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MENTAL HEALTH CRISES AMONG FOUNDATION LEVEL STUDENTS DURING COVID-19 PANDEMIC: AN ANALYSIS OF INFLUENCING FACTOR

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Abstract:

Quarantine, isolation, and social distancing were essential for preventing the transmission of the virus and protecting people's physical fitness during the ongoing COVID-19 pandemic. However, they may have had lasting negative impacts, notably on mental health and well-being, especially on higher education students, as they are in a pivotal life-transition stage linked to increased mental health crises. Therefore, the main objective of this study is to assess the influential factors associated with mental health crises among foundation-level students during the COVID-19 pandemic. This study involved 277 students from the foundation of science programme at the Preparatory Centre of Science and Technology, University of Malaysia Sabah. A questionnaire was originally constructed to analyse the factors impacting mental health crises. Overall results found that the range of the mean from the questionnaire was 4.56 to 4.80, indicating that depression, anxiety, stress, and eating disorders are undoubtedly the influencing factors of mental health crises among foundation-level students. The majority of students scored much higher on the items under the stress factor (4.73) compared to the other three factors, which suggests that most of the students suffered from stress during the COVID-19 pandemic. This is followed by depression (4.69), anxiety (4.64) and eating disorders (4.63). Thus, universities and lecturers play a crucial role in reducing stress, depression, and anxiety associated with academic commitments.

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Keywords:

Mental Health, COVID-19, Stress, Depression, Anxiety, Students

Introduction

The present COVID-19 outbreak, which is caused by the new coronavirus SARSCoV2, has had a massive impact on the educational activities of higher education students around the world (Fitzgerald & Konrad, 2021; Keyserlingk et al., 2022). The closure of colleges and universities and the transition of curriculums to an online setting presented students with new challenges and demanded a rapid adjustment of their study habits (Keyserlingk et al., 2022). In Malaysia, a state of emergency was declared on March 18, 2020. Even though quarantine, isolation and social distancing were essential for preventing the transmission of the virus, protecting people's physical fitness, and managing medical resources, they may have had lasting negative impacts, notably on mental health and well-being (Rahman et al., 2020). In reality, these precautionary actions may have caused more depression, anxiety, stress, and poor eating habits by forcing close relatives to live apart and making people feel more alone and isolated (Banerjee & Rai, 2020; Laranjeira et al., 2021).

After a traumatic incident, individuals might develop a variety of mental health issues (Gerber et al., 2018), and some pre-existing psychiatric illnesses, which include the risk of suicidal behaviour and neurological and drug use disorders, may increase (World Health Organization, 2020). The COVID-19 pandemic may indeed be viewed as a painful stressor with significant adverse health effects (Lee, 2020). Numerous global studies have examined the psychological effects of COVID-19 (Fitzgerald & Konrad, 2021; Hawes et al., 2021; Keyserlingk et al., 2022; Laranjeira et al., 2021).

While a few research has been conducted in Malaysia, the majority of studies on the mental health effects of COVID-19 have focused on healthcare workers (Nazli et al., 2022; Quek et al., 2022) and the population in general (Dai et al, 2020; Wong et al., 2021), with only a number of completed studies on higher education students. Findings on the psychological effects of COVID-19 in this group are very significant given that this is a pivotal life-transition stage (Gale & Parker, 2014) linked to increased anxiety, stress, and depression rates (Hermetet et al., 2019). In addition, the present pandemic crisis has negatively impacted university and college life, affecting the educational system, student social life, and mental health (Paulino et al., 2020; Sahu, 2020).

Decisions and behaviours, particularly those directly influencing health, such as exposure to environmental stressors, are influenced by risk perceptions and attitudes in addition to decisions (Sahu, 2020). According to the transactional model of stress and handling designed by Lazarus and Folkman, people constantly evaluate environmental cues and emotionally react to them (Biggs, Brough, & Drummond, 2017). When things are labelled as stressors, the distress they cause leads people to use ways to deal with their feelings or try to deal with the stressor directly (Biggs et al., 2017).



Young people's mental health has long been acknowledged as a worldwide public health issue (Laranjeira et al., 2021). It has now become crucial to comprehend how students respond to difficulties during a pandemic and how this affects their psychological well-being. Despite this, little is known about the effects of mental health issues on higher education students during the COVID-19 pandemic. In order to better understand psychological responses to widespread infectious disease outbreaks and to facilitate psychological counselling and adjustment for vulnerable populations, more research is required to estimate the prevalence and determine risk and influencing factors (Paulino et al., 2020). As a result, the main objective of this study is to assess the influential factors associated with mental health crises among foundation-level students during the COVID-19 pandemic.

Material & Method

Sample

This study involved 277 students enrolled in the Foundations of Science programme for the academic year 2021-2022 at the Preparatory Centre of Science and Technology, University of Malaysia Sabah.

Instrumentation

In this study, a questionnaire was originally constructed to analyse the factors impacting mental health crises among foundation-level students. Some of the questions were motivated by Fitzgerald & Konrad (2021). After resolving minor issues and reformulating questions to prevent potential common method biases resulting from the language and distribution of items, the questionnaire was released more extensively. The assessment instrument consisted of a total of twelve questions comprising four factors, namely depression, anxiety, stress, and eating disorders, in accordance with the results of the factor analysis undertaken for the purpose of establishing validity. The Likert scale ranged from 1 (strongly disagree) to 5 (strongly agree).

Data Collection

The questionnaire was distributed during the second semester of the academic year 2021–2022, at the Preparatory Centre of Science and Technology, University of Malaysia Sabah. It took a month from the time the questionnaire was distributed until the end of data collection. Google Form, a popular online survey tool, was utilised to collect the data. The online distribution of the questionnaire allowed a large number of students rapid access. Restriction of a network IP address was implemented to avoid an individual from responding more than once. The questionnaire was completed by students in less than 10 minutes.

Ethical Concerns

In the study on the influencing factor of mental health crises, only data from students who were fully aware of the survey's purpose were used for analysis, and student confidentiality was protected.

Statistical Analysis

Statistical Package for the Social Sciences (SPSS) version 27.0 and Minitab 16 programmes for Windows were used to analyse the data. Factor loadings, reliability coefficients, estimates of the questionnaire items' means and standard deviations were among the analyses performed.



Results & Discussion

There was a total of 277 student responses obtained. Table 1 presents the findings of the factor analysis performed to verify validity. Four factors, each with three items, accounted for 84.99% of the total variation: depression, anxiety, stress, and eating disorders. The reliability value (Cronbach's coefficient) of each factor was as follows: 0.875 for the depression factor, 0.864 for the anxiety factor, 0.887 for the stress factor, and 0.860 for the eating disorder factor. The alpha coefficients for each of the four factors showed that the items in each factor have a high level of internal consistency and reliability.

Table 1. Factor Loading for Mental Health Crises					
Questionnaire Item	Depression	Anxiety	Stress	Eating Disorder	Reliability
	Factor 1	Factor 2	Factor 3	Factor 4	(α)
1. Difficulty focusing or paying attention.	0.869	0.424	0.219	0.137	
2. Lack of motivation and interest.	0.875	0.418	0.245	0.175	0.875
3. Changes in social behaviour, including withdrawal from others and social isolation.	0.843	0.487	0.285	0.186	
4. Constantly experiencing panic and fear.	0.320	0.871	0.220	0.116	
5. Excessive sweating and headaches.	0.354	0.848	0.209	0.187	0.864
6. Insomnia or changes in sleep pattern.	0.347	0.883	0.241	0.163	
7. Academic stress.	0.386	0.219	0.890	0.183	
8. Time management stress.	0.417	0.275	0.886	0.171	0.887
9. Environmental stress.	0.379	0.297	0.872	0.170	
10. Fear public dining with others.	0.318	0.470	0.224	0.814	
11. Out-of-control eating.	0.381	0.495	0.268	0.891	0.860
12. Weight or body shape obsession or dissatisfaction.	0.315	0.448	0.210	0.867	
Percentage of variance	22.178	19.343	26.578	16.894	

The results for the mental health crises during the COVID-19 pandemic among foundationlevel students can be classified into 4 factors, namely depression, anxiety, stress, and eating disorders, as shown in Tables 2 to 5. The overall mean for the factor of depression was 4.69 (± 0.56), as indicated by the results for each item in Table 2. Item 1, where students had difficulty focusing or paying attention, received the highest mean score (4.74). This is followed by item 2, in which the students lack motivation and interest, and item 3, wherein the students experience changes in social behaviour, including withdrawal from others and social isolation, with mean scores of 4.71 and 4.63, respectively.



The findings of this study are supported by prior studies in China whereby difficulty in concentrating during online learning and lack of interest were positively associated with depression during the lockdown (Chen et al., 2022; Liu et al., 2021). Furthermore, the isolation, fear of getting COVID-19, and uncertainty during the pandemic may have triggered mental health crises such as depression in certain individuals (Laranjeira et al., 2021).

Table 2. Descriptive Statistics fo	r Mental Health Crises	Based on The Depr	ression Factor
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Questionnaire Item	Mean (Standard Deviation)	Overall Mean (Standard Deviation)
1. Difficulty focusing or paying attention.	4.74 (0.47)	
2. Lack of motivation and interest.	4.71 (0.56)	4.69 (0.56)
3. Changes in social behaviour, including withdrawal	4.63 (0.64)	
from others and social isolation.		

Regarding Table 3, the factor of anxiety recorded 4.64 (± 0.52) for the overall mean. To be specific, item 6, where students experienced insomnia or changes in sleep pattern, showed the highest mean score of 4.73. This is followed by item 4, where the students constantly experience panic and fear, with a mean score of 4.64. The result of this study is in line with previous studies, where 71% of students had an increase in anxiety, which included symptoms such as sleep disturbance (Salimi et al., 2021), panic attacks, and fear of illness (Batista et al., 2021) due to the outbreak of COVID-19. Predictably, due to all the aspects discussed above, the mean score is quite high for item 5, where few students had excessive sweating and headaches. All these symptoms were related to each other and greatly contributed to anxiety.

Questionnaire Item	Mean (Standard Deviation)	Overall Mean (Standard Deviation)	
4. Constantly experiencing panic and fear.	4.64 (0.59)	4.64 (0.52)	
5. Excessive sweating and headaches.	4.56 (0.50)		
6. Insomnia or changes in sleep pattern.	4.73 (0.48)		

As for Table 4, the factor of stress recorded 4.73 (\pm 0.47) for the overall mean. In detail, students rated the highest mean score for item 7 which is academic stress, with a mean score of 4.80. This is followed by item 8 which is time management stress, and item 9; environmental stress, with a mean score of 4.72 and 4.66, respectively. According to Pua et al., (2015), sources of stress among students can be categorised into three components: academic, environmental, and time management. The results of this study are compatible with this classification. In addition, (Keyserlingk et al., 2022) discovered a relationship between academic achievement and an increase in stress. While Fitzgerald and Konrad (2021) encountered that the majority of their respondents were concerned about their inability to manage academic workload (62%) and the

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need to perform well in school (56%). These pupils demand a higher grade and feel stressed when they're unable to comprehend particular concepts. They also experience time management stress when there is inadequate time to complete the assignment before the given deadline (Batbaatar & Amin, 2021).

Moreover, distractions in the learning environment were also a factor of stress for students during the pandemic as they had to go through remote learning and study on their own without having a lecturer or friends around (Wallace et al., 2021). While Dommett et al. (2022) in their study in the United Kingdom reported that most of the students found the lecture environment very stressful during the pandemic, which is also similar to the results of this study.

Table 4. Descriptive Statistics for Mental Health Crises Based on The Stress Factor

Questionnaire Item	Mean (Standard Deviation)	Overall Mean (Standard Deviation)	
7. Academic stress.	4.80 (0.41)		
8. Time management stress.	4.72 (0.48)	4.73 (0.47)	
9. Environmental stress.	4.66 (0.52)	_	

According to the results for each item in Table 5, the factor of eating disorder recorded 4.63 (± 0.53) for the overall mean. In detail, item 11, which is out-of-control eating, showed the highest mean score of 4.70. This is followed by item 12 which is the weight or body shape obsession or dissatisfaction and item 10, which is the fear of public dining with others, with a mean score of 4.62 and 4.57, respectively. The result of this study is supported by Tavolacci et al. (2021), who found that, other than bulimia, out-of-control eating, also known as hyperphagia, has been the most prevalent eating disorder among university students in France. Tavolacci et al. (2021) in their study also mentioned, depression and academic stress due to COVID-19 were associated with eating disorders. Furthermore, a decrease in the frequency of moderate and intense physical activity during the pandemic was associated with a rise in disordered eating (Schwartz & Costello, 2021; Tavolacci et al., 2021).

 Table 5. Descriptive Statistics for Mental Health Crises Based on The Eating Disorder

 Factor

Questionnaire Item	Mean (Standard Deviation)	Overall Mean (Standard Deviation)	
10. Fear public dining with others.	4.57 (0.56)	1 62 (0 52)	
11. Out-of-control eating.	4.70 (0.50)	4.63 (0.53)	
12. Weight or body shape obsession or dissatisfaction.	4.62(0.53)		

Figure 1 displays the overall results for the questionnaire item's mean score. The range of the mean is 4.56 to 4.80, indicating that depression, anxiety, stress, and eating disorders are undoubtedly the influencing factors of mental health crises among foundation-level students during the COVID-19 pandemic. The majority of students scored much higher on the items under the stress factor compared to the other three factors. This suggests that most of the



students suffered from stress during the COVID-19 pandemic. Moreover, most previous studies found higher levels of anxiety and depression (Hyland et al., 2020; Özdin & Bayrak, 2020), stress (Fang et al., 2022; Unützer et al., 2020), and problematic eating disorders as a result of the COVID-19 pandemic (Schwartz & Costello, 2021; Tavolacci et al., 2021) which are in line with the results of this study.



Figure 1: The Mean Score for Questionnaire Items

The university has taken the required steps in response to the spread of COVID-19, which has wreaked havoc on the everyday routines of students. At the University of Malaysia Sabah, the campus began to close, and the significant number of students who live in the campus were compelled to move back in with their parents or find an off-campus residence with such short notice. Students no longer had access to campus resources including libraries or other study spaces. All lectures, discussions, presentations, group projects, and other academic activities were shifted online. Sports, club activities, and many other extra-curricular activities were unable to resume as usual because the majority of facilities were closed. In order to follow social distancing guidelines and avoid the transmission of the virus, social gatherings were banned. Students were uncertain as to when campus operations would resume normally and how remote learning would influence their academic achievement. Furthermore, many students had to undertake new responsibilities, such as home-schooling their siblings, taking care of family members, or working to help their families, which decreased the amount of time they



Volume 7 Issue 48 (December 2022) PP. 447-457 DOI 10.35631/IJEPC.748033 had to devote to their studies (Keyserlingk et al., 2022). Thus, the COVID-19 pandemic has probably produced a stressful scenario for students.

Therefore, lecturers play a crucial role in mitigating students' feelings of depression, anxiety, and stress. Positive results involving lecturer support, lecturer response, and course management indicate that lecturers can intervene to reduce student mental health crises (Fitzgerald & Konrad, 2021; Laranjeira et al., 2021). There are numerous adjustments lecturers can make to reduce student mental health crises. The implementation of a balance and coordinated learning environment lessens stress, depression, and anxiety associated with academic commitments. Reminders of impending assignments can help students who have difficulty focusing and keep them informed of their commitments. Adapting to assignment expectations may help students cope. Converting some letter-graded assignments to pass/fail grading may be necessary (Fitzgerald & Konrad, 2021; Laranjeira et al., 2021). It may be helpful to alleviate study-related stress and worry by offering tolerance and being flexible with extensions to students who require more time due to difficulty focusing, obligations outside of campus, internet, or technology problems. (Fitzgerald & Konrad, 2021).

Conclusion

The pandemic of COVID-19 ushered in an entirely new era of online learning in the educational sector. This study assessed the influential factors of a mental health crises among foundation-level students during the COVID-19 pandemic. It gave insights into the students' mental health issues in terms of depression, anxiety, stress, and eating disorders. Overall, stress has become the most influential factor in students' mental health crises among students and enhance their coping resources, universities could consider equipping students with self-regulation skills. While lecturers may consider providing a balanced and coordinated learning environment that assists in the lessening of feelings of depression, anxiety, and stress associated with academic commitments.

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References

- Banerjee, D., & Rai, M. (2020). Social isolation in Covid-19: The impact of loneliness. *International Journal of Social Psychiatry*, 66(6), 525–527. https://doi.org/10.1177/0020764020922269
- Batbaatar, N., & Amin, G. (2021). Students' Time Management During Online Class. International Conference Universitas Pekalongan 2021, 1(1), 189–194.
- Batista, P., Duque, V., Vaz, A. L., & Pereira, A. (2021). Anxiety impact during COVID-19: a systematic review. *The Journal of Infection in Developing Countries*, *15*(03), 320–325. https://doi.org/10.3855/jidc.12730
- Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. The handbook of stress and health: A guide to research and practice. 351-364, Hoboken, NJ, USA. https://doi.org/10.1037/0022-3514.54.3.466
- Chen, S., Bi, K., Lyu, S., Sun, P., & Bonanno, G. A. (2022). Depression and PTSD in the aftermath of strict COVID-19 lockdowns: a cross-sectional and longitudinal network



analysis. *European Journal of Psychotraumatology*, 13(2). https://doi.org/10.1080/20008066.2022.2115635

- Dai, H., Zhang, S. X., Looi, K. H., Su, R., & Li, J. (2020). Perception of Health Conditions and Test Availability as Predictors of Adults' Mental Health during the COVID-19 Pandemic: A Survey Study of Adults in Malaysia. *International Journal of Environmental Research and Public Health 2020, 17*(15), 5498. https://doi.org/10.3390/IJERPH17155498
- Dommett, E., Limniou, M., Sedghi, N., Kumari, D., & Drousiotis, E. (2022). Student Engagement, Learning Environments and the COVID-19 Pandemic: A Comparison between Psychology and Engineering Undergraduate Students in the UK. *Education Sciences 2022, 12*(10), 671. https://doi.org/10.3390/EDUCSCI12100671
- Fang, Y., Ji, B., Liu, Y., Zhang, J., Liu, Q., Ge, Y., ... Liu, C. (2022). The prevalence of psychological stress in student populations during the COVID-19 epidemic: a systematic review and meta-analysis. *Scientific Reports*, 12(1), 1–20. https://doi.org/10.1038/S41598-022-16328-7/TABLES/3
- Fitzgerald, A., & Konrad, S. (2021). Transition in learning during COVID-19: Student nurse anxiety, stress, and resource support. *Nursing Forum*, 56(2), 298–304. https://doi.org/10.1111/NUF.12547
- Gale, T., & Parker, S. (2014). Navigating change: a typology of student transition in higher education. *Studies in Higher Education*, 39(5), 734–753. https://doi.org/10.1080/03075079.2012.721351
- Gerber, M. M., Frankfurt, S. B., Contractor, A. A., Oudshoorn, K., Dranger, P., & Brown, L. A. (2018). Influence of Multiple Traumatic Event Types on Mental Health Outcomes: Does Count Matter? *Journal of Psychopathology and Behavioral Assessment 2018*, 40(4), 645–654. https://doi.org/10.1007/S10862-018-9682-6
- Hawes, M. T., Szenczy, A. K., Klein, D. N., Hajcak, G., & Nelson, B. D. (2021). Increases in depression and anxiety symptoms in adolescents and young adults during the COVID-19 pandemic. *Psychological Medicine*, 1–9. https://doi.org/10.1017/S0033291720005358
- Hermetet, C., Arnault, É., Gaborit, C., Coillot, H., Florence, A. M., Diot, P., ... Grammatico-Guillon, L. (2019). [Prevalence and risk markers of anxiety and depression among health students]. *Presse Medicale (Paris, France : 1983)*, 48(2), 100–108. https://doi.org/10.1016/J.LPM.2019.01.002
- Hyland, P., Shevlin, M., McBride, O., Murphy, J., Karatzias, T., Bentall, R. P., ... Vallières, F. (2020). Anxiety and depression in the Republic of Ireland during the COVID-19 pandemic. Acta Psychiatrica Scandinavica, 142(3), 249–256. https://doi.org/10.1111/ACPS.13219
- Keyserlingk, L. von, Yamaguchi-Pedroza, K., Arum, R., & Eccles, J. S. (2022). Stress of university students before and after campus closure in response to COVID-19. *Journal* of Community Psychology, 50(1), 285–301. https://doi.org/10.1002/JCOP.22561
- Laranjeira, C., Dixe, M. A., Valentim, O., Charepe, Z., & Querido, A. (2021). Mental Health and Psychological Impact during COVID-19 Pandemic: An Online Survey of Portuguese Higher Education Students. *International Journal of Environmental Research and Public Health 2022, Vol. 19, Page 337, 19*(1), 337. https://doi.org/10.3390/IJERPH19010337
- Liu, Y., Yue, S., Hu, X., Zhu, J., Wu, Z., Wang, J. L., & Wu, Y. (2021). Associations between feelings/behaviors during COVID-19 pandemic lockdown and depression/anxiety after



lockdown in a sample of Chinese children and adolescents. *Journal of Affective Disorders*, 284, 98–103. https://doi.org/10.1016/J.JAD.2021.02.001

- Nazli, A. I. M., Ooi, Y. T., Thyagarajan, D., & Jamaluddin, R. (2022). Attitude toward Suicidal Behavior: A Cross-Sectional Study among Health-Care Professionals in Northwest Malaysia. *Malaysian Journal Of Psychiatry*, 31(1), 1–6. https://doi.org/10.4103/MJP.MJP_2_22
- Özdin, S., & Bayrak Özdin, Ş. (2020). Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *Https://Doi.Org/10.1177/0020764020927051*, 66(5), 504–511. https://doi.org/10.1177/0020764020927051
- Paulino, M., Dumas-Diniz, R., Brissos, S., Brites, R., Alho, L., Simões, M. R., & Silva, C. F. (2020). COVID-19 in Portugal: exploring the immediate psychological impact on the general population. *Psychology, Health & Medicine*, 26(1), 44–55. https://doi.org/10.1080/13548506.2020.1808236
- Pua, P. K., Lai, C. S., Foong, M., & Ibrahim, C. (2015). The relationship between mental health and academic achievement among university students. 2nd International Conference on "Global Trends in Academic Research" (GTAR- 2015), 2(April 2015), 755–764.
- Quek, J. H., Lee, X. X., Yee, R. L. K., Tan, X. Y., Ameresekere, L. S. N., Lim, K. G., & Pinto, J. (2022). Prevalence of Depression, Anxiety, and Stress among Medical University Lecturers in Malaysia during COVID-19 Pandemic. *Malaysian Journal Of Psychiatry*, 31(1), 7–12. https://doi.org/10.4103/MJP.MJP_3_22
- Rahman, M. A., Hoque, N., Alif, S. M., Salehin, M., Islam, S. M. S., Banik, B., ... Cross, W. (2020). Factors associated with psychological distress, fear and coping strategies during the COVID-19 pandemic in Australia. *Globalization and Health*, 16(1), 1–15. https://doi.org/10.1186/S12992-020-00624-W/TABLES/6
- Sahu, P. (2020). Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus*, *12*(4). https://doi.org/10.7759/CUREUS.7541
- Salimi, N., Gere, B., Talley, W., & Irioogbe, B. (2021). College Students Mental Health Challenges: Concerns and Considerations in the COVID-19 Pandemic. *Journal of College Student Psychotherapy*, 1-13. https://doi.org/10.1080/87568225.2021.1890298
- Schwartz, M. D., & Costello, K. L. (2021). Eating Disorder in Teens During the COVID-19 Pandemic. *Journal of Adolescent Health*, 68(5), 1022. https://doi.org/10.1016/j.jadohealth.2021.02.014
- Tavolacci, M. P., Ladner, J., & Dechelotte, P. (2021). COVID-19 Pandemic and Eating Disorders among University Students. *Nutrients* 2021, 13(12), 4294. https://doi.org/10.3390/NU13124294
- Unützer, J., Kimmel, R. J., & Snowden, M. (2020). Psychiatry in the age of COVID-19. World Psychiatry, 19, 130–131. https://doi.org/10.1002/wps.20768
- Wallace, S., Schuler, M. S., Kaulback, M., Hunt, K., & Baker, M. (2021). Nursing student experiences of remote learning during the COVID-19 pandemic. *Nursing Forum*, 56(3), 612–618. https://doi.org/10.1111/NUF.12568
- Wong, L. P., Alias, H., Md Fuzi, A. A., Omar, I. S., Nor, A. M., Tan, M. P., ... Chung, I. (2021). Escalating progression of mental health disorders during the COVID-19 pandemic: Evidence from a nationwide survey. *PLOS ONE*, 16(3), e0248916. https://doi.org/10.1371/JOURNAL.PONE.0248916



World Health Organization. (2020, March 18). Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020. Retrieved October 14, 2022, from World Health Organization website: https://apps.who.int/iris/handle/10665/331490?locale-attribute=ar&locale-