University Student's Psychological Problems and Coping Strategies in Modular Learning Delivery during Covid 19 Pandemic

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ABSTRACT

The COVID-19 pandemic has had a significant impact on education worldwide, including in the Philippines. This study examines the coping strategies employed by students in the Modular Learning System at Jose Rizal Memorial State University-Katipunan Campus during the 2020-21 school year. A combination of quantitative and qualitative survey methods was used, employing quota sampling. The findings reveal that students utilized various coping strategies, such as crying, praying, and completing learning tasks ahead of time, to navigate the challenges of modular learning. However, they also experienced stress, fatigue, headaches, and difficulty sleeping as they adapted to this new learning modality. The students reported receiving limited financial assistance and sought more support from friends, peers, family members, and parents with their lessons. While there were no significant differences in coping strategies based on age and gender, "year level" and "family income" showed significant differences. This suggests that students in different academic years and from diverse socioeconomic backgrounds employed distinct coping strategies. The study recommends strengthening other engagements, such as spiritual, social, physical, and mental activities, to alleviate students' stress experiences. It also suggests minimizing or regulating the number of activities assigned to students and considering activities that require minimal financial involvement. This research contributes insights into the coping strategies employed by students in the Modular Learning System and provides recommendations for enhancing their learning experiences and reducing stress levels during the pandemic.

Keywords: coping strategies, modular learning, COVID-19 pandemic, health status, social support

INTRODUCTION

The COVID-19 pandemic has dramatically impacted the education field globally, including in the Philippines. The Department of Education (DepEd) and the Commission on Higher Education (CHED) implemented distance/blended learning and flexible learning programs to ensure continuous learning during the pandemic. However, the shift to these new learning modalities has posed challenges for students and their families. The lack of preparedness and the absence of face-to-face classes have affected students' well-being and academic performance.

Stress is a significant concern among students, as it can negatively affect their physical and psychological health and academic performance. Coping strategies play a crucial role in helping students manage stress and adapt to new circumstances. Effective coping strategies include problem-focused coping.

Despite the challenges, students have utilized coping mechanisms to navigate remote learning. Coping strategies can vary among students, and their success levels may differ. Understanding these coping strategies is essential for educators and policymakers to provide necessary support and interventions to promote healthier coping mechanisms and enhance students' overall well-being and educational experience.

The education field in the Philippines has faced challenges in implementing distance/blended learning programs due to the pandemic. Despite the difficulties, the Department of Education (DepEd) and the Commission on Higher Education (CHED) believe learning must continue. As a result, modular learning has been adopted as one of the learning modalities in universities, which involves using modules created by teachers to facilitate learning activities.

With the absence of face-to-face classes in the country, students' health and academic performance have been affected by the stress caused by the pandemic. Coping strategies are crucial in helping individuals adapt to new and challenging situations. The effectiveness of coping strategies depends on whether they are problem-focused

or emotion-centered, based on the perceived controllability of the stressor. Students in higher Education cope with the remote learning setup through various coping mechanisms, which can impact their success and well-being.

Understanding the coping strategies employed by students in the new learning modality, specifically Modular Learning Delivery, is essential for Jose Rizal Memorial State University-Katipunan Campus. This research aims to identify students' coping strategies during the school year 2020–21. The findings of this study can guide instructors in supporting students who face difficulties with the new teaching method and help students improve their coping styles to reduce stress levels.

In the broader context, studying students' coping strategies in the face of the COVID-19 pandemic and remote learning can provide insights into their adaptability and resilience. This knowledge can inform educators and policymakers in developing effective interventions to address negative coping styles, focusing on social, emotional, and psychological support. Promoting healthier coping mechanisms and providing necessary support can create a conducive learning environment, enhancing students' well-being and overall educational experience.

The decision regarding the resumption of face-to-face classes rests with President Rodrigo Duterte, who is undecided but may allow them in the future under favorable conditions. This situation has significantly disrupted the lives of students and their families, highlighting the lack of preparedness and global readiness for such pandemics.

The impact of the pandemic on students' health and academic performance is a matter of concern. Stress resulting from the crisis can have adverse effects on students, including reduced attention and memory, decreased dedication to studying, and increased absences. Furthermore, stress can negatively affect students' physical and psychological well-being, leading to substance abuse, insomnia, anxiety, and emotional exhaustion. The present study aims to identify the coping strategies employed by students at Jose Rizal Memorial State University-Katipunan Campus to navigate the new learning modality. The findings of this study can serve as a guide for instructors in conducting orientations and providing support to students facing difficulties during the pandemic. Additionally, students can benefit from understanding their coping styles and making necessary adjustments to reduce stress levels.

Understanding the coping strategies employed by students in the context of the new learning modality can provide valuable insights into their adaptability and resilience. This knowledge can inform educators and policymakers in developing effective interventions to address negative coping styles, promote healthier coping mechanisms, and provide students with the necessary support to thrive academically and emotionally. A conducive learning environment can be created by addressing negative coping styles and enhancing students' overall well-being and educational experience.

The COVID-19 pandemic has forced educational institutions worldwide to implement alternative teaching methods, and understanding how students cope with these changes is crucial for providing practical support and interventions. By identifying the coping strategies employed by students, educators, and policymakers can develop targeted interventions to address negative coping styles and promote healthier mechanisms for dealing with stress and challenges in the learning environment. The findings of this study can guide instructors in conducting orientations and addressing students' difficulties, ultimately enhancing students' overall educational experience and well-being.

This research study aims to achieve several objectives related to understanding and analyzing the coping strategies employed by students at Jose Rizal Memorial State University-Katipunan Campus during the school year 2020-21 to adapt to the Modular Learning Delivery. Firstly, the study aims to identify the specific coping strategies students utilize in navigating the challenges and changes associated with this new learning modality. Secondly, it seeks to examine the effectiveness of these coping strategies in managing stress and addressing the various obstacles students face. Additionally, the study intends to explore the relationship between the coping strategies employed by students and their academic performance, overall well-being, and satisfaction with the learning experience. Lastly, based on the findings, the study aims to provide practical recommendations and interventions that can enhance students' coping mechanisms and improve their educational experience within the

context of the Modular Learning Delivery. By accomplishing these objectives, the research aims to contribute valuable insights for educators, policymakers, and students themselves in effectively addressing the challenges of this new learning environment and promoting positive outcomes.

RESEARCH METHOD

Through quota sampling, this study used both quantitative and qualitative survey methods of research. The questionnaire's collection of questions for various coping mechanisms was taken from a study by Rotas and Cahapay (2020) and adjusted to fit the circumstances of the study. The face-to-face Focus Group Discussion (FGD) was employed to thoroughly understand the respondents' social concerns, particularly those related to the health challenges and lack of social support that students experience when adhering to pandemics. It entailed bringing together individuals with comparable backgrounds or life experiences to discuss a specified topic of interest to the researchers.

The respondents' consent was secured at the beginning of the study procedure. The researchers described the aim of this study. Taking into account the current circumstances, it was pointed out that their involvement was voluntary and followed the anonymous concept. It has also been pointed out that there was no benefit or damage to participating in the study.

Research Respondents

A total of 250 students served as respondents in this study. They were selected at 70% per year through quota sampling techniques. They were 10 respondents used for the FGD for the qualitative data gathering. They were enrolled in Bachelor of Secondary Education during the first and second semesters of the school year 2020–2021 at Jose Rizal Memorial State University-Katipunan Campus.

Statistical Treatment

The profile of the respondents was determined using frequency count and percentage. The coping strategies employed by the students in response to the new learning modality were assessed using a weighted mean. To examine the significant differences in coping strategies among the students, they were categorized based on age, gender, year level, and family income, and a Chi-square test was employed.

The following scoring was used to determine students' coping strategies in the Modular Learning System.

Rating	Bracket	Description	
5	4.21-5.00	Always	
4	3.41-4.20	Often	
3	2.61-3.40	Sometimes	
2	1.81-2.60	Seldom	
1	1.00-1.80	Neve	

RESULTS AND DISCUSSION

Table 1: Profile of the Student-Respondent in Terms of "Age"

Age	Frequency	Percentage	
20-22	109	43.6%	
23-25	111	44.4%	
26=28	17	6.8%	
29-31	13	5.2%	
Total	250	100%	

Most students were within the age bracket 20-22, with a frequency of 109 or 43.6%. The age bracket 29-31 obtained the lowest frequency of 13 or 5.2%. This result explained that this age corresponds to the respondent's first year of college.

Gender	Frequency	Percentage	
Male	68	27.2%	
Female	137	54.8%	
Gay	27	10.8%	
Lesbian	12	4.8%	
Transgender	6	2.4%	
Total	250	100%	

Table 2: Profile of the Student-Respondent in terms of "Gender"

The table presents the profile of student respondents in terms of gender. Out of the 250 participants, 68 (27.2%) identified as male, 137 (54.8%) identified as female, 27 (10.8%) identified as gay, 12 (4.8%) identified as lesbian, and 6 (2.4%) identified as transgender.

The distribution of gender among the student respondents provides insights into the sample's composition and highlights the diversity within the student population. Notably, most of the participants identified as female, comprising 54.8% of the total respondents. This may indicate a higher representation of female students in the research sample or potentially reflect the gender distribution within the university or specific program under study.

The presence of male, gay, lesbian, and transgender students within the sample demonstrates the importance of inclusivity and recognizing students' diverse experiences and perspectives. It is crucial to acknowledge and consider the unique challenges and coping strategies that individuals from different gender identities may employ in adapting to the new learning modality.

The findings from this profile analysis contribute to the overall understanding of the student population and provide a foundation for further analysis regarding the coping strategies employed by students. By considering the diverse gender identities and their coping strategies, researchers, educators, and policymakers can develop tailored interventions and support systems that address the specific needs of different groups. This promotes inclusivity, enhances student well-being, and fosters a positive and supportive learning environment for all students.

It is important to note that this research result should be interpreted within the context of the study's limitations, such as the specific demographics of the university and the potential sample bias. Further research with more extensive and diverse samples would be beneficial to validate and generalize these findings. Nonetheless, the profile analysis offers valuable insights into the gender distribution within the student population. It sets the stage for a deeper exploration of coping strategies about gender in the subsequent analysis.

 Table 3: Profile of the Student-Respondent in terms of "Year level"

Year Level	Frequency	Percentage	
First Year	93	37.2%	
Second Year	74	29.6%	
Third Year	36	14.4%	
Fourth Year	44	17.6%	
Total	250	100%	

The respondents were dominated by first-year students, who obtained a 93 or 37.2% frequency. The third-year respondents were only 36 or 14.4%. This explained that the majority of the enrolled students were first year. However, the number of students reduced when they reached the fourth year due to poor grades, pregnancy,

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school alternatives, need for employment, high school transition, business numbers, and reform policies ("Factors affecting the decrease of enrollment in schools," n.d.)

Table 4: Profile of the Student-Respondent in Terms Of "Family Income"

Monthly Income	Frequency	Percentage
Php 5,001 above	18	7.2%
Php 4,001-5,000	38	15.2%
Php 3,001-4,000	64	25.6%
Php 2,001-3,000	68	27.2%
Php 1,000-2,000	62	24.8%
Total	250	100%

Most of the respondent's family income was within Php 2,001-3,000 with a 68 or 27.2% frequency. Only 18, or 7.2%, have an income of Php 5,001 or above. In the contention of Jacobsen (2020) that the majority of students and their families were unprepared for the crisis, the government's failure to generate global preparedness for possible pandemics was a wake-up call.

Table 5: Summary of Coping Strategies Adapted by the Students to Overcome Their Difficulty of Modular Learning

Coping Strategies	Weighted Mean	Verbal Description
Looking for a good place and time	3.77	Often
Borrowing learning resources	3.68	Often
Seeking support from peers	3.59	Often
Approaching the instructors	3.79	Often
Practicing time management	3.94	Often
Doing learning tasks ahead	4.09	Often
Extending the time for learning tasks	3.93	Often
Diverting attention	3.91	Often
Regulating self	3.80	Often
Taking extra jobs	3.91	Often
Praying	4.09	Often
Crying	4.96	Always
Grand Total	3.96	Often

The summary of coping strategies adopted by the students to overcome their difficulty in modular learning has a total weighted mean of 3.96. The result showed that the students often coping strategies were "Crying" as the first coping strategy with a weighted mean of 4.96, which is described as "Always," followed by "Doing learning tasks ahead" and "Praying," both with a weighted mean of 4.09 and described as "Often." The respondents were helped by these strategies when they encountered many activities, what to finish first, and the unintended shortcomings.

"Borrowing learning resources came in second with a weighted mean of 3.68, followed by "Seeking support from peers." This clarified that these coping mechanisms proved helpful when encountering issues with the lessons and technology. According to research, students reported feeling stressed at some point, so stress was unavoidable and could affect how they handled the demands of university life (Ramos, 2011; Rourke et al., 2010).

Table 6: Significant Difference among the Coping Strategies Adapted by the Students when they are Categorized According to Gender, Year Level, and Family Income

Variables	Statistic	df	p-value	Interpretation
Age	-2.14	3.0	0.121	Not significant
Gender	-1.90	4.0	0.130	Not significant
Year Level	-3.09	4.0	0.037	Significant
Family Income	-4.83	4.0	0.008	Significant

The results presented in Table 6 indicate the significant difference among the coping strategies employed by students when they are categorized according to their year level and family income. However, no significant difference was found based on age and gender.

The values for age and gender were 0.121 and 0.130, respectively, and both were above the significance level of 0.05. This indicates that there may not be a statistically significant difference between the coping mechanisms used by pupils based on their age or gender. It suggests that pupils of various ages and genders used similar coping mechanisms to adjust to the new teaching method. However, the p-values for year level and family income were 0.037 and 0.008, respectively, which fell below the 0.05 level of significance. This shows that pupils' coping mechanisms varied significantly when divided into groups based on their grade level and family income. It means that students with various academic backgrounds, years of study, and family income levels utilized distinct coping strategies to navigate the challenges associated with the new learning modality.

The significant difference found based on year level suggests that students at different stages of their academic journey may face unique stressors and adapt differently. Factors such as academic workload, the complexity of coursework, and the level of familiarity with the learning environment may influence the coping strategies employed by students in different year levels.

The significant difference observed with family income suggests that socioeconomic factors can influence coping strategies. Students from different income backgrounds may have varying access to resources, support systems, and opportunities, which can impact their coping mechanisms. It highlights the importance of considering socioeconomic factors when designing interventions and supporting students.

These research findings provide valuable insights for educators, policymakers, and support services in tailoring interventions and resources to meet the specific needs of students based on their year level and family income. By recognizing the differences in coping strategies, educational institutions can implement targeted measures to enhance students' resilience, well-being, and academic success.

It is essential to acknowledge the limitations of this research, such as the study's specific context and sample size. Further research with more diverse samples is recommended to validate and generalize these findings. Nonetheless, the results shed light on the role of year level and family income in influencing coping strategies. They also provide a foundation for developing effective strategies to support students' learning journey.

CONCLUSIONS

This study sheds light on the coping strategies employed by students in dealing with modular learning during the pandemic. The findings indicate that crying, praying, and engaging in learning tasks were the most commonly utilized coping strategies among the students. These strategies provided a sense of emotional release, support, and a focus on academic tasks, helping students navigate the challenges associated with modular learning. Furthermore, the study revealed that students experienced various stress-related symptoms such as fatigue, headaches, and difficulty sleeping. This suggests that the shift to modular learning imposed additional burdens on students, impacting their overall well-being and physical health. Additionally, the students reported receiving less financial assistance and support from friends, peers, family members, or parents in relation to their lessons, which further exacerbated the challenges they faced during this learning modality. While there were no significant differences in coping strategies based on age and gender, it was observed that "year level" and "family income" had a significant influence on the coping strategies adopted by students. This implies that factors such as academic progression and financial stability play a role in shaping how students cope with the

demands of modular learning. This study highlights the importance of understanding the coping mechanisms employed by students during times of educational disruption. Recognizing the challenges faced by students and providing appropriate support systems is crucial in ensuring their well-being and academic success. Educational institutions and policymakers can utilize these findings to develop interventions and strategies that address the specific needs of students in modular learning environments, promoting resilience and enhancing the overall learning experience.

RECOMMENDATIONS

In light of the findings from this study, several recommendations can be made to address the challenges and promote the well-being of university students. Firstly, the university should prioritize the strengthening of other student engagements, such as spiritual, social, physical, and mental activities. This can be achieved through the guidance unit, which can provide support and resources to help students manage their stress experiences effectively. Secondly, there is a need to minimize or regulate the amount of activities and requirements given to students. The study revealed that the workload contributed to increased stress levels among students. Therefore, it is essential for faculty members to carefully consider the quantity and deadlines of assignments, ensuring that they are manageable and feasible for students. Lastly, it is recommended that faculty members consider providing activities and requirements that do not involve or require excessive financial resources from students. This consideration can alleviate the financial burden faced by some students, ensuring equitable access to educational opportunities and reducing the stress associated with financial constraints. By implementing these recommendations, universities can create a more supportive and conducive learning environment for students. This will not only help in alleviating stress levels but also contribute to the overall well-being and academic success of students.

REFERENCES

- 1. Akan, H., Gurol, Y., Izbirak, G., Ozdatli, S., Yilmaz, G., Vitrinel, A., &Hayran, O. (2010). Knowledge and attitudes of university students toward pandemic influenza: A cross-sec-a national study from Turkey. BMC Public Health, 10(1), 1–8. https://doi.org/10.1186/1471-2458-10-413
- **2.** Anspaugh, D. J., Hamrick, M. H., &Rosato, F. D. (2003). Wellness: Concepts and applications (5th ed.). New York: McGraw-Hill.
- **3.** Aribo, E. O. E., Daniel, N. E., &Ekpenyong, C. (2013). Associations between academic stressors, reaction to stress, coping strategies and musculoskeletal disorders among college students. Ethiopian Journal of Health Sciences, 23(2), 98-112.
- 4. Carver C. Brief Coping Scale. Available from the Internet. [https://local.psy.miami.edu/faculty/ccarver/sclBrCOPE.phtml]
- 5. Cheng C. (2001). Assessing coping flexibility in real-life and laboratory settings: a multimethod approach. J. Pers. Soc. Psychol. 80 814–833. 10.1037//0022-3514.80.5.814 [PubMed] [CrossRef] [Google Scholar]
- 6. Cheng C., Cheung M. W. L. (2005). Cognitive processes underlying coping flexibility: differentiation and integration. J. Pers. 73 859–886. 10.1111/j.1467-6494.2005.00331.x [PubMed] [CrossRef] [Google Scholar]
- 7. Cheng, C., Kogan, A., and Chio, J. H. (2012). The effectiveness of a new coping flexibility intervention compared to a cognitive-behavioral intervention in managing work stress. Work Stress 26, 272–288. doi: 10.1080/02678373.2012.710369
- 8. Chou, P.-C., Chao, Y.-M. Y., Yang, H.-J., Yeh, G.-L., and Lee, T. S.-H. (2011). Relationships between stress, coping and depressive symptoms among overseas university preparatory Chinese students: a cross-sectional study. BMC Public Health 11:352. doi: 10.1186/1471-2458-11-352
- 9. Creswell, J. D., Dutcher, J. M., Klein, W. M. P., Harris, P. R., & Levine, J. M. (2013). Self-affirmation improves problem-solving under stress. PloS One, 8(5), e62593.CrossRefPubMedPubMedCentralGoogle Scholar
- Eisenbarth, C. (2012). Coping profiles and psychological distress: a cluster analysis. N. Am. J.Psychol. 14, 485–496.

- 11. Factors affecting the decrease of enrollment in schools. (n.d.). The Classroom | Empowering Students in Their College Journey. https://www.theclassroom.com/factors-affecting-decrease-enrollment-schools-8241566 . html
- 12. Galea et al., 2020 S. Galea, R.M. Merchant, N. Lurie. Google Scholar: https://doi.org/10.1016/S0140-6736(20)30559-6
- 13. Is the pandemic destroying Philippine Education? (2020, December 6). The ASEAN Post.https://theasean.post.com/article/pandemic-destroying-philippine-education
- 14. Jacobsen, K. H. (2020). Will COVID-19 generate global preparedness? In The Lancet.
- 15. Khalid, L., Khalid, T., Qabajah, M., Barnard, A., &Qushmaq, I.(2016). Healthcare workers' emotions, perceived stressors, and coping strategies during a MERS-CoV outbreak. Clinical Medicine & Research, 14(1), 7–14. https://doi.org/10.3121/cmr.2016.1303
- 16. Lee J. Mental health effects of school closures during COVID-19. The Lancet.April 14, 2020 https://doi.org/10.1016/S2352-4642(20)30109-7
- 17. OECD. (2017, March 1). Gender imbalances in the teaching profession. OECD iLibrary. https://www.oecd-ilibrary.org/education/gender-imbalances-in-the-teaching-profession 54f0ef95-en
- 18. Ramos, J. A. (2011). A comparison of nontraditional graduate students' perceived stress levels and coping styles in distance learning versus on-campus programs. Contemporary Educational Technology, 2(4), 282–293.
- **19.** The mental health consequences of COVID-19 and physical distancing: the need for prevention and early intervention JAMA Intern. Med. (2020), 10.1001/jamainternmed.2020.1562
- 20. Rotas, E. (2021). From stress to success: Exploring how Filipino students cope with remote learning amid COVID-19 pandemic. Journal of Pedagogical Sociology and Psychology, 3(1),27-35.https://doi.org/10.33902/jpsp.2021366608
- 21. Rourke, M. O., Hammond, S., Flynn, S. O., & Boylan, G. (2010). The medical student stress profile: A tool for stress audit in medical training. Medical Education, pp. 44, 1027–1037. doi:10.1111/j.1365-2923.2010.03734.x
- 22. Roy, D., Tripathy, S. Kar, S., Sharma, N., Verma, S., & Kaushal, V. (2020). Study of Knowledge, attitude, anxiety & perceived mental healthcare need in the Indian Population during
- 23. COVID-19 Pandemic.Asian Journal of Psychiatry, 51, 102083-102087. https://doi.org/10.1016/j.ajp2020.102083
- 24. Schönfeld, P., Brailovskaia, J., Bieda, A., Zhang, X. C., and Margraf, A. (2016). The effects of daily stress on positive and negative mental health: mediation through self-efficacy. Int. J. Clin. Health Psychol. 16, 1–10. doi: 10.1016/j.ijchp.2015.08.005
- 25. Siltanen S., Rantanen T., Portegijs E., Tourunen A., Poranen-Clark T., Eronen J., et al. (2019). Association of tenacious goal pursuit and flexible goal adjustment with out-of-home mobility among community-dwelling older people. Aging Clin. Exp. Res. 31 1249–1256. 10.1007/s40520-018-1074-y [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- 26. Sohail, N. (2013). Stress and academic performance among medical students. Journal of the College of Physicians and Surgeons Pakistan, 23(1), 67–71.
- 27. Thawabieh, A.M. &Qaisy, L.M. (2012). Assessing Stress among University Students. American International Journal of Contemporary Research, 2, 110–116.
- 28. The transactional model of stress and coping theory is Google search. (n.d.). Google. https://www.google.com/search?q=The+Transactional+Model+of+Stress+and+Copi ng+Theory +is&oq=The+Transactional+Model+of+Stress+and+Coping+Theory+is&aqs=chrome..69i57j0l3.2921j 0j7&sourceid=chrome&ie=UTF-8
- 29. The transactional model of stress and coping. (2020, July 11). PsychologyItBetter.https://psychology it better.com/transactional-model-stress-coping
- 30. Turner, J., Bartlett, D., Andiappan, M., & Cabot, L. (2015). Students perceived stress and perception of barriers to compelling study: impact on academic performance in examinations. Br. Dent. J. 219, 453–458. doi 10.1038/SJ. adj.2015.850

- 31. Usher K., Durkin J., Bhullar N. The COVID-19 pandemic and mental health impacts. Int. J. Ment. Health Nurs. 2020 doi: 10.1111/inm.12726. [PMC free article] [PubMed] [CrossRef] [Google Scholar]
- 32. Vázquez F.L., Torres A., Blanco V., Díaz O., Otero P., Hermida E. Comparison of relaxation training with a cognitive-behavioral intervention for indicated prevention of depression in university students:

 A randomized controlled trial. J. Psychiatr. Res. 2012;46:1456–1463. doi: 10.1016/j.jpsychires.2012.08.007. [PubMed] [CrossRef] [Google Scholar]
- 33. Jacobsen, M. (2020). Is the pandemic destroying Philippine Education? The Diplomat. Retrieved from [Reference Link]
- 34. Chou, L. P., Li, C. Y., & Hu, S. C. (2011). Job stress and burnout in hospital employees: comparisons of different medical professions in a regional hospital in Taiwan. BMJ Open, 1(1), e000186.
- 35. Turner, A., Boulter, P., Cheek, C., & Cheek, E. (2015). The relationship between academic stress, coping, self-esteem, and academic success in fourth-year undergraduate nursing students. Journal of Nursing Education, 54(8), S1-S10.
- 36. Waqas, A., Khan, S., Sharif, W., Khalid, U., & Ali, A. (2015). Association of academic stress with sleeping difficulties in a Pakistani medical school medical students: a cross-sectional survey. PeerJ, p. 3, e840.
- 37. Schönfeld, P., Brailovskaia, J., Margraf, J., & Wells, A. (2016). Negative emotions mediate the association between academic stress and psychopathology in college students. Journal of Affective Disorders, 200, 37-44.
- 38. Cheng, C. (2001). Assessing coping flexibility in real-life and laboratory settings: A multimethod approach. Journal of Personality and Social Psychology, 80(5), 814–833.
- 39. Anspaugh, D. J., Hamrick, M. H., &Rosato, F. D. (2003). Wellness concepts and applications: Anspaugh, D., Hamrick, M. H., &Rosato, F. D. Wellness concepts and applications. Thomson/Wadsworth.
- 40. Cheng, C. (2001). Assessing coping flexibility in real-life and laboratory settings: A multimethod approach. Journal of Personality and Social Psychology, 80(5), 814–833. https://doi.org/10.1037/0022-3514.80.5.814
- 41. Cheng, C., & Cheung, M. W. (2005). Cognitive processes underlying coping flexibility: Differentiation and integration. Journal of Personality, 73(4), 859–886. https://doi.org/10.1111/j.1467-6494.2005.00342.x
- 42. Jacobsen, K. H. (2020). Is the pandemic destroying Philippine Education? Harvard International Review. https://hir.harvard.edu/is-the-pandemic-destroying-philippine-education/
- 43. Siltanen, J., Mäntysaari, M., Kinnunen, U., Feldt, T., Tolvanen, A., &Pulkkinen, L. (2019). Coping strategies in adolescence and later substance use in young adulthood. Journal of Youth and Adolescence, 48(5), 906–917. https://doi.org/10.1007/s10964-019-01006-1
- 44. Thawabieh, A. M., & Qaisy, L. M. (2012). Coping with stress strategies of Arab students at an Arab and an Israeli University. College Student Journal, 46(3), 586–597.
- 45. Turner, M. M., RSiltanen, S. A., DeLongis, A., & Upchurch, D. M. (2019). Daily coping responses and psychological distress
- 46. Waqas, A., Khan, S., Sharif, W., Khalid, U., & Ali, A. (2015). Association of academic stress with sleeping difficulties in a Pakistani medical school medical students: a cross-sectional survey. PeerJ 3:e840. Doi: 10.7717/peers.840
- 47. Yusoff et al. (2011).A study on stress, stressors, and coping strategies among Malaysian medical students