#### **Muslim Education Review**

Vol. 4 No. 1, 2025, 65-87

https://doi.org/10.56529/mer.v4i1.242

# Effective Strategies to Ensure Teachers' Psychological Well-Being Amid Social Crisis: A Lesson from COVID-19 Pandemic

Muhammad Yahya Abdullah, Shalsabilla Rinira Putri Universitas Islam Negeri Raden Fatah, Palembang, Indonesia Corresponding E-mail: yahyaabdullahpalembang@gmail.com

#### **Abstract**

In the context of a crisis such as the COVID-19 pandemic, the decline in teachers' psychological well-being has become a serious issue that affects the effectiveness of the learning process. Through previous literature studies, this research aims to map various strategies that can foster teachers' psychological well-being in a social crisis, using the COVID-19 pandemic as the model crisis. This can serve as a guide for regulators in educational institutions in facing future crisis events. The research method used is a systematic literature review, which allows researchers to systematically evaluate and synthesize findings from various relevant literature sources published between 2019 and 2023, only from journal articles. Eventually, the results identified 10 strategies that can be implemented: teacher creativity, resource support, supportive environment, relational support, teacher competency development, psychological support, organization, physical training, collaboration with policy makers, and additional funding. It is hoped that these strategies can become the basis to contribute positively to teachers' psychological well-being while facing complex challenges in times of crisis such as the COVID-19 pandemic later.

**Keywords**: COVID-19 pandemic, critical situation, strategies, teachers' psychological well-being



## Introduction

When the COVID-19 pandemic began to hit the whole world in 2020, there were many social changes implemented to help people maintain their health and avoid the spread of the COVID-19 virus. For instance the governments of several countries, such as China and Italy which experienced the most severe cases of the spread of the COVID-19 virus, tightened social distancing measures as an effort to mitigate the spread of COVID-19 cases (Bianchi & Caso, 2022).

The education sector is no exception, which also experienced the impact of the pandemic. One of the educational topics that has received attention is the issue of teachers' psychological well-being in the era of the COVID-19 pandemic (Pöysä et al., 2021). This issue caused a number of influences in daily activities that can be traced through the previous literature which indicates that the welfare of teachers has a big impact on themselves and also students in learning (Ferguson & Hall, 2011; Skaalvik & Skaalvik, 2016).

The majority of teachers over the world during the COVID-19 pandemic experienced many dynamic problems related to their welfare, such as learning activities that changed drastically from offline to online methods (Guoyan et al., 2021), an increased workload due to school demands (Kasprzak & Mudło-Głagolska, 2022), less competence to employ the present-day technology (Kim et al., 2021) and others which caused increased teacher stress and anxiety. This had a considerable impact on the teaching-learning process of their students.

Psychological well-being for teachers encompasses a range of emotional and mental factors, such as depressive symptoms, stress, resiliency, life satisfaction, and secondary trauma (Kwon et al., 2022) that directly affect their effectiveness and overall satisfaction in their profession. It is not merely the absence of mental health issues, but also the presence of positive psychological attributes such as buoyancy, which refers to the ability to stay optimistic and resilient under pressure

(Anderson et al., 2021). Moreover, joy in teaching can help sustain motivation and foster a sense of fulfillment, even amidst challenges (Billett et al., 2022). Creative self-efficacy, or the belief in one's capacity to implement innovative teaching strategies, is also a vital aspect of teachers' psychological well-being (Anderson et al., 2021). These factors enable teachers to thrive emotionally and professionally, contributing not only to their personal satisfaction but also to the quality of education they provide. In the context of the pandemic, understanding and supporting these dimensions of teachers' psychological well-being is critical, as they directly influence how teachers manage the stresses of a rapidly changing educational landscape and continue to inspire and support their students.

According to this particular issue, academics and regulators have implemented various political policies and strategies to reduce teachers' excessive stress levels and anxiety during the pandemic, for instance grant extra funding (D'Souza, 2021), increasing sports and meditation activities for teachers and students (Demmin et al., 2022), and creating an environment that supports learning (Anderson et al., 2021; Duong et al., 2023).

Furthermore, through a review of previous literature, there are related studies to this current work such as well-conducted research (see for instance Duong et al., 2023) which analyzed teachers' perceptions of school leaders' efforts to improve the welfare of teachers and lecturers in the city of Hanoi, Vietnam during the pandemic and it was found that they received support from school leaders to develop their skills, flexibility and psychological well-being activities. A similar study with a quantitative approach also discussed the same thing to evaluate the magnitude of the emotional burden on teachers during the COVID-19 pandemic in various areas that were significantly affected. This study showed that teachers experienced higher emotional burden due to depression, anxiety and stress than general population during the pandemic (Keim et al., 2022).

Another previous work carried out by Sacre et al.(2023) who tried to examine the quality of teaching before and during the pandemic and also observe the correlation between teachers' psychological well-being and teaching quality. The results reported that teachers felt emotional exhaustion and a decrease in the quality of learning in cognitive activation, classroom management and learning support compared to before the pandemic. Furthermore, other research (Chan et al., 2021) claimed the same point which indicated that the majority of the teachers felt emotionally exhausted, high levels of stress and job ambiguity due to the job duties being unclear.

Through the social facts and previous literature above, we have not yet found a study that maps out what strategies must be implemented to contribute to the teachers' psychological well-being in the education system during a social crisis period such as COVID-19. Therefore, this study will focus on mapping out various strategies that can be implemented to ensure teachers' psychological well-being through previous literature studies. Thus, the result of this study can become a guide for regulators in educational institutions later when facing a social crisis such as the COVID-19 pandemic.

#### Method

This research is using a systematic literature review (SLR) method. This method aims to assess all research documents related to a particular topic and interpret the results of the study (Kondaveeti et al., 2021). This research has three important stages, first stage is formulating a research question and searching numerous documents by specific keyword. Second stage is carrying out certain procedures to find publications related to the problem formulation and third stage is determining data sources from several documents that can answer the specified research question (Kitchenham, 2007; Pautasso, 2013).

The first stage, formulating the research question, the researcher only determined one research question "What Are Effective Strategies to Ensure Teachers' Psychological Well-Being Amid Social Crisis Such as COVID-19 Pandemic?". To obtain documents relating to the research question by specific keyword, the researcher used "Well-being Teacher Pandemic" as specific keywords by utilizing the publish or perish application with a database originating from journal articles indexed by Scopus database. This database is considered to contain relevant and reputable sources for this current research.

In the second stage, the results of the documents obtained in the first stage are selected using certain criteria. According to the research protocol, there are several criteria as well as the research question taken into consideration. The documents sourced were journal articles that were written in English, published within the time period 2019-2023, targeted teachers as the specific research population, were empirical studies and where the data source was available online. By this procedure, several potential articles were obtained to get a correlated and comprehensive data source.

In the third stage, the researcher determined the source of data to answer the research question, this is carried out through a two-step screening process. First was screening the abstract of each article and then secondly was screening the entire contents of the article to determine relevance to the research question, so that they can be used as data sources for this research. For more detail of the previous three stages, it can be seen in table 1 below.

**Table 1.** Research Data Source Process

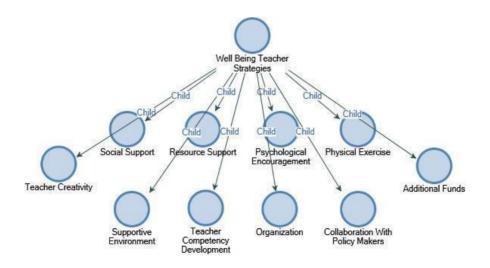
Stage	Description	Documents Reviewed	Documents Excluded	Documents Remaining
Stage 1	Formulating Keywords and Identifying Documents through Database Searching	52 documents	-	52 documents
Stage 2	Excluding some documents based on:		1. Book chapters, books, reviews, conference papers, conference reviews (n: 5) 2. PDF unavailable (n: 14) Non-English language (n: 1) 3. Articles' pdfs are unavailable and could not be accessed (n:14 Documents) 4. Document are not written by English language (n: 1 Documents) 5. Publication period beyond 2019 to 2023 (n:0 Documents) 6. Documents does not target teachers as research population	32 documents

Stage 3.1	Excluding some documents based on abstract content	32 documents	Abstract does not give exact research question (n: 1)	31 documents
Stage 3.2	Excluding documents based on full content relevance	31 documents	Article does not provide exact answer (n: 9)	22 documents

Thus, after three stages were carried out, there are only 22 articles identified that had the potential to answer the research question related to how to ensure teachers' psychological well-being amid a social crisis. After obtaining final data sources, codification of data sources was carried out using the Nvivo 12 Pro application to systematically analyze the data sources of this research.

### **Result and Discussion**

Figure 1. Well-Being Teacher Strategies Amid Pandemic Era



## **Teacher Creativity**

The first strategy to ensure teachers' psychological well-being is to bring out creativity in classroom learning with a significant teacher role (Bereczki & Kárpáti, 2018). The study showed that with various teacher creativity in the learning process, such as creative self-efficacy can have a quite significant impact on buoyancy in teaching, a creative growth mindset can have a very significant impact on positive affect in teaching, and also environmental support to bring out creativity will have a very significant impact on positive affect of dispositional joy in teaching, even if the teachers possess creative anxiety. It will have a big impact on reducing secondary traumatic stress and negative influences on learning experienced by teachers, such as creative growth mindset and environmental support for creativity contributes to an increase in teachers' psychological well-being, with large effect sizes for positive affect and dispositional joy in teaching. An increase in creative selfefficacy also enhances buoyancy in teaching (medium effect). Overall, these factors support the improvement of teachers' well-being through creative support and enhanced self-confidence (Anderson et al., 2021).

The concept of creative self-efficacy for teachers in learning can be expressed as "I feel that I am good at creating new ideas for teaching" (Anderson et al., 2021). Meanwhile, a creative growth mindset will provide new ideas to develop learning communities, adapt to new things and maintain students' independence in learning (Anderson et al., 2021). Then, supportive environment can encourage schools towards better quality for student development, moreover, it is more effective than teacher self-efficacy in shaping teachers' psychological well-being (DaVia Rubenstein et al., 2013). And last, managing creative anxiety appropriately can reduce the potential for secondary traumatic stress which includes secondary traumatic stress including emotional arousal, intrusion of stress into daily life, and avoidant behaviors to face that stress (Ormiston et al., 2022).

## Resource Support

Furthermore, among the many factors that can support teachers in maintaining their psychological well-being are contextual aspects that are tied to their work, such as school resources, colleague support and leadership support (Hascher et al., 2021). These supportive contextual aspects greatly influenced teachers' well-being amid crisis such as the COVID-19 pandemic. The example of this includes urgency of school organizational climate management (Burns & Machin, 2013), organizational justice (Capone & Petrillo, 2016), and the influence of trust in school principals (Berkovich, 2018).

Outside of that, support from other resources, such as the psychological and physical well-being of teachers by providing physical and mental health service programs as well as increasing rest time and good management of teachers' physical activity at school, will improve the psychological and physical well-being of teachers which will greatly impact the effectiveness of learning (Kwon et al., 2022). By utilizing school resources, it can mitigate the negative influence of work demands which can cause teacher fatigue, therefore it is very essential to ensure teachers have adequate resources for their benefit in preventing negative impacts on their psychological well-being (Kim et al., 2021).

# Supportive Environment

Another strategy that has been implemented to anticipate teacher fatigue and anxiety at school is to create an environment that supports teachers to feel comfortable during the learning process at school. For this reason, the school principal is the most responsible person, in order to improve teacher welfare, such as by carrying out learning development programs for teacher professionalism, necessary technical training, a flexible work environment (Duong et al., 2023), maintaining teacher enthusiasm in teaching by supporting the harmonious development of teacher interests (Kasprzak & Mudło-Głagolska, 2022).

An environment that supports teachers' psychological well-being will encourage creativity as discussed previously, thereby it can boost teacher dispositional joy and reduce the negative influence on teaching workload in the classroom (Anderson et al., 2021). This will create an educational institution that establishes good relationships among teachers, students and staff at the school (Guoyan et al., 2021).

## Social Support

Aside from environmental support and school resources that can be applied to improve teachers' psychological well-being, there are other strategies that can also be implemented. The firm support among closest people who have relationships with teachers. A former study proved that the importance of support from closest people such as colleagues and teams will enormously help teachers in fostering their well-being during a difficult atmosphere such as during the COVID-19 pandemic (Eblie Trudel & Sokal, 2023).

This is also in accordance with an earlier report in Australia which also proved that relationship support is really needed to contribute teachers' psychological well-being during crisis times, that support can come from students, parents, colleagues, family and friends of the teacher(Billett et al., 2022), similar issues have also been studied in other countries like Austria (Fröhlich et al., 2022), Switzerland (Hascher et al., 2021) and German (Stang-Rabrig et al., 2022).

This strategy aims to exchange information and thoughts in dealing with similar situations experienced by each other as a consequence they will produce solutions to these problems and can reduce stress levels due to these problems during crisis times (Fröhlich et al., 2022). Along with this, social support can also be provided by the school through programs that support social interaction between teachers and parents, thereupon that learning not only takes place at school, but also gets support from parents' physical activity and will decrease the workload of teachers at school and reduce their level of stress (D'Souza, 2021).

Other social supports also come from school seniors who collaborate with principals and vice principals (Hascher et al., 2021; Stang-Rabrig et al., 2022). These educational leaders play a crucial role in enhancing teachers' psychological well-being by providing supervision and mentoring opportunities. By fostering an environment where teachers feel supported, these leaders help to reduce feelings of isolation and stress, which are common challenges during times of uncertainty. Mentoring from senior educators, including those from outside the school, not only advances the learning system at the school but also provides teachers with a safe space to share concerns and receive emotional support. This kind of supportive interaction contributes to increased psychological well-being, as it encourages a sense of belonging, reduces job-related anxiety, and promotes resilience in coping with the pressures of the teaching profession, Moreover, the UK government has made significant efforts to address teachers' well-being, particularly through initiatives that address mental health and well-being (MHWB) for staff (Kim et al., 2021)

## **Teacher Competency Development**

The next strategy is to prioritize the development of teacher professionalism in learning. Social changes caused by critical times such as a pandemic for instance, will have a big impact on changes to the learning system in a school. In that case, comprehensive training is needed for teachers to be able to adapt to the new system (Duong et al., 2023).

For instance, due to the pandemic which requires every individual to maintain social distance from each other, in order to prevent more massive transmission of the virus, learning is not held offline but is online through internet-based learning. Therefore, the development of digital skills (Alves et al., 2021) and information and computer technology (Stang-Rabrig et al., 2022) became substantially greater amid the crisis due to educational needs.

In addition, educational institutions can also hold training on the use of e-learning by explaining the beneficial influence of teachers in learning in these difficult times. This should be accompanied by an established good learning management system because it will greatly enhance the position and responsibilities of teachers in the new learning system. In the future this will greatly impact effective learning, reducing the excessive workload that can be caused by poor learning management systems (Guoyan et al., 2021).

However, what must also be considered is that the development training given to teachers must be in accordance with the subjects taught by the teacher accompanied by adequate resource support. Therefore, they can execute the proportional demands placed on them (Kasprzak & Mudło-Głagolska, 2022). With appropriate educational guidance, it can help teachers improve their well-being during a crisis and can have an impact on creating safe spaces, increasing self-awareness and creating solutions using available resources (Galazka & Jarosz, 2021).

## Psychological Encouragement

A strategy that was also found in difficult times during the pandemic was to carry out various practical psychological encouragement programs, this is in alignment with preceding research which proved that practical strategies are more effective than performative strategies for supporting the mental health and well-being of teachers and students (Eblie Trudel & Sokal, 2023). One example is implementing a combined intervention between the inquiry-based stress reduction (IBSR) method and teachers' psychological well-being during the pandemic, this psychological program has been proven to improve teachers' psychological well-being compared to teachers who do not receive this treatment (Zadok-Gurman et al., 2021).

Other programs to support teachers' psychological well-being can also be carried out by implementing positive psychology training for

educational practitioners. There was a study that tries to implement the positive psychology training to foster teachers' psychological well-being and reduce psychological pressure caused by the development of psychological resources during the program and also has an impact on strengthening teaching competence to form an education center as a sustainable welfare and mental health ecosystem (García Álvarez et al., 2022; Lee et al., 2023).

The mentioned psychological training program previously had a great influence on teacher well-being, this is in accordance with former research which proved that emotional and stress levels are strongly correlated with well-being of teachers (Orines & Sunga-Vargas, 2023). Accordingly, training with psychological intervention needs to be undertaken as a strategy to deal with the problem of teachers' psychological well-being in schools as several studies have proven (Alves et al., 2021; Lau et al., 2022).

In addition to psychological training, teachers can also manage personal emotions (Beltman et al., 2022) through religiosity activities which can create a sense of optimism, thereby reducing perceived stress and ultimately creating satisfaction (Edara et al., 2021; Orines & Sunga-Vargas, 2023). Teachers who show positive emotions find it easier to form connections with students, and show stronger core beliefs, resilience, and flexibility in decision making in learning, consequently that teachers will feel more effective and well-being (Simonton et al., 2022).

# Organization

Internal organizations in schools can also have a significant impact in providing support to teachers by giving them trust, thereby they will feel safer at school (Beltman et al., 2022). Besides internal support, external organizations such as educational organizations under the auspices of the government which makes policies in the field of education will support teacher well-being significantly (Beltman et al., 2022).

School organizations play a very important role in designing the work of employees and teachers at schools. Designing work with a flexible schedule will create a comfortable work environment then it can have a significant impact on the welfare of teachers in schools, as a previous study states the urgency of the role of school organizations towards teachers' psychological well-being (Lau et al., 2022).

## Physical Exercise

Physical exercise is also a strategy that can be applied to reduce stress and anxiety felt by teachers in schools during the COVID-19 pandemic. One such quantitative study proved that a combination of aerobic exercise meditation for 6 weeks can have an effective positive impact to improve teachers' mental health and well-being and enable self-resilience to stressful environments during the corona virus pandemic (Demmin et al., 2022). This statement is also supported by several previous studies which recommend physical exercise due to it is big impact on mental and physical health in various populations (Chiesa et al., 2011; Gillison et al., 2009; Keng et al., 2011; Warburton et al., 2006)

# Collaboration With Policy Makers

The next step is to collaborate with policy makers in the education sector, this is because policy makers play a very important role in prioritizing teachers' psychological well-being during times of crisis such as during the COVID-19 pandemic. Policy makers must be able to allocate the right resources to support teacher needs, both material and non-material support that can encourage teacher flexibility and autonomy by considering variations of working conditions by creating open communication between teachers and policy makers, as a result it will have a positive impact on well-being teacher (Duong et al., 2023; Kim et al., 2021).

Policy makers must also be aware of the knowledge and awareness of strategies to face future problems by collaborating with researchers, educational leaders and organizational policy makers in schools, then they will get adequate information and be better able to prepare the right support and resources to ensure teachers' workload balance (Eblie Trudel & Sokal, 2023).

Policy makers must also collaborate with school leaders in implementing a clear work structure (Hascher et al., 2021). This is because policy makers will have a very significant role, especially during times of crisis where a lot of social change occurs, consequently learning system reform is needed (Alves et al., 2021). Later, it will create a positive educational environment that can improve teacher achievement and students (Guoyan et al., 2021).

#### Additional Funds

And the final strategy that can be carried out in times of crisis is to provide additional funding for learning activities in schools. This strategy can help directly to help resolve excessive teacher workload due to the lack of labor in the education sector, for that reason the teachers have to accomplish various types of workload themselves, especially teachers at the Kindergarten Level (Watts & Pattnaik, 2022). Additional funding can enable the recruitment of additional staff to help teach in classrooms which can allow teachers time for rest, exercise, or recreational activities (Kwon et al., 2022).

Additional funding could also have practical implications for shaping the well-being of teachers and schools during the pandemic. By allocating these funds to determine steps to facilitate teaching resources tailored to needs in times of crisis, design teaching strategies that support the teaching and learning process based on methods that best suit the situation and conditions in times of crisis (D'Souza, 2021).

#### Conclusion

Through the studies that have been conducted, this research produced ten strategies that can be applied to overcome various negative problems related to teachers' psychological well-being during the crisis period using the pandemic model. These strategies are teacher creativity, resource support, supportive environment, relational support, teacher competency development, psychological support, organization, physical training, collaboration with policy makers and additional funding.

The findings from this research provide a significant contribution in resolving teacher mental health problems during the crisis using the COVID-19 pandemic as a model for practitioners, academics and regulators in the education sector by identifying various strategies that can be implemented. This research provides a holistic view that leads to the development of teacher welfare, as well as providing guidance for systemic improvement efforts to ensure teacher working conditions in crisis situations later. This research suggests future quantitative research could be conducted to determine a ranking among the ten strategies so that it can be seen which strategy should be prioritized first when facing a crisis.

#### References

- Alves, R., Lopes, T., & Precioso, J. (2021). Teachers' well-being in times of COVID-19 pandemic: Factors that explain professional well-being. *IJERI: International Journal of Educational Research and Innovation*, 15, Article 15. https://doi.org/10.46661/ijeri.5120
- Anderson, R., Bousselot, T., Katz-Buoincontro, J., & Todd, J. (2021). Generating Buoyancy in a Sea of Uncertainty: Teachers Creativity and Well-Being During the COVID-19 Pandemic. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.614774

- Beltman, S., Hascher, T., & Mansfield, C. (2022). In the Midst of a Pandemic: Australian Teachers Talk About Their Well-Being. *Zeitschrift Für Psychologie*, *230*, 253–263. https://doi.org/10.1027/2151-2604/a000502
- Bereczki, E., & Kárpáti, A. (2018). Teachers' beliefs about creativity and its nurture: A systematic review of the recent research literature. *Educational Research Review*, *23*, 25–56. https://doi.org/10.1016/j.edurev.2017.10.003
- Berkovich, I. (2018). Typology of trust relationships: Profiles of teachers' trust in principal and their implications. *Teachers and Teaching*, 24(7), 749–767. https://doi.org/10.1080/13540602.2018.1483914
- Bianchi, M., & Caso, D. (2022). Distance learning during COVID-19 pandemic: Italian teachers' well-being and the role of age on ICT adoption. *Italian Journal of Applied Statistics*, 33, 177. https://doi.org/10.26398/IJAS.0033-010
- Billett, P., Turner, K., & Li, X. (2022). Australian teacher stress, well-being, self-efficacy, and safety during the COVID-19 pandemic. *Psychology in the Schools*, 60. https://doi.org/10.1002/pits.22713
- Burns, R. A., & Machin, M. A. (2013). Employee and Workplace Well-being: A Multi-level Analysis of Teacher Personality and Organizational Climate in Norwegian Teachers from Rural, Urban and City Schools. *Scandinavian Journal of Educational Research*, *57*(3), 309–324. https://doi.org/10.1080/00313831.2012.656281
- Capone, V., & Petrillo, G. (2016). Teachers' perceptions of fairness, well-being and burnout: A contribution to the validation of the Organizational Justice Index by Hoy and Tarter. *International Journal of Educational Management*, 30(6), 864–880. https://doi.org/10.1108/IJEM-02-2015-0013

- Chan, M., Sharkey, J. D., Lawrie, S. I., Arch, D. A. N., & Nylund-Gibson, K. (2021). Elementary school teacher well-being and supportive measures amid COVID-19: An exploratory study. *School Psychology*, 36(6), 533–545. https://doi.org/10.1037/spq0000441
- Chiesa, A., Calati, R., & Serretti, A. (2011). Does mindfulness training improve cognitive abilities? A systematic review of neuropsychological findings. *Clinical Psychology Review*, *31*(3), 449–464. https://doi.org/10.1016/j.cpr.2010.11.003
- DaVia Rubenstein, L., McCoach, D. B., & Siegle, D. (2013). Teaching for Creativity Scales: An instrument to examine teachers' perceptions of factors that allow for the teaching of creativity. *Creativity Research Journal*, 25(3), 324–334. https://doi.org/10.1080/10400419.2013.813807
- Demmin, D., Silverstein, S., & Shors, T. (2022). Mental and physical training with meditation and aerobic exercise improved mental health and well-being in teachers during the COVID-19 pandemic. *Frontiers in Human Neuroscience*, 16. https://doi.org/10.3389/fnhum.2022.847301
- D'Souza, R. (2021). Quality of Life in the Perspectives of Teachers in COVID 19 Pandemic Era: Implications for Funding Allocation for Faculty Well-being Initiatives. *Studies of Applied Economics*, *39*(12), Article 12. https://doi.org/10.25115/eea.v39i12.6315
- Duong, A., Nguyen, H., Tran, A., & Trinh, T. (2023). An investigation into teachers' occupational well-being and education leadership during the COVID-19 pandemic. *Frontiers in Education*, 8. https://doi.org/10.3389/feduc.2023.1112577
- Eblie Trudel, L., & Sokal, L. (2023). Dynamic perspectives on education during the COVID-19 pandemic and implications for teacher well-being. *International Journal of Educational Research Open*, *4*, 100241. https://doi.org/10.1016/j.ijedro.2023.100241

- Edara, I., del Castillo, F., Ching, G., & Castillo, C. (2021). Religiosity and Contentment among Teachers in the Philippines during COVID-19 Pandemic: Mediating Effects of Resilience, Optimism, and Well-Being. *Religions*, 12, 879. https://doi.org/10.3390/rel12100879
- Ferguson, K., & Hall, D. (2011). Predicting Teacher Anxiety, Depression, and Job Satisfaction. *J Teach Learn*, 8. https://doi.org/10.22329/jtl.v8i1.2896
- Fröhlich, D., Mori, J., Guias, D., & Hobusch, U. (2022). Newly Qualified Teachers' Well-Being During the COVID-19 Pandemic: Testing a Social Support Intervention Through Design-Based Research. *Frontiers in Psychology*, *13*, 873797. https://doi.org/10.3389/fpsyg.2022.873797
- Galazka, A., & Jarosz, J. (2021). The Role of Educational Coaching in Enhancing Teachers' Well-being During Pandemic. *The New Educational Review*, 64, 39–49. https://doi.org/10.15804/tner.21.64.2.03
- García Álvarez, D., Soler, M., Cobo-Rendón, R., & Hernández-Lalinde, J. (2022). Positive Psychology Applied to Education in Practicing Teachers during the COVID-19 Pandemic: Personal Resources, Well-Being, and Teacher Training. *Sustainability*, 14, 1–12. https://doi.org/10.3390/su141811728
- Gillison, F. B., Skevington, S. M., Sato, A., Standage, M., & Evangelidou, S. (2009). The effects of exercise interventions on quality of life in clinical and healthy populations; a meta-analysis. *Social Science & Medicine*, 68(9), 1700–1710. https://doi.org/10.1016/j.socscimed.2009.02.028

- Guoyan, S., Khaskheli, A., Raza, S. A., Khan, K., & Hakim, F. (2021). Teachers' self-efficacy, mental well-being and continuance commitment of using learning management system during COVID-19 pandemic: A comparative study of Pakistan and Malaysia. *Interactive Learning Environments*, 31, 1–23. https://doi.org/10.1080/10494820.2021.1978503
- Hascher, T., Beltman, S., & Mansfield, C. (2021). Swiss Primary Teachers' Professional Well-Being During School Closure Due to the COVID-19 Pandemic. *Frontiers in Psychology*, *12*, 687512. https://doi.org/10.3389/fpsyg.2021.687512
- Kasprzak, E., & Mudło-Głagolska, K. (2022). Teachers' Well-Being Forced to Work from Home Due to COVID-19 Pandemic: Work Passion as a Mediator. *International Journal of Environmental Research and Public Health*, 19(22), 15095. https://doi.org/10.3390/ijerph192215095
- Keim, R., Pfitscher, G., Leitner, S., Burger, K., Giacomoni, F., & Wiedermann, C. (2022). Teachers' emotional well-being during the SARS-CoV-2 pandemic with long school closures: A large-scale cross-sectional survey in Northern Italy. *Public Health*, 208. https://doi.org/10.1016/j.puhe.2022.04.006
- Keng, S.-L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical Psychology Review*, *31*(6), 1041–1056. https://doi.org/10.1016/j.cpr.2011.04.006
- Kim, L., Oxley, L., & Asbury, K. (2021). "My brain feels like a browser with 100 tabs open": A longitudinal study of teachers' mental health and well-being during the COVID-19 pandemic. *British Journal of Educational Psychology*, 92. https://doi.org/10.1111/bjep.12450

- Kitchenham, B. (2007). Kitchenham, B.: Guidelines for performing Systematic Literature Reviews in software engineering. EBSE Technical Report EBSE-2007-01. EBSE Technical Report EBSE.
- Kondaveeti, H. K., Kumaravelu, N. K., Vanambathina, S. D., Mathe, S. E., & Vappangi, S. (2021). A systematic literature review on prototyping with Arduino: Applications, challenges, advantages, and limitations. *Computer Science Review*, *40*, 100364. https://doi.org/10.1016/j.cosrev.2021.100364
- Kwon, K.-A., Ford, T., Tsotsoros, J., Randall, K., Malek-Lasater, A., & Kim, S. (2022). Challenges in Working Conditions and Well-Being of Early Childhood Teachers by Teaching Modality during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19. https://doi.org/10.3390/ijerph19084919
- Lau, S. S. S., Shum, E. N. Y., Man, J. O. T., Cheung, E. T. H., Amoah, P. A., Leung, A. Y. M., Okan, O., & Dadaczynski, K. (2022). Teachers' Well-Being and Associated Factors during the COVID-19 Pandemic: A Cross-Sectional Study in Hong Kong, China. *International Journal of Environmental Research and Public Health*, 19(22), 14661. https://doi.org/10.3390/ijerph192214661
- Lee, A. S. Y., Datu, J. A., Chan, D. K. C., Lau, E., Fung, W. K., Cheng, R., & Chung, K. (2023). The effects of a PROSPER-based intervention on well-being among pre-service preschool teachers during the COVID-19 pandemic: A randomized control trial. *Educational Psychology*, *OO*, 1–18. https://doi.org/10.1080/01443410.2023.2189649
- Orines, R., & Sunga-Vargas, M. (2023). Stress and Emotion-Focused Coping as Predictors of Psychological Well-being among Public School Teachers during COVID-19 Pandemic. *North American Journal of Psychology*, *25*, 405–416.

- Ormiston, H. E., Nygaard, M. A., & Apgar, S. (2022). A Systematic Review of Secondary Traumatic Stress and Compassion Fatigue in Teachers. *School Mental Health*, *14*(4), 802–817. https://doi.org/10.1007/s12310-022-09525-2
- Pautasso, M. (2013). Ten Simple Rules for Writing a Literature Review. *PLOS Computational Biology*, *9*(7), e1003149. https://doi.org/10.1371/journal.pcbi.1003149
- Pöysä, S., Pakarinen, E., & Lerkkanen, M.-K. (2021). Patterns of Teachers' Occupational Well-Being During the COVID-19 Pandemic: Relations to Experiences of Exhaustion, Recovery, and Interactional Styles of Teaching. *Frontiers in Education*, 6. https://doi.org/10.3389/feduc.2021.699785
- Sacre, M., Ries, N., Wolf, K., & Kunter, M. (2023). Teachers' well-being and their teaching quality during the COVID-19 pandemic: A retrospective study. *Frontiers in Education*, 8. https://doi.org/10.3389/feduc.2023.1136940
- Simonton, K. L., Layne, T. E., Brown, B., & Loupe, K. (2022). Physical Education Teacher Experiences Through the Lens of a Pandemic: Putting a Spotlight on Teacher Beliefs, Practices, Emotional Fragility, and Well-Being. *Journal of Teaching in Physical Education*, 1–12. https://doi.org/10.1123/jtpe.2021-0216
- Skaalvik, E., & Skaalvik, S. (2016). Teacher Stress and Teacher Self-Efficacy as Predictors of Engagement, Emotional Exhaustion, and Motivation to Leave the Teaching Profession. *Creative Education*, *07*, 1785–1799. https://doi.org/10.4236/ce.2016.713182
- Stang-Rabrig, J., Brüggemann, T., Lorenz, R., & McElvany, N. (2022). Teachers' occupational well-being during the COVID-19 pandemic: The role of resources and demands. *Teaching and Teacher Education*, 117, 103803. https://doi.org/10.1016/j.tate.2022.103803

- Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence. *CMAJ*, *174*(6), 801–809. https://doi.org/10.1503/cmaj.051351
- Watts, R., & Pattnaik, J. (2022). Perspectives of Parents and Teachers on the Impact of the COVID-19 Pandemic on Children's Socio-Emotional Well-Being. *Early Childhood Education Journal*, *51*, 1–12. https://doi.org/10.1007/s10643-022-01405-3
- Zadok-Gurman, T., Jakobovich, R., Dvash, E., Zafrani, K., Rolnik, B., Ganz, A., & Lev-Ari, S. (2021). Effect of Inquiry-Based Stress Reduction (IBSR) Intervention on Well-Being, Resilience and Burnout of Teachers during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 18, 3689. https://doi.org/10.3390/ijerph18073689