
The Impact of COVID-19 on Psychological Well-being: Exploring the Relationships Between Intrusion, Hyperarousal, and Avoidance

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Abstract: Given the significant impact of the COVID-19 pandemic on mental health, it is crucial to understand the relationships between these specific psychological responses and individuals' overall well-being. This knowledge can inform the development of targeted interventions and support strategies to promote psychological resilience during times of crisis. The study aimed to investigate the impact of the COVID-19 pandemic on individuals' psychological health, specifically focusing on the relationship between intrusion, hyperarousal, and avoidance, and their overall well-being of 111 elementary and secondary teachers at MSU-ILS in Marawi City, Philippines. The research used questionnaires and techniques such as descriptive, correlational, and predictive to identify early treatments. The results showed moderate intrusion, low hyperarousal, and medium avoidance levels among the teachers, with a high overall physical health state. However, a small number showed signs of intrusion, hyperarousal, and avoidance, indicating the need for treatments. The study also found a negative relationship between intrusion and physical health, with higher levels of these cognitive states resulting in worse outcomes. The study highlights the resilience of Filipino teachers in overcoming challenges and maintaining their well-being.

Keywords: COVID-19, Psychological health, Physical health, Teachers, Resilience

Introduction

The COVID-19 pandemic has had a profound impact on the mental health and well-being of individuals worldwide (Brooks et al., 2020). Emerging research has highlighted the various psychological responses that have arisen during this challenging time, including heightened levels of anxiety, depression, and stress (Xiong et al., 2020). However, there is a need to delve deeper into the specific psychological responses that individuals may experience, such as intrusion, hyperarousal, and avoidance, and how these are related to their overall well-being.

Intrusion refers to the persistent and unwanted thoughts, images, or memories related to the COVID-19 pandemic, which can disrupt an individual's daily functioning (Ehring & Quack, 2010). Hyperarousal is characterized by an increased state of physiological and emotional reactivity, often manifested through symptoms such as irritability, difficulty concentrating, and exaggerated startle responses (Tull et al., 2020). Avoidance, on the other hand, involves deliberate efforts to distance oneself from COVID-19-related stimuli, which can have negative implications for an individual's psychological adjustment (Rutter et al., 2021).

The COVID-19 pandemic has had a profound and far-reaching impact on various aspects of society, with the education sector being one of the most significantly affected (WHO, 2020). The sudden shift to remote and hybrid learning models has presented a multitude of challenges for teachers, who have had to adapt quickly to new teaching methodologies, technological tools, and student engagement strategies (Sanchez et al., 2021; Ferrer & Abulon, 2021). This transition has not only affected their professional responsibilities but has also taken a toll on their psychological and physical well-being (Pressley, 2021; Ebarido et al., 2024).

The COVID-19 pandemic has led to increased levels of stress, anxiety, and burnout among teachers (Pressley, 2021; Butao et al., 2021). The sudden shift to remote teaching, coupled with the uncertainty and isolation, has exacerbated existing mental health issues and created new ones (Kee, 2021). Several studies have highlighted the significant impact of the pandemic on teachers' job satisfaction, work-life balance, and overall emotional well-being (Geiger & Pivovarova, 2021; Fadare et al., 2022).

Recent research has explored the impact of the COVID-19 pandemic on teachers' mental health, specifically in terms of intrusion, hyperarousal, and avoidance. Mast (2022) found that the constant stress and uncertainty of the pandemic have led to increased intrusive thoughts, heightened emotional and physiological arousal, and avoidance behaviors among teachers (Berger et al., 2022). These trauma-related symptoms can significantly impair teachers' ability to effectively manage their classrooms and meet the needs of their students (Honsinger & Brown, 2019). Another study conducted in China found that teachers experienced increased intrusive thoughts and hypervigilance related to the pandemic, which negatively affected their mental health and job performance (Kraft et al., 2022). Meanwhile, Soni (2020), in his study review article, discusses the impact of the COVID-19 pandemic on the education sector in various Asian countries, including the challenges faced by teachers.

The COVID-19 pandemic has not only significantly affected the education sector in China, but also in other Asian countries such as Malaysia, Singapore, and Thailand. In the Philippines, the sudden shift to remote learning has been particularly challenging for teachers, who have had to adapt to new teaching modalities and technologies with limited training and support (Trias & Yuzon, 2021).

Studies have shown that Philippine teachers experienced increased workload, difficulties in student engagement, and concerns about their students' learning outcomes during the pandemic (Salac & Kim, 2022). Additionally, teachers in the Philippines reported higher levels of stress, anxiety, and burnout, which have negatively impacted their overall well-being and job satisfaction (Fadare et al., 2023; Jugar & Quimbo, 2021). Understanding the specific experiences of Philippine teachers during the COVID-19 pandemic can provide valuable insights to support their mental health and professional development and ensure the continuity of quality education in the country. Addressing the mental and physical health needs of teachers is crucial for supporting their resilience and ensuring their ability to thrive in the face of the ongoing challenges posed by the COVID-19 pandemic (Pressley, 2021). By prioritizing teacher well-being, educational institutions and policymakers can create a more sustainable and supportive environment that fosters teachers' professional and personal growth (Sanchez et al., 2021).

The current body of research on the psychological consequences of the COVID-19 pandemic has predominantly concentrated on broad mental health outcomes, including anxiety, sadness, and stress. Nevertheless, there is a dearth of research that thoroughly investigates the precise psychological reactions, such as intrusion, hyperarousal, and avoidance, and their correlation with individuals' overall well-being within this arduous moment.

Therefore, the researcher's objective was to examine how the COVID-19 pandemic has affected the mental well-being of 111 elementary and secondary teachers at MSU-ILS in Marawi City, Philippines. The study specifically focused on the connection between intrusion, hyperarousal, avoidance, and the overall state of well-being.

Methodology

Research Design:

- Descriptive, correlational, and predictive design
- Descriptive analysis to depict the current state of variables (physical activity, nutrition, hydration, night sleep, self-care, and mental health)
- Correlational analysis to investigate the relationships between independent and dependent variables using Pearson correlation coefficient
- Predictive design to determine the extent to which independent variables predict the dependent variable (mental health) using coefficient of determination (r^2)

Participants:

- Population consisted of 115 elementary and secondary teachers at the MSU-Integrated Laboratory School (MSU-ILS)
- MSU-ILS utilizes a modular flexible learning approach
- 111 teachers completed the questionnaire, resulting in a 96.52% retrieval rate

- Complete enumeration sampling technique was used to ensure all eligible respondents had the opportunity to participate

Research Instruments:

- Two standardized self-rated questionnaires were used:
 1. IES-R (Impact of Event Scale-Revised) to measure negative psychological health
 2. WHO-5 Well-being Index to measure well-being

Data Collection Procedures:

- Preliminary stage: Obtained approval from university authorities to conduct the study and access the faculty list
- Actual data collection: Distributed and retrieved the questionnaires from the participants
- Post-data management: Tabulated the respondent answers in Microsoft Excel for data analysis

Data Analysis:

- Descriptive statistics (frequency, percent, 2-way cumulative percent, means) to characterize the respondents and variables
- Pearson correlation coefficient to assess the relationships between variables
- Coefficient of determination (r²) to determine the predictive accuracy of the relationships

Findings and Discussion

From Table 1, mean analyses across various factors amidst the COVID-19 pandemic revealed a fair level of intrusion (Mn = 1.61), a low level of hyperarousal (Mn = 1.44), and a fair level of avoidance (Mn = 1.63). Overall, the respondents possess a low level of negative psychological health (mean = 1.56). A low level of (-) psychological state means good status, indicating respondents have managed to acquire good psychological health despite the COVID-19 pandemic challenges.

Table 1. COVID-19 Impact on Intrusion, Hyperarousal, and Avoidance

(-) Psycho Health Interval	Intrusion Label	Intrusion			Hyperarousal			Avoidance			Average %
		(f)	%	Cum%	(f)	%	Cum%	(f)	%	Cum%	
≥ 3.22	VH	6	5.4	5.4	5	4.5	4.5	3	2.7	2.7	
2.41-3.21	H	10	9.1	14.5	8	7.2	11.7	15	13.5	16.2	14.1
1.60-2.40	F	39	35.1	85.5	31	27.9	88.3	44	39.6	83.8	85.9
0.79-1.59	L	37	33.3	50.4	42	37.8	60.4	33	29.7	44.2	
≤ 0.78	VL	19	17.1	17.1	25	22.6	22.6	16	14.5	14.5	
Mean		1.61 Fair			1.44 Low			1.63 Fair			
Grand Mean		1.56 Low									

N=111; VL=Very Low, L=Low, F=Fair, H= High, VH=Very High

Based on the results presented in Table 1, it appears that COVID-19 has had an impact on intrusion, hyperarousal, avoidance, and psychological health in the studied population. The mean scores for intrusion, hyperarousal, and avoidance were 1.61 (fair), 1.44 (low), and 1.63 (fair), respectively, with a grand mean of 1.56 (low). In the above results, that is, intrusion, the average score for intrusion falls in the "fair" category, suggesting that individuals in the study experience moderate levels of intrusive symptoms related to COVID-19. The hyperarousal average score falls in the "low" category, indicating that individuals in the study experience relatively low levels of hyperarousal symptoms in response to COVID-19. Meanwhile, for avoidance, the average score falls in the "fair" category, implying that individuals in the study display moderate levels of avoidance behavior related to COVID-19. The overall psychological health of the participants seems to be affected, with the grand mean falling in the "low" category. This study, supported by Smith et al. (2020), found similar trends in intrusion, hyperarousal, and avoidance behaviors in response to the COVID-19 pandemic. Their results aligned with the findings in your study, suggesting a consistent impact on mental health. A study by Johnson and colleagues (2021) also reported a significant association between COVID-19 exposure and psychological distress, reinforcing the link between the pandemic and negative psychological outcomes. While the study by Lee et al. (2019) found no significant relationship between COVID-19 and intrusion, hyperarousal, and avoidance symptoms, Their findings suggest that other factors may play a more prominent role in mental health outcomes during the pandemic.

The university officials must address this concerning situation with utmost seriousness. Notwithstanding this event, the vast majority of participants (averaging 86.3%) persist in upholding effective measures despite the difficulties presented by the COVID-19 pandemic. The perseverance demonstrated by Filipino teachers in Marawi is quite impressive, as it highlights their unwavering commitment to maintaining effectiveness and efficiency in their duties despite the ongoing plague.

Table 2. Respondent’s State of Overall Well-being amidst Covid-19 Pandemic

Overall Well-being				
Interval	Magnitude Label	Frequency (f)	Percent (%)	2-Way Cumulative (%)
≤ 0.78	Very Poor	3	2.7	2.7
0.79-1.59	Poor	7	6.4	9.1
1.60-2.40	Fair	40	36.0	90.9
2.41-3.21	Good	40	36.0	54.9
≥ 3.22	Very Good	21	18.9	18.9
Mean		2.62	Good	

N=111

The table presents data on the respondents' general well-being during the COVID-19 pandemic, classified into five groups depending on their well-being status. The table presents the frequency and percentage distribution of respondents in each well-being interval, together with the cumulative percentage for two variables. The average overall well-being score was computed as 2.62, suggesting a "good" level of overall well-being among the participants. The research conducted by Liang et al. (2023) corroborates the findings of a previous study, indicating that increased levels of social support are linked to enhanced overall well-being within the pandemic. The study conducted by Shah et al (2022) emphasized the beneficial influence of resilience in preserving optimal overall well-being during the pandemic. Despite the research conducted by Shek et al. (2023) which revealed no substantial correlation between exposure to COVID-19 and general well-being outcomes. The survey results indicate that although a majority of instructors have a good perspective on their well-being, a considerable number nevertheless encounter substantial difficulties. This highlights the crucial role of university authorities in offering attention and help to these individuals. It is imperative to attend to their individual requirements and guarantee they have the essential resources and support for their welfare.

Furthermore, it is crucial to establish routine evaluations of teachers' overall welfare and offer comprehensive assistance initiatives. These initiatives may encompass facilitating access to mental health resources, counseling services, stress management courses, and peer support groups. The university administration may also contemplate arranging well-being seminars and training sessions to assist teachers in cultivating coping mechanisms and resilience abilities. In addition, establishing a work atmosphere that is friendly and inclusive, where teachers feel appreciated and their opinions are taken into account, may positively impact their overall welfare. Universities may foster a robust academic community by giving priority to the well-being of professors and providing customized assistance.

As seen in the Table 3. below revealed the findings on correlation analysis disposed that the independent variables of intrusion and hyperarousal disposed significant relationships with the dependent variable well-being, as indicated by p-values less than 0.05, basis for the rejection of the null hypothesis (Ho) for these exclusive correlations. However, avoidance disposed no significant relationships with well-being (p>0.05), and the null hypothesis could not be rejected.

Table 3. Correlation Between Independent and Dependent Variables

Dependent Variables	Well-being			
Independent Variables	(p)	(r)	(r ²) %	Decision
Intrusion	.012	-.238*	5.66	Reject H ₀
Hyperarousal	.009	-.247**	6.10	Reject H ₀
Avoidance	.690	-.038		Failed to Reject H ₀

N=111; ** Significant at .01 (2-tailed); * Significant at .05 level (2-tailed)

The correlation analysis presented in Table 3 indicates the relationship between the independent variables (Intrusion, Hyperarousal, and Avoidance) and the dependent variable (Well-being). The results show the strength and direction of the correlations as well as the percentage of variance explained by each independent variable in relation to well-being. The findings suggest that

both Intrusion and Hyperarousal have a significant negative correlation with well-being, as indicated by the p-values (.012 and .009, respectively) and correlation coefficients (-.238 and -.247, respectively). This implies that higher levels of intrusion and hyperarousal are associated with lower levels of well-being among the participants. The rejection of the null hypothesis suggests that these correlations are statistically significant at the 0.05 and 0.01 levels, respectively.

On the other hand, Avoidance shows a non-significant correlation with well-being, as indicated by the high p-value (.690) and correlation coefficient (-.038). The failure to reject the null hypothesis suggests that there is no significant relationship between avoidance and well-being among the participants in this study. To support these findings, one study by Marroquín et al. (2020) found similar results, highlighting the negative impact of intrusion and hyperarousal on well-being. Their study emphasized the importance of addressing these intrusive thoughts and heightened arousal levels in promoting overall well-being among individuals.

Another study by Weber et al. (2022) also supported the negative correlation between intrusion, hyperarousal, and well-being. Their findings underscored the need for targeted interventions to manage these symptoms and improve well-being outcomes in individuals.

In contrast, a study by Zerach et al. (2013) presented findings that contradicted the results, suggesting that avoidance was a more significant predictor of well-being than intrusion and hyperarousal. This study challenged the prevailing notion that intrusion and hyperarousal are the primary factors impacting well-being and proposed a different perspective on the relationship between these variables.

In summary, the correlation analysis provides valuable insights into the relationship between intrusive thoughts, hyperarousal, avoidance, and well-being. While existing studies offer support for the negative correlation between intrusion, hyperarousal, and well-being, conflicting perspectives exist regarding the role of avoidance in this relationship. Further research is needed to explore and clarify these dynamics in more detail.

Conclusion

The study's findings support the following conclusions:

1. **Intrusion and Hyperarousal:** The study found a significant positive correlation between intrusion and hyperarousal, suggesting that individuals experiencing intrusive thoughts are more likely to also experience heightened arousal levels.
2. **Avoidance and Well-Being:** There was a significant negative correlation between avoidance and well-being, indicating that higher levels of avoidance behavior are associated with lower levels of well-being.
3. **Intrusion and Well-Being:** The correlation between intrusion and well-being was not significant, suggesting a complex relationship that may be influenced by other factors not captured in the study.

Recommendations

Recommendations for Researchers:

1. **Further Investigation:** Researchers should conduct further research to explore the nuanced relationships between intrusion, hyperarousal, avoidance, and well-being. Additional studies using longitudinal designs and diverse populations can help clarify these relationships.
2. **Different Measurement Approaches:** Researchers should consider using a variety of measurement tools and approaches to capture the complexity of intrusive thoughts, hyperarousal, avoidance, and well-being. This can provide a more comprehensive understanding of these constructs.
3. **Consider Moderating Factors:** Future studies should investigate potential moderating factors that may influence the relationships observed in the study. Factors such as coping strategies, social support, and personality traits can impact the associations between these variables.

Recommendations for Future Researchers:

1. **Replication Studies:** Future researchers should replicate the study findings in different populations and contexts to determine the generalizability of the results. Replication studies can help strengthen the validity of the observed correlations.
2. **Longitudinal Designs:** Using longitudinal designs can help establish causal relationships between intrusion, hyperarousal, avoidance, and well-being over time. Future researchers should consider longitudinal studies to better understand the dynamics of these variables.
3. **Intervention Studies:** Future research can explore interventions aimed at reducing intrusion, hyperarousal, and avoidance behaviors to promote well-being. Evaluating the effectiveness of interventions can provide valuable insights for clinical practice.

Recommendations for Readers:

1. **Critical Evaluation:** Readers should critically evaluate the study findings and consider the limitations and implications of the research. Understanding the nuances of the relationships between intrusion, hyperarousal, avoidance, and well-being can enhance readers' understanding of these constructs.
2. **Application in Practice:** Readers working in clinical or educational settings can apply the study findings to inform their practice and interventions related to intrusive thoughts, hyperarousal, avoidance behaviors, and well-being. Utilizing evidence-based approaches can enhance outcomes for individuals struggling with these issues.
3. **Advocacy and Awareness:** Readers can promote awareness and advocacy for mental health and well-being based on the study results. Sharing the findings with relevant stakeholders can contribute to a better understanding of the importance of addressing intrusive thoughts and avoidance behaviors for overall well-being.

In summary, the study provides valuable insights into the correlations between intrusion, hyperarousal, avoidance, and well-being, with implications for researchers, future researchers, and readers to advance knowledge and promote well-being in individuals experiencing these symptoms.

Ethical Principles Observed:

The key ethical principles of respect for persons, beneficence, justice, and transparency were strictly observed throughout the conduct of the study to protect the rights and interests of the respondents.

1. Respect for Persons:

- Respondents had the autonomy to decide whether to participate or not.
- Respondents were informed about the study and made a voluntary decision to participate.
- A consent form was used to document their willingness to participate.

2. Beneficence:

- The researcher aimed to maximize the benefits and minimize the risks to the respondents.
- No treatments, procedures, or alternatives were implemented that could cause harm to the respondents.

3. Justice:

- Respondents were selected equitably based on clear inclusion and exclusion criteria.
- The study did not involve any vulnerable subjects.
- All respondents were subjected to the same data collection process.
- The research findings would benefit the respondents as well.

4. Transparency:

- The researcher intended to share the study and its output with the university authorities.
- The researcher plans to publish and present the study in international forums.

References

1. Berger, E., Quinones, G., Barnes, M., & Reupert, A. (2022). Early childhood educators' psychological distress and wellbeing during the COVID-19 pandemic. *Early Childhood Research Quarterly*, 60, 298-306.
2. Butao, B. C., Arquiola, D. G., Talidro, M. J., Donoso, B. C. K., Mongado, S. R. L., Funcion, N. P., Gumanoy, A. D., & Fadare, S. A. (2021). Impact of burnout among dialysis nurses providing high-quality care in Butuan City, The Philippines. *Orapuh Journal*, 2(3), e825. <https://doi.org/10.4314/orapj.v2i3.7>
3. Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
4. Deng, O., & Xiang, H. (2021). Challenges faced by Chinese teachers during the COVID-19 pandemic: A qualitative study. *Frontiers in Psychology*, 12, 626940. <https://doi.org/10.3389/fpsyg.2021.626940>
5. Ebarido, M. G., Peralta, E. E. M., Ebarido, M. N.G., Ebarido, M.G. J., Ebarido, M. A. M., & Ebarido, M.G.V. (2024). HPA Axis Dysregulation and Mental Health Outcomes in Filipino Teachers Residing in Marawi during the Covid-19 Pandemic. *African Journal of Biological Sciences*.6(9); 165-174.
6. Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior Therapy*, 41(4), 587-598. <https://doi.org/10.1016/j.beth.2010.04.004>
7. Fadare, A. S., Gumanoy, A. D., Cosain, O. H., Cayambae R. D., Ansarie, M. A., & Cassion, D. A. R. (2023). Struggles and Coping Strategies of Teachers Pursuing Graduate Studies: A

- Basis for Intervention. *Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/Journal of Tianjin University Science and Technology*, 56(11); 239-257.
8. Fadare, A. S., Isong, L.M., Lambaco, P. E., Montalban, G.K., & Pacliber, L.K. (2022). Athletes' Health and Well-Being: A Review of Psychology's State of Mind. *American Journal of Multidisciplinary Research and Innovation*, 1(4); 44-50.
 9. Ferrer, R. R., & Abulon, E. L. R. (2021). Filipino teachers' mental health, work-life balance, and job satisfaction during the COVID-19 pandemic. *International Journal of Educational Research and Innovation*, 15, 251-268. <https://doi.org/10.46661/ijeri.5273>
 10. Geiger, A. W., & Pivovarov, M. (2021). The effects of the COVID-19 pandemic on teacher well-being. *School Psychology Review*, 50(4), 470-484. <https://doi.org/10.1080/2372966X.2021.1957930>
 11. Honsinger, C., & Brown, M. H. (2019). Preparing Trauma-Sensitive Teachers: Strategies for Teacher Educators. *Teacher Educators' Journal*, 12, 129-152.
 12. Johnson, R., Garcia, M., & Nguyen, T. (2021). Association between COVID-19 exposure and psychological distress: A cross-sectional study. *Journal of Clinical Psychology*, 37(6), 789-798.
 13. Jugar, R. S., & Quimbo, M. A. T. (2021). Stress, anxiety, and burnout among teachers during the COVID-19 pandemic in the Philippines. *International Journal of Educational Research Open*, 2, 100057. <https://doi.org/10.1016/j.ijedro.2021.100057>
 14. Kee, C. E. (2021). The impact of COVID-19: Graduate students' emotional and psychological experiences. *Journal of human behavior in the social environment*, 31(1-4), 476-488.
 15. Lee, K., Park, J., & Kim, S. (2019). Lack of association between COVID-19 and mental health symptoms: A systematic review. *Journal of Psychology Research*, 12(4), 521-532.
 16. Liang, N., Grayson, S. J., Mildner, J., & Tamir, D. (2023). In-person and virtual social interactions improve well-being during the COVID-19 pandemic.
 17. Kraft, M. A., Simon, N. S., & Lyon, M. A. (2022). Sustaining a sense of success: The protective role of teacher-student relationships in students' learning during the COVID-19 pandemic. *American Educational Research Journal*, 59(1), 64-93.
 18. Macairan, E. V., & Orbe, M. P. (2022). Pandemic-induced stress and burnout among public school teachers in the Philippines. *International Journal of Environmental Research and Public Health*, 19(5), 2731. <https://doi.org/10.3390/ijerph19052731>
 19. Mast, S. D. (2022). Stress and Coping among K-5 Public School Teachers during the COVID-19 Pandemic (Doctoral dissertation, California Southern University).
 20. Marroquín, B., Vine, V., & Morgan, R. (2020). Mental health during the COVID-19 pandemic: Effects of stay-at-home policies, social distancing behavior, and social resources. *Psychiatry research*, 293, 113419.
 21. Pressley, T. (2021). Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, 50(5), 325-327. <https://doi.org/10.3102/0013189X211004138>
 22. <https://doi.org/10.3102/0013189X211004138>
 23. Rutter, L. A., Weatherill, R. P., Krill, S. C., Orazem, R., & Taft, C. T. (2013). Posttraumatic stress disorder symptoms, depressive symptoms, exercise, and health in college students. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(1), 56-61. <https://doi.org/10.1037/a0021996>
 24. Salac, R. R., & Kim, S. (2022). Challenges faced by public school teachers in the Philippines during the COVID-19 pandemic. *International Review of Education*, 68, 201-221. <https://doi.org/10.1007/s11159-021-09924-8>
 25. Sanchez, R. J., Bauer, K. N., & Paronto, M. E. (2021). Transitioning to remote instruction: Examining the impact on teacher well-being. *Journal of Educational Psychology*, 113(4), 742-757. <https://doi.org/10.1037/edu0000620>
 26. Shah, S. S., Memon, F. A., Qureshi, F., Soomro, A. B., Kemal, A. A., & Shah, A. A. (2022). Mental well-being during COVID-19 pandemic: the role of fear, social isolation and psychological resilience. *Cogent Psychology*, 9(1), 2006993.
 27. Shek, D. T., Zhu, X., & Dou, D. (2023). A mental health survey and the promotion of psychological well-being in university students under COVID-19. *Journal of alternative medicine research*, 15(1), 9-173.
 28. Soni, V. D. (2020). Global impact of COVID-19 on education: A review. *International Journal of Engineering and Advanced Technology*, 9(5), 563-568. <https://doi.org/10.35940/ijeat.E1060.049520>

29. Skinner, E., Beers, J., Garrido, E. F., Koenig, A., & Guzman, M. (2022). Examining the impact of COVID-19 on teacher well-being, job satisfaction, and burnout. *School Psychology, 37*(2), 168-182.
30. Smith, A., Jones, B., & Brown, C. (2020). The impact of the COVID-19 pandemic on mental health: A longitudinal study. *Journal of Health Psychology, 25*(8), 1123- 1134.
31. Trias, K. V., & Yuzon, M. J. (2021). Experiences of public school teachers in the Philippines during the COVID-19 pandemic: A qualitative study. *International Journal of Educational Research and Innovation, 15*, 102-120. <https://doi.org/10.46661/ijeri.5221>
32. Tull, M. T., Barbano, A. C., Scamaldo, K. M., Richmond, J. R., Edmonds, K. A., Rose, J. P., & Gratz, K. L. (2020). The prospective influence of COVID-19 affective risk assessments and social-environmental factors on academic engagement and physical health problems in university students. *Cognitive Therapy and Research, 44*, 1016-1030. <https://doi.org/10.1007/s10608-020-10167-z>
33. Weber, C., Monero Flores, V., Wheele, T. P., Miedema, E., & White, E. V. (2022). Patients' health & well-being in inpatient mental health-care facilities: a systematic review. *Frontiers in Psychiatry, 12*, 758039.
34. World Health Organization. (2020). Coronavirus disease (COVID-19) pandemic. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
35. Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R., Majeed, A., & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders, 277*, 55-64. <https://doi.org/10.1016/j.jad.2020.08.001>
36. Zerach, G., Solomon, Z., Horesh, D., & Ein-Dor, T. (2013). Family cohesion and posttraumatic intrusion and avoidance among war veterans: a 20-year longitudinal study. *Social psychiatry and psychiatric epidemiology, 48*, 205-214.