

Coping with stress for teachers during Covid-19. Systematic review

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Abstract

The present research aimed to evaluate the coping strategies used by teachers to cope with stress during Covid-19, and thereby ensure that experts excel in their field and continue to acquire academic knowledge to perform successfully during their professional stage. Regarding the methodology, a systematic review based on the Prism diagram was carried out to verify the use of adequate sources, based on inclusion and exclusion criteria. The study focused on a detailed analysis through the observation and understanding of situations in the current reality, which allowed to deepen the problem. Likewise, the results detailed that there are few investigations that give importance to the search for various strategies to eradicate stress in teachers, however, the recommendations of the studies investigated are taken into account, since they have the purpose of instructing and generating greater knowledge in teachers and thus eradicate stress. Finally, it was concluded that the pandemic caused by Covid-19 has presented significant challenges for teachers; The sudden shift to online learning, the need to become familiar with new technologies and the concern for the health and safety of them and their students have resulted in high levels of stress among teachers, so this study takes into account and recommends institutional support even after the pandemic.

Keywords: Stress, Teachers, Students, Education, Covid-19

1. Introduction

Currently, stress is a fragile condition that occurs in people, which is considered as a precursor of multiple physical and mental disorders, in the workplace it is considered harmful to the performance of activities, causing symptoms such as uncomfortable and apprehensive anxiety that is experienced when the expected results are not achieved in certain situations, which causes a loss of tranquility. In addition, according to specialists, when the demands perceived by a professional exceed their resources and capacities to face them, an emotional and physical reaction occurs, generating various reactions such as frustration, alteration and fear of new challenges or professional proposals. (World Health Organization, 2022)(International Labour Organization, 2019)

Since the beginning of the pandemic caused by Covid-19, many cases of work stress have been evident, due to mandatory confinement, concern about dismissals or staff cuts, low salaries and the structuring of the work modality, since there was zero contact between employees and heads of different companies. Covid-19 brought with it much more than a virus, it showed that personal and professional plans can change from one moment to another, demonstrating that mental health is vital for our performance at a general level. (Mero et al., 2021)

In this context, in Brazil, since the arrival of Covid-19, the distance education scenario operated as a trigger, generating a relevant effect on the mental health of teachers of different levels of training, since the opening of educational institutions was prohibited, forcing them to technological change through the implementation of strategies, in this way, Ensure the continuity of classes. Given this situation, it became evident to reconsider mental health, designing prevention measures for the well-being of teachers in times of pandemic. In the same line of research is a study in Ecuador, in which they showed that there are some levels of stress between high and very high, because they do not have mechanisms to counteract and eradicate in some way the causes of stress, such as poor communication between teachers who work remotely, the little management of technology and the anxiety generated by confinement. which shows that there is a problem related to mental health, generated by stress, including post-stress. (Ribeiro et al., 2021)(Cabezas et al., 2021)

At the national level, work stress in teachers who practiced teleworking in Peru during Covid-19 was considered a crucial point for educational development since it can be generated by any physical and emotional factor. However, many professionals considered it prudent to request support through virtual trainings in which they received psychological counseling in order to properly manage their emotions and situations that may alter their work process and performance.(Sucapuca et al., 2022)

The research has the main objective of evaluating the coping strategies used by teachers to cope with stress during Covid-19, in this way, professionals can be made to excel in their area and continue to prepare academically.

Theoretical, practical, methodological and social justifications are also taken into account. The *theoretical justification* of the research was based on the expansion of existing knowledge that will allow to identify, collect and analyze previous studies on coping with stress in teachers during the Covid-19 pandemic. In doing so, it contributes to the consolidation and expansion of existing knowledge in this field, allowing a better understanding of the associated factors, the coping strategies used and the results obtained in previous research.

On the other hand, the *practical justification* was based on raising the level of teaching, since chronic stress can negatively affect the quality of instruction and learning. By identifying the most effective coping strategies, this study can provide teachers with practical tools to manage their stress and thereby improve their performance and learning environment in the classroom.

The *methodological justification* was based on the systematic review that follows a rigorous and objective approach to the collection and selection of relevant studies. This involves defining clear inclusion and exclusion criteria, searching multiple databases exhaustively, and independent evaluation of studies by two or more reviewers. This rigorous approach ensures objectivity in the selection of evidence and reduces selection bias.

Finally, there is the *social justification* that was based on the strengthening of educational resilience; Covid-19 has generated unprecedented challenges in the field of education. By identifying effective coping strategies for teachers, this research can strengthen educational resilience, that is, the ability to adapt and recover in the face of crisis situations. By strengthening the resilience of teachers, a more solid education is promoted and resistant to future situations of stress or adversity.

2. Method

To analyze *Coping with stress for teachers during Covid-19*, a *systematic review* was carried out that is defined as a method that is based on the prism diagram, which aims to corroborate that suitable sources were used, in addition, the study was of *qualitative* approach since, it seeks to carry out a detailed analysis based on the observation and understanding of situations in the current reality, That way you can delve into the problem.

The method used was *inductive*, since it allows discovery and analysis of the information found. In addition, it is widely used because it is a form of reasoning that converges from particularities or specific cases and general knowledge can be obtained that allows conclusions to be reached regarding the subject. (Jaramillo & Aguirre, 2021)

3. Type and design of research

The research was a *basic* type, referring to the compilation of information and data regarding the subject of study, whose purpose is to obtain more knowledge and contextualize it based on what other authors think about it. In this sense, it aims to generate new knowledge, after having carried out this research work. (García & Sánchez, 2020)

The design was *narrative* which is characterized by relating facts through theories, and contextualizing the determined problem, it is also characterized by offering a greater understanding and analysis of the research phenomena, so that it can be connected with the past, present and future to generate a linear and coherent history. (Rodriguez, 2020)

The literature review considered articles published in journals indexed in the databases: Scopus, Web of Science and SciELO; Also, bibliographic information. Information was extracted from the publications that allowed the

study objectives to be achieved. Piza et al. mentioned that based on the technique or method used, answers to the problem can be obtained. (2019)

Inclusion criteria:

Table 1. Inclusion and exclusion criteria

| Inclusion Criteria | Exclusion Criteria |
|---|---------------------------------------|
| Studies belonging to the period from 2019 to 2023. | Undergraduate, postgraduate thesis. |
| Study in English and Spanish. | Articles not available in open access |
| Important database articles such as SCOPUS, SCIELO and WOS. | Incomplete articles |

4. Development

At the international level, the authors D'Adamo and Lozana are taken into account, who indicate that there are many studies where high levels of stress in teachers are revealed, however, there are very few that distinguish how to alleviate this problem. In their research they aim to promote emotional self-regulation to reduce stress in teachers of different educational levels through interventions focused on optimal and full attention exercises, in which it was perceived that stress levels vary according to the scale of positive and negative affectivity. The teachers made self-records to consciously detail their process, after the interventions the stress decreased, increasing positive emotions. In conclusion, treatments or dynamics aimed at recognizing the level of stress, are favorable to improve the bond with students.(2019)

In the same way, Palafox and Domínguez achieved vital research for the development of society, demonstrating that stress in teachers can interfere with academic production and mental and physical health. With the objective of distinguishing and verifying the various methodological components together with the results of studies related to stress in teachers. To this end, a literature review was used on topics with a common purpose, resulting in stress being present in 20% of individuals associated with psychological variables, such as lack of control, emotional fatigue and overload. The studies discussed highlight the aspects that dispose and accelerate stress by showing the characteristics of stress due to academic demands. (2021)

At the national level, Palacios and Rivera examine the relationship between teachers' work stress in Lima and professional and personal factors, along with the perception of the quality of educational resources. For this reason, the study in question is carried out based on the Maslach Burnout inventory for teachers, which consists of multiple items which evaluate professional burnout, resulting in work stress not necessarily related to personal factors, but are professional resources for development, It means that the quality of professional goods is not optimal, therefore, it does not allow the professional to develop. (2020)

Arce et al., the objective of studying the connection between stress levels at work and the production of malondialdehyde (MDA), a byproduct of lipid peroxidation, in teachers of a particular University, under the descriptive research method, in which the Work Stress Scale was used. On the hypothesis proposed, the authors indicated that no relationship was found between stress and plasma concentration of MDA, which suggests investigating much more with other variables. However, stress was shown as a social reaction, it means that professionals feel constant pressure for the environment and their academic expectations, thus it was concluded that values are shown that indicate an improvement in teamwork strategies, this highlights the positive perception of organizations with a climate, Favorable organizational structure and environment, which benefits work performance.(2023).

Stress theory

Work stress according to Patlán's theory is present at every stage of personal, academic and professional life. On the side of work stress, it is identified as an occupational health problem which has generated much research and an important agreement regarding the need for research focused on distinguishing the impact of work stress on mental and physical health in different workers worldwide. Similarly, Ramírez indicates that there are numerous

analytical approaches and methods for assessing stress that fail to understand how groups of workers, influenced by particular work cultural contexts, generate meaning and explain the ways in which stress manifests differently. In this way, the author considers that stress is a discomfort that affects both the body and emotions, social life and moral values. Its causes and effects are rooted in social structures and relate to the individual and their social interactions.(2019)(2019)

Also, García et al. indicates that sleep quality and sleepiness are factors that generated stress in the time of Covid-19, since these symptoms contribute to a healthy immune system and general well-being. In addition, the prolonged presence of stress can disturb the balance of antioxidants in the body, resulting in increased oxidative stress and the production of free radicals and, oxidative stress is related to the development of various diseases as well as the aging process. (2023)

5. Procedures

As this research is a systematic review, the *Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)* system was carried out, and for this purpose similar studies were identified and described that evaluate *Coping with stress for teachers during Covid-19*.

Within the procedure, an analysis matrix was elaborated where the characteristics of each of the articles that contributed significantly to the study spectrum were recorded. The quality of both national and international studies was reviewed and evaluated, in terms of methodological quality and the contribution they could have for the present research.

After applying the search denominations, we found 46 **articles** on *Coping with stress for teachers during Covid-19 from the last 5 years*, distributed between 2019 and 2023: Scopus, Elsevier: 12; Scielo: 19; WOS:15 of which were analysed in their entirety as shown in **Table 2**.

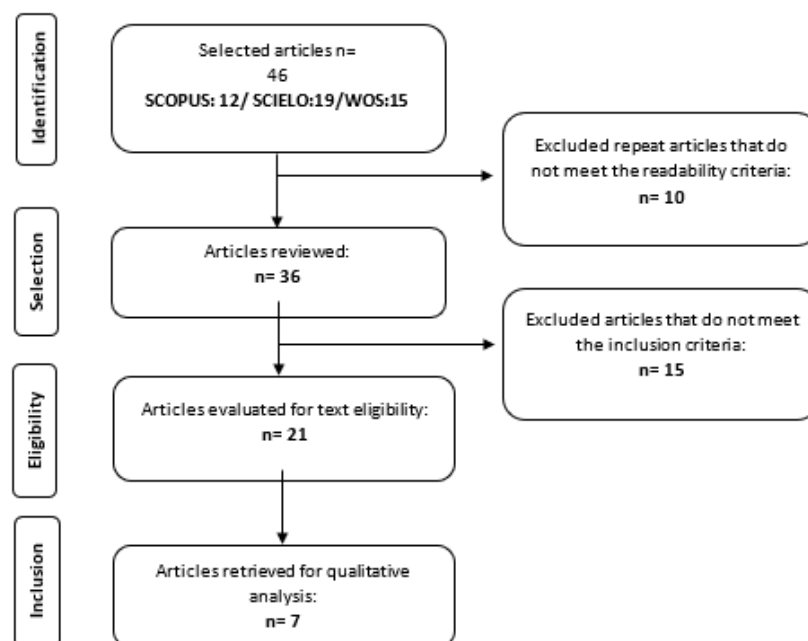


Table 2. PRISMA flowchart of selection of articles for review

6. Results

For the development of the article, studies that were related to the topic were compiled, which is why they were ranked in an authorship table, divided by the name of the authors, country and year, shown in Table 3.

Table 3. Authorship.

| No. | Database | Author(s) | Country | Author- año |
|-----|----------|-----------|---------|-------------|
|-----|----------|-----------|---------|-------------|

| | | | | |
|---|--------|---|----------|------------------------|
| 1 | SCIELO | Cortes, J. | Mexico | (Cortes, 2021) |
| 2 | SCOPUS | Alvites, C. | Peru | (Alvites, 2019) |
| 3 | SCIELO | Mendes, L.; Campelo, And.; Pinheiro, C.; Pires, I.; Vasconcelos, G. | Brazil | (Mendes et al., 2020) |
| 4 | WOS | Kaihoi, C.; Bottiani, J.; Bradshaw, C. | USA. | (Kaihoi et al., 2022) |
| 5 | SCOPUS | Tacca, D.; Tacca, To. | Peru | (Tacca & Tacca, 2019) |
| 6 | SCOPUS | Rivera, To.; Spain, J.; Echeverry, D.; Moreno, P. | Colombia | (Rivera et al., 2021) |
| 7 | WOS | Camacho, D.; Hoover, S.; Rosette, H. | | (Camacho et al., 2021) |

7. Discussion

The research brought together a series of studies that contribute to the expansion of previous knowledge of *Coping with stress for teachers during Covid-19*.

Cortés in his research concluded that, stress is a significant health concern that has increased among teachers as a result of the pandemic, highlighting as fundamental to understand the symptoms, consequences and associated preventive measures to minimize their risks. In addition, during Covid-19 it was necessary to maintain an optimal state of health, and it was crucial to identify the symptoms of stress. Teachers play a critical role in education by contributing to the formation of lives through the development of skills and strengths. In addition, they provide students with the opportunity to identify their areas for improvement and reach their full potential, however, stress problems were identified in teachers due to mandatory confinement, lack of interaction between students and teachers, since coexistence is relevant to originate healthy relationships, in addition, social distancing was perceived unfavorably, which led to a reduction in mental well-being and physical health. If educators lack the skills and competencies needed to guide the learning process, students will not have a solid foundation to achieve their own goals. This coincides with the results of this study, which identified the importance of teachers having up-to-date knowledge to effectively guide their students' learning. (2021)

On the other hand, Alvites concludes in his research that there is a relationship between teacher stress and psychosocial factors in which anxiety stress, anxiety depression and other symptoms and diseases that stress can generate prevail. In addition, the author indicated the need for education at all levels to be adjusted to current demands, with the teacher as the central figure. This professional must carry out his tasks in an agile way due to the media pressure coming from his environment, the authorities, his colleagues and even his own students. However, this constant pressure over time can cause you stress. With the same idea is the research of Mendes et al., (2019)(2020)who analyze the presence of stress which has generated some indicative signs of depression in teachers of a public entity, concluded that the daily performance of educational tasks involves making significant decisions and is related to different stressful situations both internal and external to work, which contributes to the experience of stress, thus demonstrating that the presence of depressive symptoms can be associated with stress. These studies are linked to those of the present study because the promotion and development of strengths and virtues in educators play a crucial role in the transformation of education. During their working day, each teacher expresses emotions that can positively or negatively influence the learning process of their students. These emotions become a determining factor for educational quality, for this reason, he suggests eradicating stress through psychological interventions on a regular basis, in this way follow-up will be carried out with regard to mental health.

Kaihoi et al., concluded that, increasingly, school leaders, school districts, and policymakers recognize the importance of supporting educators' emotional well-being. Given the socially active environment of schools and the value of social support in preventing burnout due to stress, the possibility arises that relationships between educators could be a valuable resource to draw on in interventions. These findings are especially relevant considering the elevated levels of stress and burden that teachers have experienced while trying to return to normalcy after the COVID-19 pandemic. It means that resilience has developed intrinsically, however, a strategy recommended by the author is to better organize the times, whether they are study, classes and / or personal, since the teacher has frequent contact with all kinds of personalities and attitudes that they do not dominate, therefore, they must have time spent for themselves. (2022).

Camacho et al., in the same line of research, conclude that teachers working in urban schools experience levels of stress and burnout that have a significant impact on their mental health and work performance, contributing to worrying dropout rates. These hypotheses are related to the authors Tacca and Tacca, who indicate that university professors work in a work environment where they interact with various people (superiors, colleagues, students, etc.) and face situations that can generate stress, the results revealed a negative association between perceived stress and factors such as psychological demands, workload, compensation and reconciliation of teacher responsibilities. According to the data, it was observed that hired teachers exhibit higher levels of stress, and experience predominant symptoms such as fatigue, insomnia, headaches, difficulty concentrating and changes in appetite. No significant differences were found in relation to age and gender. For this reason, it is prudent that institutions or entities employ strategies such as granting flexible schedules according to the schedules of each teacher, promoting effective communication, improving the environment based on facilities and infrastructure, sharing wellness programs that encourage self-care among professionals.(2021)(2019)

Finally, Rivera et al. concluded that Burnout syndrome is a state of physical, emotional and mental exhaustion associated with work, and the study sought to determine what proportion of training specialists and teachers in the field of critical medicine and intensive care present this syndrome in the aforementioned university in that specific period. The study indicated that significant differences were found in the scores of two measurement scales: depersonalization and personal fulfillment. These differences were observed between two groups: those who had children and those who did not. The results showed that people with children scored significantly higher on depersonalization and personal fulfillment compared to those without children. In addition, a significant difference was found in depersonalization scores between teachers and students, with the scores being higher in teachers. This suggests that teachers experienced higher levels of depersonalization compared to students. In both cases, it is mentioned that the differences found were statistically significant, with a p value (p-value) less than 0.05, indicating that the observed differences are unlikely to occur by chance. In this sense, all the authors mentioned have in common the proposal of various strategies to eradicate stress, such as self-care, since teachers showed higher levels of depersonalization compared to students, it is recommended to implement stress management programs and promotion of self-care for teachers. This may include stress management workshops, relaxation sessions, encouraging physical activity and promoting mental health; Institutional support, since it is essential that educational institutions provide a favorable work environment and adequate institutional support to teachers and students. This involves encouraging open communication, establishing feedback and participation channels, and offering resources and programs of emotional and professional support and monitoring along with follow-up, because regular monitoring of the well-being and stress level of teachers and students is recommended. This can help identify possible signs of burnout and take preventive measures or early interventions when necessary.(2021).

8. Conclusions

- Teachers have experienced significant difficulties as a result of the Covid-19 pandemic. The abrupt transition to distance learning, the need to adapt to new technologies and concerns for the health and safety of themselves and their students have contributed to an increase in stress levels, which make it difficult to carry out their work activities.
- Teachers have exhibited a remarkable ability to adapt and be resilient during the pandemic. In addition, they have implemented creative approaches to maintain the quality of education, demonstrated flexibility in planning their classes, and maintained constant communication with students and their families. For this reason, it is important that teachers achieve effective communication with their environment in order to inform and be recognized for their daily work.
- Strong institutional support for teachers during and after the Covid-19 pandemic is essential. This involves providing them with resources and training in stress management techniques, establishing policies and practices that promote teacher well-being, recognizing and valuing the hard work they do in challenging circumstances.

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