formale.

KEYWORDS

Teacher Training, Mindfulness, Awareness, Emotional Education, Burn-Out, Transformative Learning, Reflexivity.

Formazione degli Insegnanti, Mindfulness, Consapevolezza, Educazione Emozionale, Burn-Out, Apprendimento Trasformativo, Riflessività.

Introduction

The health emergency we have been experiencing for about two years has created a significant revolution in the way we express emotions, in managing stress, in interpersonal relationships and in lifestyle. The constant transformations have affected above all the school world and have led to stressful conditions in teachers related to work commitment which, if prolonged, can be a source of physical and psychological discomfort. By accepting the challenge of our times, we want to read the current historical moment as a problem of commitment and responsibility for research to build answers for the future, starting with the reflection on the actions to be taken to re-design the lives of each one. In this perspective, pedagogy and other human sciences in general aim to build self-training paths that lead subjects to re-learn to dream, to hope, to plan a life projected towards tomorrow (Buccolo, 2015).

The Report published by the Istituto Superiore di Sanità (ISS, 2020), clearly indicated the existence of a risk to physical and mental health due to stressful factors such as isolation in the home, prolonged school closure and strong limitation of social relations.

In June 2020, the results of an exploratory research were published that concerned perceptions and emotional experiences during the first months of Covid-19 (Buccolo, Ferro Allodola & Mongili, 2020). The sample of subjects involved in the survey involved nearly 6,000 people across Italy.

It seems therefore useful to start from the first national data – with a pedagogical-educational perspective – that emerged from the aforementioned study, to reflect on emotions and stress management during the pandemic.

The prevailing emotions were: anxiety (42.3%), sadness (35.4%), vulnerability (31.3%), fear (33.1%). A few months ago, an article in the New York Times highlighted with the term «languishing» – coined, for the first time by Keyes (2002) – an emotional state produced by the pandemic, which is characterized as the absence of joy and purpose. in life. It is a feeling of stagnation and emptiness, which comes to take shape as the absence of well-being. There are no symptoms of psychological distress, but the subject is not at the best of his abilities.

In summary, languishing turns off motivation and undermines the ability to concentrate (Grant, 2021). However, it also emerged that 25.5% of the interviewed sample tried to implement resilience strategies (Buccolo, Ferro Allodola & Mongili, 2020). This last figure - although contrasted by strong feelings of fear of contagion with respect to Covid-19 corresponding to 46.8% of the sample – is corroborated by as many as 75.3% who tried to take note of the situation, trying to transform the negative emotions into positive. Resilience as a competence of the individual-time-context product allows subjects to act on their own narrative flow by interpreting events and reconfiguring their story by acting, in particular, on their own self and on their own context to improve living conditions, reducing dependence from the surrounding environment. Resilience is, therefore, a skill that can be learned, improved and implemented through educational technologies and training courses undertaken by teachers to improve emotional life and stress management. Among the methods applied in training contexts it seems useful to refer to the practice of Mindfulness. The term «mindfulness», although it has different definitions, in Italian the term is often translated as «awareness». Mindfulness means, according to Jon Kabat-Zinn's definition, "paying attention in a particular way: intentionally, in the present moment and in a non-judgmental way" (2003). In other words, it is a matter of voluntarily directing one's attention to what is happening in one's mind, body and around oneself, moment by moment, carefully listening to one's experience, suspending criticism and judgment, but simply listening in the «here and now». Mindfulness is characterized by two closely interconnected components (Bishop et. al., 2004):

- the ability to direct attention to the present moment (self-regulation of attention);
- the attitude with which it is done, characterized by curiosity, openness and acceptance.

Mindfulness, therefore, is a practice aimed at training people about «being present» by accepting the reality of what they consciously experience. In recent decades, the clinical efficacy of mindfulness has been demonstrated through studies that have shown the reduction of stress symptoms even in subjects with serious diseases (Branstrom et al., 2012). Furthermore, its potential within both nursing and formal learning contexts for adult education was analyzed (Baer et al. 2012) with an impact on cognitive skills to improve attention, memory and concentration (Zeidan et al., 2010). The awareness of the experience, which unfolds in the present moment, creates an attunement with ourselves that activates specific brain circuits, inducing a wide range of beneficial effects, from emotional balance to improving the functioning of heart activity (Siegel, 2009).

Therefore the practice of mindfulness applied to teacher training becomes a concrete tool, documented by scientific research and studies, to reduce stress

and maintain a conscious relationship with oneself, with students, with colleagues, with parents, with the environment and with the changes of scenery, pleasant or not. With mindfulness, subjects are helped to understand their way of reacting to the events of life. This develops emotional intelligence, or the ability to consciously recognize, use, understand and manage one's own and others' emotions (Buccolo, 2019). In this regard, it is useful to remember that the teacher represents the professional of educational growth who has to do with «the other in training» (Buccolo, Pilotti & Travaglini, 2021); the teacher must take seriously the weight and impact of relational aspects in the training processes, as well as being supported in the elaboration of one's fear, anguish, need for dependence, uncertainty, which are constitutive of human nature». Furthermore, teacher represents a point of reference for the students, in order to improve management and class dynamics and favor the development of relational well-being. Therefore, learning to read relational dynamics is an indispensable skill, considered a constitutive part of professionalism (Riva, 2004, p. 160). This leads to rethinking the identity of the teacher within social complexity (Morin, 2011), where the strong degree of contingency excludes the possibility of pre-established actions. That is, it requires the ability to act in a flexible participatory context, with different degrees of complexity and with different social subjects involved in the exercise to share the interpretation of the problems encountered. The professional profile of the teacher, therefore, changes in relation to the socio-cultural educational transformations that he is experiencing, especially in this historical moment, where the relationship with the meaning attributed to problems and educational action also changes, in the context of unprecedented and unexpected situations. Morin writes on the unpredictability of life and places at the center among the figures most exposed to Covid-19 infection – together with socio-health professionals – the teachers of every school grade who, without interruption, in the midst of the Pandemic have revealed themselves not so much of functionaries, but “missionaries”, dedicating their time to care and relationship with others (Morin 2020, p. 35).

Education to unpredictable events is, therefore, what pedagogy in recent years has included in its evolutionary epistemological process, which includes among its knowledge also practices which, through reflective and transformative processes (Schön 1993, 2006; Mezirow 2003), they accompany individuals and communities to overcome new situations, consisting of unpredictable and unexpected experiences (Calaprice, 2020). To face these situations of uncertainty, teachers must be – at the same time – researchers able to identify the relationships between each phenomenon, applying customized procedures and strategies. In this perspective, the teacher learns by «educating», through the ability to «feel with the other» and to feel responsible for him. The need to change perspective and to understand that teachers, in their professional career, must also be trained in the emotional life, going beyond existential experience, is strongly highlighted (Iori, 2009). This need aims at the construction of self-reflective competences (Schön, 1993, 2006), also with respect to the problems and difficulties that constitute the emotional experience of different people.

A concrete answer to all this can be found in the application of the practice of mindfulness in educational contexts, which allows teachers to acquire emotional and relational skills, such as the ability to self-control, the regulation of negative emotions, the development of resilience and empathy, both in personal and professional life.

1. Research scenarios

Stress is the physiological response of the organism that involves the physical, neurological, hormonal, immune, psychological system, in biological, emotional and cognitive issues (Fink, 2016). A response that – in the short term (acute stress) – promotes dynamic phenomena of adaptation of the organism to the most varied environmental conditions but which – if it occurs too frequently and/or for long periods (chronic stress) – can have dysfunctional and pathological effects on various organs and systems (McEwen, 2017).

The brain represents the fundamental organ in the allostatic model as its structures – cortical and limbic – involved in cognitive and emotional processes (prefrontal cortex, anterior cingulum, insula, amygdala, hippocampus and striatum) play a fundamental role in the attribution of valence and personal salience to environmental stimuli and organize the behavioral and physiological response to stressful events.

In turn, these same brain structures are the main target of hormones and stress mediators; the latter, in fact, induces changes in both the structure and function of the brain (McEwen et al., 2015, 2016).

Chronic stress, therefore, causes important damage to the brain and in particular:

- a decrease in the prefrontal cortex, the consequences of which are a decrease in short-term memory, disturbances in the assessment of the context, in decision making and in self-control processes (Arnsten, 2015; McEwen et al., 2016).
- a decrease in the volume of the hippocampus, with negative consequences on episodic memory and on the regulation of mood (Gianaros et al., 2007; McEwen et al., 2016);
- a reduction of gray matter in many brain areas involved in emotional processes (medial prefrontal cortex, anterior cingulate and insula) (Vyas et al., 2022);
- a hypertrophy of the amygdala (Tost et al., 2015); consequently, there is a greater reactivity of the same to the presentation of negative stimuli, that can lead to increased anxiety, inability to extinguish negative memories and reduced cognitive and behavioral flexibility (Ansell et al., 2010). This increases the long-term risks of developing mental disorders, such as depression, post-traumatic stress disorder (PTSD) and addiction (Cohen et al., 2016; Schwabe et al., 2011).

The chronic element is decisive as it causes a progressive allostatic overload, i.e. the body uses all available weapons to adapt, until it is no longer able to react effectively to stressful events.

In this setting, chronic stress can overwhelm the body's overall ability to manage current and future stressors by diminishing the regulatory and coping skills, in particular, of teachers (i.e. stress management), as well as their physical and psychological health (Schaufeli & Greenglass, 2001), which can lead to burnout syndrome (Schaufeli et al., 1993) and increased allostatic load, as highlighted above (McEwen, 2004).

A particular form of work-related stress, the onset of which may derive from a large use of ICT during one's professional activity, is to be identified in the «technostress» (Salanova et al., 2007, 2013), a construct still little known and widespread in the Italian context.

In detail, it is possible to identify three types of technostress (Salanova et al., 2004):

1. **Techno-anxiety:** the best known and most well-known typology of technostress; in this case the subject who experiences it experiences, in addition to anxiety, a feeling of discomfort and tension for the current and future use of ICT. This form of anxiety affects not only the relationship with digital tools, but also with one's skills and competences as a professional in relation to technologies. There is a specific form of techno-anxiety, so-called "techno-phobia", which results in resistance and hostile/aggressive thoughts towards digital tools.
2. **Techno-fatigue:** peculiar form of technostress, linked to the feeling of tiredness and mental exhaustion caused by ICT.
3. **Techno-dependence:** tendency that occurs when the subject is unable to detach and move away from ICT for a medium-long period of time; in this case, we speak of "disconnection anxiety" (Brivio et al., 2018), which translates into an evident compulsiveness to remain "connected", a form of need that the subject tends to not find himself isolated from the rest of the world. Among the most recurrent compulsive actions, which these subjects resort to, there are: anticipatory control of notifications, conflicts with other activities, negative reactions in front of an interruption/disconnection, going in search of the latest model/software to keep up with times, "right to Wi-fi" (Albertini & Galimberti, 2017).

In Italy, technostress has been recognized as an occupational disease since 2007 and as such falls under the obligation of risk assessment pursuant to Legislative Decree 81/08, Article 28.

A prolonged and massive experience of technostress can also turn into burnout (Estrada-Muñoz et al., 2020).

According to the new definition of the WHO (World Health Organization), burnout is not identifiable either as a disease or as a medical condition, but rather appears in the ICD-11 (International Classification of Disease) – in force starting from January 2022 – as a picture, or rather a factor, which influences the health of the subject. In order for this syndrome to be diagnosed, however, it is necessary to exclude other disorders that present a similar picture, such as anxiety, depression or adjustment disorder (WHO, 2019).

Burnout syndrome is characterized by a depletion of one's emotional resources to cope with stressors and is defined by feeling cynical, irritable, having a negative attitude towards work and reduced self-efficacy and/or productivity (e.g. personal fulfillment; Maslach and Jackson, 1981; Maslach et al., 1996; Jennett et al., 2003).

The nature of their profession often requires teachers to invest substantially in students, colleagues and schools without receiving similar levels of mutual investment. Research shows that there are negative emotional, psychological and professional repercussions when teachers feel that their investments are not rewarded (Van Horn et al., 1999). Together, the chronic lack of mutual investment and related negative outcomes predicts the components of burnout, exacerbating the negative feedback loop that ultimately leads to burnout (Mearns & Cain, 2003). It is therefore important to examine the variables of individual differences in work stress research, in particular on expectations of negative mood regulation (Ibidem).

However, since this is a fairly well-known and widespread syndrome, there are various researches that have studied the construct in relation to other dimensions/factors, such as: perceived stress (Teles et al, 2020), emotional intelligence

(Colomeischi 2014), non-verbal communication, satisfaction and quality of life (Sestili et al, 2018), identification with the organization (Parrello et al, 2019). These studies show how, in reality, the factors that can increase, or vice versa decrease, the risk of experiencing burnout are equally varied.

According to Sternberg, nurses and teachers are among those at the highest risk of burnout. Sternberg writes: “These professionals face daily caregiving situations in their working life, often with inadequate pay, inadequate help in their jobs, and with too many patients or students in their care. Studies are beginning to show that burnout (nurses and teachers) can have not only psychological burnout, but physiological burnout as well: a flattened cortisol response and an inability to respond to any stress even with a mild cortisol burnout. In other words, chronic unrelenting stress can change the stress response itself. And it can change other hormone systems in the body as well” (Sternberg, 2008).

In a very recent research, which involved some Dutch primary school teachers, it emerges that “compared to other professions, teachers are more likely to drop out from work and develop mental illnesses. Almost one in five even choose a new profession within 5 years after starting as a teacher. This indicates an urgent need for interventions to reduce stress levels in teachers. However, few evidence-based effective interventions targeting stress and work-related problems in the primary educational system are available «(Lensen et al., 2021).

As regards Italy, the Professional Resilience of Teachers Scale – SRPI (Benvenuto, Di Genova, Nuzzaci & Vaccarelli, 2021) has recently been validated, which can be usefully applied in conditions of stress and traumatic situations that can be linked to personal experiences or emergency situations that lead teachers to face numerous unforeseen problems in their work and implement them, eg. evaluation and coping strategies related to the concept of resilience.

2. Methods

Setting and participants

The research aimed to evaluate and describe the effects of the application of mindfulness practices in the professional training of teachers of all levels, in order to examine the pedagogical implications and transformations on themselves and in the professional context. The training course was structured inspired by the Mindfulness-Based Stress Reduction (MBSR) program and the work of Jon Kabat-Zinn and Saki Santorelli of the Center for Mindfulness in Medicine, Health Care and Society University of Massachusetts (USA)¹. The MBSR program applied to teacher training was designed to «learn at an experiential level» to take care of oneself, to develop a greater state of serenity and mental peace, to be protagonists in choosing to live the present as an opportunity for growth and discovery, letting go of expectations and fears. In the educational field, the practice of mindfulness is configured as a multi-faceted construct, given the numerous dimensions involved in a process, as well as, and consequently, multidimensionality also characterizing the practice proposed in the empirical phase, integrating different techniques: meditation, experiential exercises, metaphors, short stories and creative writing.

1 <https://www.ummhealth.org/umass-memorial-medical-center/services-treatments/center-for-mindfulness>

The online questionnaire was designed by the two authors of this article and administered by Maria Buccolo, as referent of training activities of the “Istituto Comprensivo Via del Calice» in Rome, during the last online lesson. This event promoted a collegial discussion on the potential and limits of a training course focused on awareness. The need arose from the dialogue to request a second edition of the training course - in in face-to-face mode - in order to work more effectively and with the five senses even in outdoor education contexts.

Below is a summary of the training course tested with the participants.

<p>Course title TAKE THE NEXT STEP - MINDFUL LEARNING</p>
<p>Tranier John Angelori (MBSR Mindfulness Trainer)</p>
<p>Recipients n. 57 teachers of all types and levels of schools belonging to Area n. 5 of the city of Rome.</p>
<p>Procedure n. 10 meetings, of which the first and last in attendance at the High School for Science and Human Sciences «T. Gullace Talotta ”- lead school. The other meetings took place online, via the G-suite (Meet) platform.</p>
<p>General Objective Developing a better ability to maintain contact with «difficult» emotions and achieve greater self-acceptance, moreover, mindfulness practices in the teaching profession, lead to the development of mental attitudes that reduce stress and promote attitudes, that counteract the phenomena of burnout . The research was aimed at testing and evaluating a training course focused on Mindfulness for teachers. The sample collected for this research consists of n. 57 teachers from Area n. 5 of the city of Rome (Italy), from kindergarten to high school.</p>
<p>Specific Objectives</p> <ul style="list-style-type: none"> - Provide teachers with the skills related to the development of conscious thinking practices that they can use with themselves; in class with pupils; in life in all our interpersonal relationships. - Promote self-acceptance through greater awareness of one’s experience which includes sensations, perceptions, impulses, emotions, thoughts and relationships with others. - Examine anger, anxiety, self-centeredness and how these limit the will to be “fully present”; - Explore the impermanence and interconnectedness of all things; - Get in touch, recognize and be able to better manage difficult emotions, passing from reactivity to response. - Improve the quality of communication and listening to make relations with pupils, their parents and colleagues more effective. - Be aware, in the present moment without judging yourself.

Procedure

The exploratory research carried out moves in the field of participatory research-action (Orefice, 2006), according to an integrated research approach that is carried out at the time of the survey through the collection and analysis of data, of education understood as self-training of the subject who develops a reflective and

transformative action (Schön, 1993, 2006; Mezirow, 2003; Striano, 2002, 2020), aimed at the development of emotional self-awareness (Buccolo, 2019).

The survey tool identified was the online questionnaire, to overcome the problem of the restrictive measures of the pandemic and reach all the teachers who participated in the training.

The data collected – even if referring to a non-statistically significant group of subjects – were analyzed using a qualitative and interpretative approach, with the help of the NVIVO software (ver. 2020), to analyze the texts, detect the frequency of words and related synonyms.

The research results represent a starting point to deepen the practice of Mindfulness as a training device for teachers, in particular, to prevent and stem the stress and burnout (Ancona & Mendelson, 2014) generated by the pandemic which, after two years, is having important consequences for the well-being and psycho-physical health of teachers.

Survey Development

The survey (Google Form), addressed to all teachers who participated in the training course, was built and managed through the Google Forms application, with the link to the survey sent by e-mail.

The answers to the questionnaire, which remained active from 19 to 26 November, were provided by 58 people, or by all the teachers who participated in the training course.

The questionnaire was divided into two parts: a) general data (sex, age, educational level and institution of belonging) and b) n. 12 specific questions on the training experience.

The questions were intended to investigate:

- previous knowledge of Mindfulness and in what context;
- the perception of the effectiveness of Mindfulness as a practice of regulating one's emotions and for the development of flexible thinking;
- the perception of the effectiveness of Mindfulness as a willingness to change;
- the perception of the effectiveness of Mindfulness as a transformative learning practice;
- the perception of self-efficacy of the training course carried out.

Research results

The results of the research presented here can be summarized by taking up the clusters of the survey built for the present study and aimed at teachers who participated in the training course: a) General data (sex, age, school grade, home institution); b) Specific questions.

Research results – General data

In the first cluster (General data), we find the following data on the total of subjects who completed the survey: Males: 0%; Females: 100%.

The age of the participants ranges from 35 to 64 years, with a statistical average of 49.9 years.

As regards the educational level of teaching, 49.1% (28 subjects) belong to pri-

mary school, 28.1% (16 subjects) to middle school, 12.3% (7 subjects) to kindergarten and 10.5% (6 subjects) in high school.

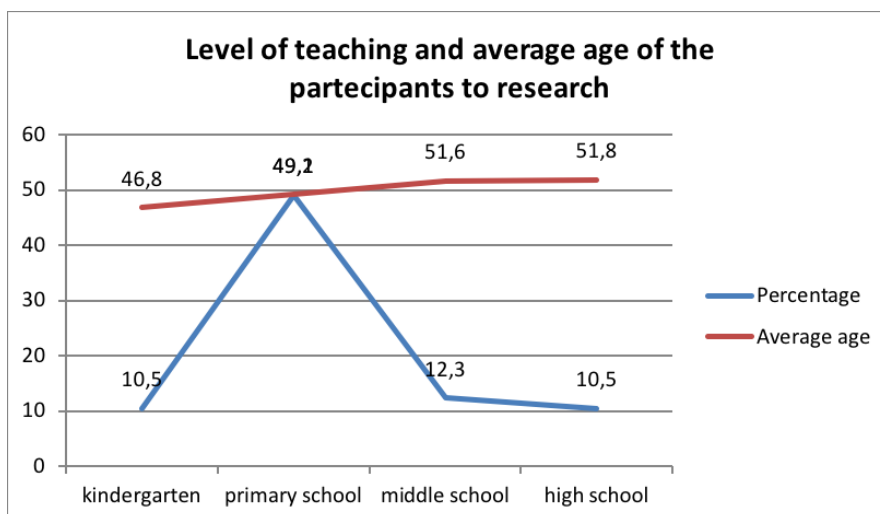


Figure 1 - Teaching level and average age of research participants.

Research results – Questions

To question 1) “Before the training course, had you ever experienced Mindfulness?”, 78.9% answered NO, while 21.1% YES.

To question 1a) “If yes, in what context?”, The answers concerned non-formal training contexts (courses organized by training agencies) and informal, face-to-face and online training.

To question 2) “Can Mindfulness help to regulate one’s emotions and to perceive situations as less stressful?”, Out of a total of 57 answers, 100% answered YES.

To question 3) “To what extent do you think you have integrated the practice of Mindfulness into your wealth of knowledge and experience?”, The following results are reported on a total of 57 answers: a) nonexistent (0%); b) mild (10.5%, 6 subjects); c) moderate (45.6%, 26 subjects); d) good (40.4%, 23 subjects); e) extended (5.3%, 3 subjects).

To question 4) «Do you think you will use Mindfulness practices in your daily life in the future?», Out of a total of 57 answers, 98.2% answered YES and only 1.8% NO.

To question 5) «If you do not think you want to use it in your work in the future, it is because», out of a total of 56 answers, 37.5% believe they «do not know enough to be able to apply it in class». Other subjects, however, express a willingness to apply it in class, but need specific training.

To question 6) “6) To what extent do you think the course has helped you to develop greater flexibility of thought?”, Out of a total of 57 answers, the following results are collected: a) nonexistent (0%); b) mild (8.8%, 5 subjects); c) moderate (35.1%, 20 subjects); d) good (49.1%, 28 subjects); e) extended (7%, 4 subjects).

In sub-question 6a) «Why?», Out of a total of 57 answers, we used the analysis of the frequency of words and synonyms processed with the NVIVO software (ver. 2020), as a basis for the identification of n. 3 macro-areas of investigation.

Word	Count	Weighted Percentage (%)	Similar Words
practice	16	3,36	good, practical, practice, practices, practicing, used
awareness	16	2,83	awareness, mind, mindful, mindfulness
reflect	12	2,19	observing, reflect, reflected, reflection, reflections, thought
think	12	2,15	believe, believed, consider, considering, think, thinking, thought

- 1) Area of (self) awareness and concentration on the «here and now»
- 2) Area of reflection on practice;
- 3) Area of reflection on one's emotions.

To question 7) "To what extent do you think this experience has helped you to have a greater availability for change?", out of a total of 57 answers, the following results are collected: a) nonexistent (0%); b) mild (7%, 4 subjects); c) moderate (43.9%, 25 subjects); d) good (43.9%, 25 subjects); e) extended (5.3%, 3 subjects).

To question 8) "Do you believe that Mindfulness facilitates new ways of reading and interpreting one's emotions?", 100% of the sample answered YES.

To sub-question 7a) «How?», Out of a total of 57 answers, we used the analysis of the frequency of words and synonyms developed with the NVIVO software (ver. 2020), as a basis for the identification of n. 3 macro-areas of investigation.

Word	Count	Weighted Percentage (%)	Similar Words
awareness	16	3,56	aware, awareness, mind, mindfulness
emotions	13	3,47	emotional
take	22	3,11	acceptance, accepting, acquire, assuming, get, guides, lead, leading, leads, learn, learned, learning, reading, take, training
focusing	11	2,80	centered, concentrating, concentration, focus, focused, focusing, stress, stressful
helps	9	2,40	facilitates, helping, helps
makes	13	2,10	form, get, gives, giving, induce, makes, making, take, works

- 1) Area of managing one's emotions;
- 2) Area of (self) awareness and reflective practice;
- 3) Area of personal time.

To question 9) "Can the practice of Mindfulness in a training context such as school lead to transformative learning?", Out of a total of 57 answers, 96.5% (55 subjects) of the sample answered YES. Only 3.5% (2 subjects) NO.

To sub-question 9a) «How?», Out of a total of 57 answers, we used the analysis of the frequency of words and synonyms elaborated with the NVIVO software (ver. 2020), as a basis for the identification of n. 3 models which include the issues raised.

Word	Count	Weighted Percentage (%)	Similar Words
awareness	19	4,48	aware, awareness, conscious, mind, mindfulness
practice	17	3,69	applied, apply, exercise, good, much, practice, practiced, skills, used, using
pupils	12	3,36	pupils, pupils', students
know	12	2,29	experience, experiences, experimented, know, knowing, knowledge, learn, learned, recognize
help	8	2,24	facilitate, facilitates, help, helping, helps, supporting

The models that emerged from the analysis are the following:

1. *Transmissive model*: Mindfulness as a practice to be transferred to students.
2. *Participatory model*: Mindfulness as a practice to be experimented with students.
3. *Metacognitive model*: Mindfulness as a practice for self-regulating learning emotions.

To question 10) «Was this course effective for you?», Out of a total of 57 answers, 89.5% (51 subjects) answered YES and 10.5 (6 subjects) NO.

To question 11) «Would you do this experience again?», Out of a total of 57 answers, 98.2% (56 subjects) answered Yes and only 1.8% (1 subject) NO.

Finally, in sub-question 11a) «Would you change something?», Out of a total of 57 subjects who filled out the question, the following answers are collected:

1. No (5 answers)
2. I would take the course face to face (26 answers).
3. The length of the training
4. Build the course on more practice.
5. I would expand it by making lessons within classrooms where there are particular dynamics that undermine interpersonal relationships
6. Maybe two hours too long – only an hour and a half – much better in the presence – videos on – max 30 students
7. Some participants were too descriptive of their personal situations, plus a therapeutic session seemed to me, at times, the meeting
8. My willingness to take some time for myself
9. The number of participants

At the last question 12), the processing of recurring words with synonyms conducted with the NVIVO software, produced the following Word Cloud:

The percentages collected from the analysis of the data – in relation to question 7) – indicate the perception of the effectiveness of the training course in relation to greater readiness for change (moderate for 43.9% and good for 43.9%).

Mindfulness, however, according to 100% of the sample interviewed facilitates new ways of reading and interpreting their emotions. The reasons given made it possible to identify n. 3 macro-areas, which include the following issues relating to question 7a).

Area of (self) awareness: focusing on the «here and now», removing anxiety and stress. “Looking at situations with different eyes allows you to face them with greater awareness”.

Area of managing one’s emotions: learning to listen to oneself; greater attention to bodily sensations; recognize, accept and welcome what you feel; “Cleanse the emotions from the» dross «of everyday life [to have] greater understanding and compassion not only for ourselves but also for others”.

Area of personal time: devote more time to oneself; take a listening attitude towards yourself.

From the analysis of the answers to question 9a), three models of reference to the practice of Mindfulness emerge, which correspond to the practices capable of facilitating transformative learning.

Models emerged	Practices identified
<i>Transmissive model</i>	<ul style="list-style-type: none"> • Transmit to the students some elements of the practice that can be implemented in the classroom • Transmit serenity and awareness • Transmit certain stimuli to children through targeted reflections • Introduce compassion for pupils and ourselves
<i>Participatory model</i>	<ul style="list-style-type: none"> • Working with children on a daily basis • Create peace of mind and collaboration. • Help and support pupils, through constant practice in the classroom
<i>Metacognitive model</i>	<ul style="list-style-type: none"> • Stimulate teaching as a motivation and not a transmission of notions • Develop a critical ability • Promote attention and concentration. • Promote the acquisition of the ability to recognize and manage one’s emotions • Guide pupils in difficulty and with low self-esteem to reformulate their mental schemes, changing their point of view and developing their potential • Facilitate the development of flexible and empathic thinking, capable of continually rethinking and redesigning itself over the course of life.

The points of convergence and operational suggestions of mindfulness practice with Mezirow’s theory of transformative learning require caution, both because they are complex systems of dimensions of knowledge and action, to be developed and integrated, hopefully, in future research, which originate from extremely different contexts and intentions. Both because the research in this direction is practically still to be developed (De Simone 2017).

From the analysis of the interviews, we can assert that there is agreement in believing that the training path has helped them in developing greater flexibility of thought, in particular with respect to the ability to learn to manage their own mental processes, as well as to develop a broader willingness to change.

Conclusions

While the world of education and school is once again severely tested by contingent situations and the natural process of renewal, the practice of mindfulness applied to teacher training can represent an alternative that broadens the horizon.

Conceiving other ways of thinking and acting, but also of investing in innovative ways of training – which put the person at the center to reduce the impact of stress at work, increase concentration, self-esteem and self-awareness – is fundamental. As well as allowing the subject to live in society by establishing relationships of civil coexistence, tolerance and to seek «happiness» (Pagano, 2018).

The path of awareness does not simply represent a «practice» to be learned in a short time – for example limited to a training course – and to be used without constancy and occasionally. Instead, it represents a different way of «being in the world», that should be cultivated as an existential attitude within the whole of everyday life. We are aware that this is by no means an easy path to take, but a path that requires effort, especially in the field of educational research.

In this research there are some data that have also highlighted the fear that the commitment spent is in vain or exceeds the benefits received. It is completely normal, therefore, for teachers to find it difficult to introduce mindfulness practices to develop daily awareness in personal professional life. Awareness that also concerns the critical use of digital technologies referring, in particular, to the «paradigm of digital care» (Mannese & Lombardi, 2018). However, we believe that teachers' outreach practices, and the help we can provide them, are a gift of inestimable emotional and educational value.

Carrying out a «kind» thought and action, imbued with a desire for understanding and loving openness to the world is by no means impossible. What is a priority, in this particular historical moment, is that teachers are also trained in resilience; that is, put in a position to face the adversities and unforeseen events of life. Mindfulness, in this sense, provides them with the tools to be less reactive, not to get carried away by negative thoughts and emotions and, finally, to clearly discriminate between situations, choosing the most appropriate behaviors. It would be desirable for mindfulness to become a practice present in school education, thus taking shape as a collective knowledge that binds different individuals in a free and transversal way in a global society (Morin, 2011) and, therefore, interconnected.

A society truly heals when it is taken care of at the root: educating citizens to awareness is one of the possible cures, because it could allow the emergence of a society founded on the assumptions of attention and kindness. A society capable of eliminating discrimination by welcoming diversity, of restructuring the universe and its inhabitants, to re-establish the foundations of a pedagogy that supports the emotional intelligence of those who govern the future of the planet.

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