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Systematic review on effective positive coping-based interventions in teachers.

Revisión sistemática sobre las intervenciones eficaces basadas en afrontamiento positivo en profesores

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Systematic review on effective positive coping-based interventions in teachers.

Abstract

Background: Throughout history, work has evolved due to factors such as industrialization, generating both work opportunities and health risks. Currently, there is an increase in stress levels in professionals in the public and health sectors, as well as in areas such as teaching, medicine, nursing, police, social work, and firefighters. These professions require direct contact with the public, attention to third parties and responsibilities that generate demands and discomfort. Objective: To analyze the models and methods used to promote positive coping skills in teachers. Method: The review followed PRISMA guidelines to examine the literature in a rigorous manner. The AMCP format was used to formulate the research question. Inclusion criteria focused on interventions to address teacher job stress and present relevant results, excluding studies with students. A search strategy was created using DECS and MESH algorithms and terms, combining logical operators and symbols. Information was collected from databases such as SCOPUS, APA, and Web of Science. Specific search algorithms were used, such as "Coping" AND ("Professor" OR "Teacher") AND "Positive psychology". Results: The review on positive coping interventions in teachers was based on the search of scientific evidence in databases over a period of three months, resulting in the selection of 8 articles published between 2013 and 2023. The interventions focused on mindfulness, relaxation, and resilience techniques to address stress and promote well-being. The reviewed studies mentioned models of psychological well-being, resilience, occupational well-being, and positive psychology as theoretical foundations. Interventions were conducted in intensive 1- to 4-day sessions or more extensive 6- to 12-week programs, supported by expert coaches. Conclusions: A marked decrease in stress levels and a significant increase in mindfulness, positive coping strategies, hope, optimism, and resilience were observed.

Keywords: Positive coping, work stress, teachers.

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Revisión sistemática sobre las intervenciones eficaces basadas en afrontamiento positivo en profesores

Resumen

Antecedentes: A lo largo de la historia, el trabajo ha evolucionado debido a factores como la industrialización, generando tanto oportunidades laborales como riesgos para la salud. En la actualidad, se observa un aumento en los niveles de estrés en profesionales del sector público y de la salud, así como en áreas como la docencia, la medicina, la enfermería, la policía, el trabajo social y los bomberos. Estas profesiones requieren un contacto directo con el público, atención a terceros y responsabilidades que generan demandas y malestares. Objetivo: Analizar los modelos y métodos empleados para promover la capacidad de afrontamiento positivo en los profesores. Método: La revisión siguió las directrices de PRISMA para examinar la literatura de forma rigurosa. Se utilizó el formato AMCP para formular la pregunta de investigación. Los criterios de inclusión se centraron en intervenciones para abordar el estrés laboral de profesores y presentar resultados relevantes, excluyendo estudios con estudiantes. Se creó una estrategia de búsqueda con algoritmos y términos DECS y MESH, combinando operadores lógicos y símbolos. Se recopiló información de bases de datos como SCOPUS, APA y Web of Science. Se emplearon algoritmos de búsqueda específicos, como "Coping" AND (“Professor” OR "Teacher") AND "Positive psychology". Resultados: La revisión sobre intervenciones de afrontamiento positivo en docentes se basó en la búsqueda de evidencia científica en bases de datos durante un período de tres meses, resultando en la selección de 8 artículos publicados entre 2013 y 2023. Las intervenciones se centraron en técnicas de mindfulness, relajación y resiliencia para abordar el estrés y promover el bienestar. Los estudios revisados mencionaron modelos de bienestar psicológico, resiliencia, bienestar laboral y psicología positiva como fundamentos teóricos. Las intervenciones se llevaron a cabo en sesiones intensivas de 1 a 4 días o programas más extensos de 6 a 12 semanas, con el respaldo de entrenadores expertos. Conclusiones: Se observó una marcada disminución en los niveles de estrés y un aumento significativo en mindfulness, estrategias de afrontamiento positivas, esperanza, optimismo y resiliencia.

Palabras clave: Afrontamiento positivo, estrés laboral, profesores.

Introduction

Throughout history, work and its conditions have undergone significant changes due to factors such as sociodemographic, economic, political, and technological transformations generated by industrialization [1]. These changes have brought new work development opportunities for workers but have also implied health risks [2]. Currently, an increase in stress levels is observed in professionals in the public and health sectors, as well as in professions such as teaching, medicine, nursing, police, social work, and firefighters [3]. This is due to the fact that more and more professions require direct contact with the public, attention to third parties and responsibilities that generate demands, tasks and discomfort [4], [5].

Due to changes in the work environment, it is observed that the panorama of occupational diseases and injuries has evolved in recent decades towards a situation in which risks and their effects constitute [6], globally, the main cause of health deterioration, impacting the well-being of workers and the efficiency levels of companies [7]. Along the same lines, Siegrist [8] indicates that work can be a source of health by providing access to employment that not only satisfies basic economic needs, but also fosters physical and mental activity, social contact, and the performance of meaningful work that contributes to individual and collective well-being. On the other hand, work can harm health by negatively affecting people's well-being through occupational accidents and occupational diseases [9]. Finally, it can also worsen pre-existing health problems by interacting with other risk factors, such as tobacco use, excess cholesterol, and sedentary lifestyle, among others [10].

Thus, the work environment becomes a means of satisfying various needs and providing economic income, social relationships, and personal well-being, among other positive aspects for the individual. However, work can become a factor that triggers stress and burnout due to the burdens and characteristics inherent to this context, especially in professions such as health, teaching, and security [11]. This is reflected in an internal state in which work demands exceed the individual's ability to control, resulting in job strain due to the interaction between the demands and the worker's control [12]. This can manifest in absenteeism, dissatisfaction, addictions, and affect the quality of life of employees [13].

Therefore, it can be stated that the way in which a person copes with stress will depend mostly on his or her abilities, the way he or she handles it, his or her perspective on it, and the environment in which he or she finds himself or herself. According to Lazarus and Lazarus [14], when facing a stressful situation, it is crucial to consider three fundamental aspects: the individual's evaluation of the stressor stimuli, both negative and positive emotions and the effects associated with this perception, and, finally, the behavioral and cognitive efforts to cope with these stressors. Coping strategies for stressful situations are defined as the continuous attempts, both cognitive and behavioral, that a person makes to cope with specific internal and/or external demands that are perceived as overwhelming to the individual's resources [15], either by avoiding the stressful situation or by coping with it [14]. Therefore, in recent years, several investigations have been conducted with the purpose of determining which

coping strategies are most effective in stress management [16].

In contrast to the predominant focus on the study of coping with negative stressful situations, Folkman, and Moskowitz [17] argue that stress management research should also consider the positive effects of coping, as well as the adaptive functions that coping can have. Folkman [18] introduces new coping strategies, such as meaning-focused coping, supported by empirical evidence and the application of positive psychology in professional practice, known as positive coping [19]. Scientific interest in the study of stress coping has been influenced by the growth of research on positive emotions, promoted by the emergence of positive psychology [20].

Therefore, it is essential to investigate an approach that analyzes the role of positive emotions in the stress management process, as there is evidence indicating that positive emotions have significant adaptive functions in both normal and stressful situations [17]. Therefore, it is important to determine whether positive coping strategies can help prevent stress arising from work demands in the educational sector [21]. Related to this issue, Lazarus and Folkman [14] highlighted the beneficial impact of positive emotions in stressful situations, suggesting that, when negative emotions predominate, positive emotions can provide psychological respite [22], support ongoing coping efforts, and restore resources depleted by stress [23], in addition to counteracting some of the negative physiological effects associated with negative emotions [18].

In a study conducted by Siu, Cooper, and Phillips [24], an intervention was carried out with the purpose of improving work well-being, decreasing burnout and strengthening the resilience of health care workers and educators in Hong Kong. This study implemented various strategies, such as self-care techniques, positive emotion management to counteract burnout, application of positive psychology in the workplace, fostering effective communication and promoting recovery. As a result of these interventions, a significant reduction in physical and psychological symptoms, a notable increase in job satisfaction and a significant increase in positive emotions were evidenced.

In addition, research such as that conducted by Luo et al. [25] on the evaluation of a positive psychological intervention to decrease burnout in nurses, and the study by Palamara et al. [26] implemented a positive psychology program for three years that included strategies to foster positive emotions, positive thoughts, meaning, purpose, achievement, success, commitment, and positive relationships, which resulted in a significant decrease in emotional exhaustion.

In this sense, Ramirez [27] highlights the importance of investigating the optimal functioning of employees and teams in the organizational environment, a central focus of positive psychology. Just as in psychology in general, positive psychology at work is dedicated to describing, explaining, and predicting effective behavior and performance in organizations, promoting actions that improve and reinforce well-being, satisfaction, and quality of work life [28].

Therefore, this systematic review focused on positive coping interventions for teachers experiencing job stress, and aimed to analyze the models, methodologies, techniques and strategies used in these interventions, as well as the effects on educational staff, who face high levels of job stress due to various factors such as organizational changes in educational institutions, challenging working conditions, high institutional demands, new pedagogical currents, workload, lack of time, lack of recognition, change in the dynamics with students, and the demand for interpersonal, pedagogical, investigative and administrative skills.

Materials and methods

To conduct the review, the guidelines established by PRISMA [29] were followed in order to examine the literature in a rigorous and systematic manner [30]. To formulate the research question, the AMCP (Adjective, Measurement, Condition, and Population) format was used [21], structuring it as follows: What are the models and methods used to promote positive coping in teachers?

Inclusion criteria for the selection of studies were as follows: (a) focus on interventions to positively address job stress in teachers as the target population and (b) present relevant research findings. Studies involving education students, undergraduates or pre-career teachers were excluded.

A search strategy was created using DECS and MESH algorithms and terms, combining logical operators and symbols such as quotation marks and parentheses. Information was collected from academic databases such as SCOPUS, APA, and Web of Science. The following search algorithms were used to locate information: 1. ("Coping") AND ("Professor" OR "Teacher") AND ("Positive psychology"); 2. ("Coping") AND ("Professor" OR "Teacher") AND ("Positive emotions"); 3. ("Coping") AND ("Professor" OR "Teacher") AND ("Positive affect"). The keywords were required to be part of the title, abstract or keywords of the articles.

The review followed the procedure described by Perestelo-Pérez [31] for conducting systematic reviews in the field of psychology and health. In the first step, the research question was generated after reviewing the existing literature related to the topic. In the second step, the available scientific evidence was found by consulting electronic databases and using specific tools to collect information. In the third step, preliminary selections of relevant references were made, verifying whether they met the inclusion criteria. The selection and evaluation of articles was carried out systematically, first by reviewing titles and abstracts, then by carrying out a joint review on a specific platform to eliminate duplicates and those that did not meet the criteria. Subsequently, the process was repeated with the complete articles to finally select and include those that were evaluated, analyzed, and synthesized in the review. In the fourth step, a critical analysis of the articles was carried out, followed by the compilation of information in an Excel matrix in the fifth step. The sixth step involved the analysis and synthesis of the scientific evidence, while in the seventh step the findings were presented after a reflective

discussion of the evidence and the presentation of conclusions.

Results and discussion

The results of the review of the current state of scientific research on positive coping interventions in teachers are shown below. First, the strategy used to search for scientific evidence in databases such as SCOPUS, APA, and Web of Science, carried out over a three-month period between November 2022 and January 2023, is described. This process led to the selection of 8 articles published between 2013 and 2023 that met the inclusion criteria of the study, which were analyzed in detail following the PRISMA 2020 methodology [30] (Figure 1). Subsequently, a descriptive analysis of the characteristics of the selected articles was performed. Finally, an analysis and summary of the scientific evidence addressing the objectives established in the review is presented.

Figure 1. PRISMA 2020 flow chart, showing the process of search, selection, inclusion, and exclusion of articles.

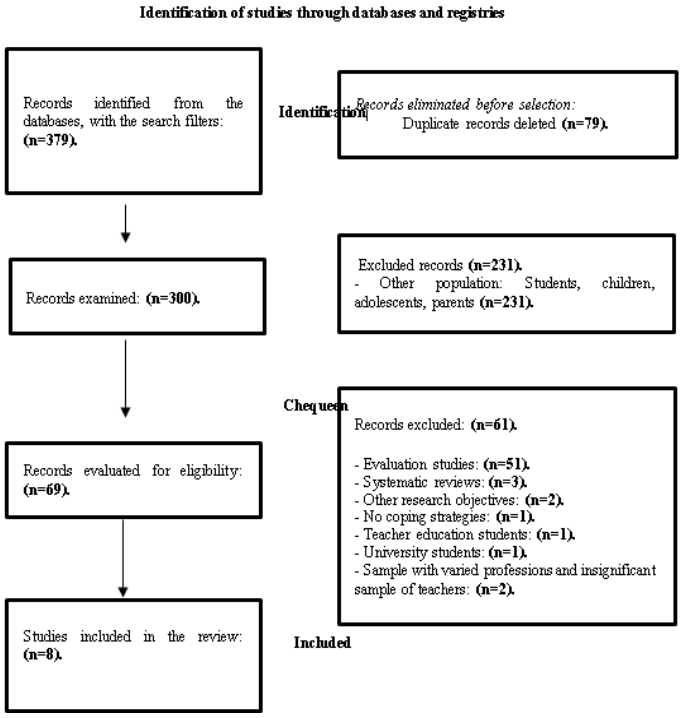

Table 1 presents the methodological details of the selected articles, indicating that 62.5% (5 articles) of them mainly employed a quantitative research approach. Also, most of the interventions were conducted with women from different educational institutions. Finally, some of the articles reviewed did not detail the types of study, research designs and sampling

methods employed.

Table 1. Methodological indicators of the selected articles.

Author	Language	Country/ City of Study	Research Approach	Type of Study	Research Design	Population Number	Population Gender	Sampling Type
Thephilah, C.; Aruna, S.; Vijayaragahavan, R. (2022) [32].	English	India, Vellore.	Quantitative	Not referred	Pre-experimental design (pre-test-post-test control group design).	100 urban schoolteachers and 100 rural schoolteachers	102 women, 98 men	Consecutive sampling method
Song, X; Zheng, M; Zhao, H; Yang, T; Ge, X; Li, H; Lou, T. (2020) [33].	English	China, Zhejiang.	Quantitative	Descriptive	Pre-experimental	161 teachers	137 women, 24 men	Not referred
Schnaider-Levi, L; Mitnik, I; Zafrani, K; Goldman, Z; Lev-Ari, S. (2017) [19].	English	Israel	Qualitative	Phenomenological	Not referred	8 teachers	Not referred	Not referred
Wald, SA; Haramati, A; Bachner, YG; Urkin, J. (2016) [34].	English	Israel, Beersheba.	Quantitative and qualitative	Not referred	Mixed methods	7 senior college students and 9 professors of medicine, nursing, and basic sciences	8 women, 8 men	Not referred
Morgan, J; Atkin, L. (2016) [35].	English	England	Quantitative	Not referred	Mixed	42 teachers	28 women, 14 men	Not referred
Berger, R; Abu-Raiya, H; Benatov, A. (2016) [36].	English	New Zealand, Christchurch.	Quantitative	Descriptive	Pre-experimental	60 teachers, 4 guidance counselors, 3 administrators, 2 school psychologists.	54 women, 15 men	Not referred.
Sharrocks, L; (2014) [37].	English	United Kingdom	Qualitative	Not referred	Not referred	14 participants on average, including teachers, learning mentors, supervisors, administrators, and teacher training students	Not referred	Not referred
Chan, D. (2013) [38].	English	Hong Kong	Quantitative	Descriptive	Experimental	78 teachers	63 women, 15 men	Not referred

Table 2 presents the models, methodologies, techniques, and strategies of positive coping mentioned in the articles selected for the study. In general terms, the authors mainly refer to mindfulness, relaxation, and resilience techniques to address stress and promote well-being. For example, the study by Schnaider-Levi et al. [19] and Chan [38] mention the psychological well-being model as key to optimal development across the lifespan. Other studies such as those by Berger et al. [36], Sharrocks [37], and Morgan and Atkin [35] refer to models of resilience, occupational well-being, and positive psychology as theoretical bases for positive coping interventions in teachers.

Table 2. Explanatory models, techniques and/or intervention strategies for positive coping.

Author	Explanatory models	Intervention techniques/ Strategies
Thephilah, C.; Aruna, S.; Vijayaragahavan, R. (2022) [32].	No report	Relaxation response (RR) Cognitive skills Affective skills Behavioral skills
Song, X; Zheng, M; Zhao, H; Yang, T; Ge, X; Li, H; Lou, T. (2020) [33].	No report	Mindfulness training (MT) Mindfulness-based stress reduction (MBSR) Mindfulness-Based Cognitive Therapy (MBCT) Mindfulness-based relationship enhancement (MBRE) Cultivating Mindfulness and Resilience in Education (CARE for Teachers)
Schnaider-Levi, L; Mitnik, I; Zafrani, K; Goldman, Z; Lev-Ari, S. (2017) [19].	Psychological well-being model	Mindfulness Inquiry-based stress reduction (IBSR)
Wald, SA; Haramati, A; Bachner, YG; Urkin, J. (2016) [34].	No report	Mind-Body Medicine Skills (MBM) Interactive Reflective Writing (IRW) Resilience
Morgan, J; Atkin, L. (2016) [35].	Self-affirmation and stress reduction theory	Positive or negative emotions
Berger, R; Abu-Raiya, H; Benatov, A. (2016) [36].	Basic resilience model Natural resilience model BEST model Secondary Traumatic Stress (STS) or vicarious traumatization	School-based resilience (ERASE-Stress)
Sharrocks, L; (2014) [37].	Newell's occupational well-being model Warr's Vitaminic Model	Relaxation Social support Emotional support Flow experience. Mindfulness
Chan, D. (2013) [38].	Diener's tripartite model (1984) Positive psychology	Frisch's Quality of Life Therapy (2006) Fordyce's Happiness Intervention (1977) Fava's Well-Being Therapy (1999) Gratitude

In addition, it is important to mention that the interventions carried out by the researchers were conducted in intensive sessions ranging from 1 to 4 days, as well as in more extensive programs ranging from 6 to 12 weeks. During these sessions, mindfulness, relaxation, and resilience techniques were largely employed in a face-to-face manner, supported by expert coaches in these techniques, as detailed in Table 3.

Table 3. Intervention methodologies for positive coping.

Author	Interventions used in the research approach
Thephilah, C.; Aruna, S.; Vijayaragahavan, R. (2022) [32].	DM: The intervention was carried out through the implementation of a Resilience program in two different groups (control group and experimental group). Saliva was collected from the participants to assess cortisol levels. Also, blood samples were obtained from the participants and their blood pressure was recorded. D: 6 weeks NS: 6 sessions SD: 2 hours per week PPS: 10 teachers per session
Song, X; Zheng, M; Zhao, H; Yang, T; Ge, X; Li, H; Lou, T. (2020) [33].	DM: The intervention consisted of adapting the 4-day MBSR intensive mindfulness training program. The intensive workshop covered traditional MBSR practices such as sitting meditation, mindfulness during eating, and body scanning, among other activities. D: 4 days NS: No referral SD: 8 hours per day. PPS: 2 qualified mindfulness instructors. 161 teachers
Schnaider-Levi, L; Mitnik, I; Zafrani, K; Goldman, Z; Lev-Ari, S. (2017) [19].	DM: The intervention was implemented using the IBSR technique to systematically identify thoughts that provoke stress and discomfort, documenting specific thoughts about various stressful situations through the "Judge thy neighbor" worksheet. The group training was designed to address teaching-related issues such as self-confidence as an educator, student-teacher dynamics, work pressure and noisy environment, and professional development, among others. During individual telephone sessions with facilitators, more personal issues were addressed. D: 12 weeks NS: Weekly meeting SD: 3.5 hours group meeting and 1-hour individual phone session PPS: 2 interviewers 8 teachers
Wald, SA; Haramati, A; Bachner, YG; Urkin, J. (2016) [34].	DM: Single-day intervention sessions that included teaching educational concepts about work fatigue and resilience, describing the physiological response to stress, along with conducting hands-on activities involving mindfulness exercises and deep reflections accompanied by reflective writing, which involved both paired and large group interactions. NS: Does not refer SD: 2 hours per day PPS: 2 trainers 9 academic teachers and 7 senior undergraduate students
Morgan, J; Atkin, L. (2016) [35].	DM: The intervention was conducted by distributing work-related self-affirmation (WS-AII) and Control Implementation (CII) questionnaires to two groups. These questionnaires included instructions to complete demographic measures, as well as assessments on teaching emotions, emotional regulation, and anxiety levels. The self-affirmation or control task was assessed using a measure of self-efficacy. Both participants in the experimental and control conditions received the same questionnaire, with the only difference being the self-affirmation or control task. D: Does not refer NS: Does not refer SD: Does not refer PPS: 42 academic teachers
Berger, R; Abu-Raiya, H; Benatov, A. (2016) [36].	DM: Educational intervention that combines resources from psychology, skills development, mindfulness practices, physical exercise, art therapy and narrative approaches to address signs linked to stress. D: 3 days NS: 16 SD: 45 minutes per session PPS: 2 trainers 63 education professionals

Sharrocks, L; (2014) [37].	DM: The intervention called "Relax and Talk" consisted of three focus groups (prior to the start of the project, during the third week of the project and one week after its conclusion) in order to gather participants' impressions and collect their perceptions of any effect the project has had on their mental well-being. D: 8 weeks NS: Does not refer SD: 2 hours per session PPS: 3 trainers 14 education professionals on average
Chan, D. (2013) [38].	DM: Intervention aimed at improving self-awareness and well-being through gratitude and coping practices. Two groups of participants were formed and attended separate information sessions (Gratitude Group and Coping Group). After the debriefing session, they were provided with a username and password to access a web page and record their experiences online for eight weeks. They were asked to complete an initial evaluation questionnaire before the intervention and another evaluation questionnaire at the end of the program. In the Gratitude Group, participants were asked to record three positive aspects they had experienced during the week on a "Blessings Log" form, reflecting on their significance. On the other hand, in the Coping Group, they were required to record three negative situations or events weekly on a "Challenge Log" form, reflecting on their impact on them. D: 8 weeks NS: Does not refer SD: No referral PPS: 40 participants were randomly assigned to the gratitude approach condition and 38 participants to the coping approach condition

DM: Description of Methodology. D: Duration. NS: Number of Sessions. SD: Session Duration. PPS: Participant Population per Session.

In conclusion, positive interventions to manage stress in teachers lead to a marked decrease in overall stress levels. In addition, a significant increase in mindfulness, positive coping strategies, hope, optimism, and resilience is observed through the various techniques used in these interventions. For more detailed information, we suggest consulting Table 4.

Table 4. Effects of interventions for positive coping.

Author	Evaluation Instruments	Effects of the interventions used
Thephilah, C.; Aruna, S.; Vijayaragahavan, R. (2022) [32].	Blood samples	The effect of stress increased fasting blood sugar levels and was reduced after the RR program. The urban and rural post-experimental groups showed a reduction in cholesterol level compared to the pre-test groups.
	Salivary cortisol measurement	The urban and rural experimental groups showed a significant reduction in cortisol levels between post-test groups 1 and 2 compared to the pre-test group. The sample taken after the procedure, as well as the sample taken after the end of the task, showed a significant decrease for the experimental groups.
	Blood pressure measurement	Systolic blood pressure and diastolic blood pressure were significantly reduced among the experimental groups after applying the stress relaxation program for three and six weeks in urban and rural schoolteachers.

Song, X; Zheng, M; Zhao, H; Yang, T; Ge, X; Li, H; Lou, T. (2020) [33].	Chinese version of the Mindfulness Awareness Awareness of Mindfulness Awareness Scale (MAAS)	Participants show higher levels of mindfulness after the program than at the beginning.
	Escala de Estrés Percibido de China (CPSS)	Participants in the mindfulness group had a greater decrease in stress.
	Chinese Positive and Negative Affect Program	Participants' dispositional mindfulness was positively associated with positive affect and negatively related to negative affect. Participants in the mindfulness group had a greater improvement in mindfulness and a greater decrease in negative affect.
Schnaider-Levi, L; Mitnik, I; Zafrani, K; Goldman, Z; Lev-Ari, S. (2017) [19].	Interview developed by the researchers	Participants described their improved ability to interpret and perceive various situations in a more flexible manner, without rigid assumptions or emotional involvement. Participants described a greater awareness of their reactions and perceptions of reality. Participants experienced a higher level of satisfaction with themselves and their environment. Participants described a more focused and centered self, which helped them cope better with the various relationships and dynamics in their daily routine.
Wald, SA; Haramati, A; Bachner, YG; Urkin, J. (2016) [34].	Professional Quality of Life Measure (ProQOL)	It did not reveal a significantly different level of reported norms of distress.
	Questionnaire elaborated by the researchers	Better understanding of the concepts of professional burnout and resilience. They perceive that they are better prepared to use meditation and writing strategies. Qualitative analysis of participants' comments that they have a greater emotional and professional self-awareness that allows them to create meaning in their teaching role.
Morgan, J; Atkin, L. (2016) [35].	Adapted version of Trigwell's 20-item Emotions in Teaching Inventory (ETI).	Self-affirmation was associated with greater positive emotions toward teaching at follow-up compared to control.
	Gross & John's Emotional Regulation Questionnaire (ERQ)	Self-affirmation was associated with lower suppression and higher reappraisal at follow-up compared to control.
	State version of Marteau & Bekker's abbreviated form of Spielberger's State-Trait Anxiety Inventory	Significant difference between conditions in state anxiety scores. Self-affirmation was associated with lower state anxiety after manipulation compared to control.
	Schwarzer & Jerusalem's General Self-Efficacy Scale	There was no significant effect for self-efficacy scores.
Berger, R; Abu-Raiya, H; Benatov, A. (2016) [36].	17-item Post-Traumatic Checklist	Significant decrease in post-traumatic stress symptoms (PTS).
	Professional Quality of Life Scale of 30 items	Significant improvement in professional self-efficacy and quality of professional life.
	COPE Brief	Significant improvement in all positive coping strategies (active coping, planning, positive reframing, acceptance, venting, religion, and instrumental and emotional support). Significant reduction in the use of self-determination.
	10-item Connor Davidson 10-item Davidson	Positive effect on both personal and professional measures.
	Hope Scale for Adults	Significant increase in personal hope and optimism.

Sharrocks, L; (2014) [37].	Interview elaborated by the researchers	Participants report evidencing physical and emotional changes in themselves that were temporary; they also reported changes in their actions (making time for a break, talking with staff about other issues besides work) and relationships that had greater potential for longevity. Participants perceived greater awareness of the support they could get from one another. Perceptions of greater happiness and well-being were identified, links were made between well-being and positive work performance outcomes. Participants reported perceived improvements in relationships and staff cohesion, however, tensions remained.
Chan, D. (2013) [38].	Gratitude Questionnaire (GQ-6)	One score was obtained in dispositional gratitude.
	Orientation to Happiness Scale (OHS)	Three scores were obtained in happiness orientations.
	Satisfaction with Life Scale (SWLS)	Improvement in life satisfaction after the intervention. Significant increase in life satisfaction between the two assessments for the gratitude approach but did not reach statistical significance for the coping approach.
	Positive and Negative Affect Schedule (PANAS)	Significant decrease in the experience of negative emotions for the gratitude intervention approach. No significant change in the experience of negative emotions for the coping intervention approach.
	Gratitude Adjective Checklist (GAC)	Significant increase in the experience of gratitude-related emotions only for the gratitude intervention approach.

In looking at the models and approaches used to foster positive coping in teachers, disparities in the studies were noted. For example, Thephilah et al. [32] focused on physical health outcomes, whereas the study by Song et al. [33] focused on mental health outcomes, and the study by Schnaider-Levi et al. [19]. The selected studies tracked effects using biological measurements in blood, saliva, and blood pressure.

Describing the assessment instruments used in the selected studies, it is observed that scales to measure the psychological components of stress predominated. It is relevant to mention that the Mindful Attention Awareness Scale-MAAS, Chinese version, is a brief self-assessment questionnaire that evaluates the general tendency to be present and mindful; On the other hand, the China Perceived Stress Scale-CPSS is a self-assessment questionnaire that measures the extent to which everyday life situations are perceived as stressful [33].

In the end, the studies analyzed mentioned theoretical bases such as models of psychological well-being [32], resilience [33], occupational well-being and positive psychology. The interventions were carried out in intensive sessions of 1 to 4 days or more extensive programs of 6 to 12 weeks, with the support of expert coaches. As a result, a significant decrease in stress levels and a notable increase in mindfulness, positive coping strategies, hope, optimism, and resilience were evidenced [19], [32], [37].

Conclusions

The studies provide evidence of the use of various intervention techniques and strategies to promote positive coping in different contexts, such as the relaxation response, the development of cognitive, affective, and behavioral skills, mindfulness training, and mindfulness-based stress reduction. These interventions have been formulated from various theoretical bases such as the psychological well-being model, self-affirmation and stress reduction theory, and the basic resilience model.

A variety of interventions exist to address stress and improve teacher well-being, such as resilience programs, mindfulness, coping skills training, art therapy, and narrative approaches. These interventions vary in duration, intensity and technical approach and can be short or long term, group or individual, mindfulness, skills, art or narrative based. The results of these interventions are also diverse, some effective and others less so, depending on factors such as individual characteristics, intensity, and quality of implementation. More research is needed to identify the interventions that prove to be most effective in reducing stress symptomatology.

The studies reviewed indicate that mindfulness and gratitude interventions can have positive effects on mental health and well-being. Participants in these studies experienced benefits such as reduced stress and anxiety, improved emotional well-being, stronger relationships, increased self-awareness, and better job performance. Although more research is needed to fully understand the mechanisms behind these practices, current evidence supports the potential of mindfulness and gratitude as promising tools for improving mental health and overall well-being.

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