

Mental Health and Psychological Adaptability on Hybrid Learning Set-Up of Criminology Students

Nanies Malabana Barnuevo, RCrim, LPT, MSCJ

Instructor I, College of Criminology, Central Bicol State University of Agriculture -Sipocot Campus, Sipocot, Camarines Sur, Philippines

Publication history: Received: June 20, 2026; Revised: July 15, 2026; Accepted: July 21, 2026

Email of Corresponding Author: nanies.malabana@cbsua.edu.ph

Abstract

This study determined the mental health status and psychological adaptability of criminology students in a hybrid learning set-up in the First District of Camarines Sur during Academic Year 2022–2023. It aimed to assess students' mental health status in terms of stress, anxiety, and depression; determine their level of psychological adaptability; examine the relationships between demographic characteristics, mental health status, and psychological adaptability; and propose an intervention program to improve students' psychological adaptability toward mental health. The study was anchored on the Theory of Student Mental Health, Metacognitive Theory, and Behavioral Learning Theory. A descriptive-correlational research design was employed, involving 329 criminology students from first year to fourth year of two institutions in the First District of Camarines Sur. Respondents were selected through simple random sampling using the Yamane sample size formula (Yamane, 1967). Data were gathered using a researcher-made survey questionnaire and analyzed through frequency count, percentage technique, weighted mean, and Pearson Product Moment Correlation. The findings revealed that criminology students experienced moderate levels of stress, anxiety, and depression. Students demonstrated moderately high psychological adaptability in managing these challenges. Results showed that some demographic variables had significant relationships with specific mental health dimensions, while relationships between mental health status and psychological adaptability varied across indicators. An intervention program was proposed to strengthen mental health awareness and psychological adaptability among students. The study contributes to Sustainable Development Goal 3 (Good Health and Well-Being) and Sustainable Development Goal 4 (Quality Education) by supporting learning environments. Its sustainability impact focuses on educational and institutional sustainability.

Keywords: Anxiety, Criminology Students, Depression, Hybrid Learning Set-up, Intervention Program, Mental Health, Psychological Adaptability, Stress

1. Introduction

The implementation of hybrid learning in Philippine higher education began as part of the transition toward the safe return of learners to physical campuses after the COVID-19 pandemic. Through CHED Memorandum Order No. 16, series of 2022, the Commission on Higher Education (CHED) provided updates on onsite learning in higher education, guiding higher education institutions in transitioning toward onsite learning arrangements while considering appropriate flexible learning modalities (Commission on Higher Education [CHED], 2022). Hybrid learning allows institutions to combine onsite learning experiences with synchronous and asynchronous distance learning approaches. Hybrid learning, also referred to as blended learning, integrates online educational resources with traditional classroom instruction. Vinikas (2022) described hybrid learning as an educational approach that combines traditional classroom experiences with online learning through digital platforms and video conferencing technologies, allowing learners to access instruction through both physical and virtual environments. It is designed to combine the advantages of physical and digital learning environments while increasing educational accessibility. Utami (2018) found that blended learning influenced students' achievement, while Palmiano (2023) emphasized that effective hybrid learning implementation requires appropriate strategies, technological readiness, and institutional support. This suggests that blended learning provides opportunities for flexible learning experiences and improved academic engagement when properly implemented. However, Alvarez (2020) emphasized that blended learning in the Philippines remains a developing educational approach and continues to encounter challenges involving communication, productivity, motivation, stress management, scheduling difficulties, and dependence on devices and internet connectivity.

The adjustment toward hybrid learning has also raised concerns regarding students' psychological well-being. The American College Health Association (ACHA, 2022) reported that many college students experienced psychological distress, including anxiety, depression, and trauma-related concerns. Bryant and Welding (2023) further emphasized that academic challenges significantly affect students' mental health. In response to increasing mental health concerns, government institutions have implemented initiatives supporting psychological well-being. The Department of Health

Bicol Center for Health Development introduced the Lusog Isip Application to promote mental health awareness, self-monitoring, and appropriate help-seeking behaviors. Similarly, Republic Act 11036, known as the Philippine Mental Health Act, established policies aimed at promoting mental health awareness, strengthening mental health services, protecting the rights of individuals with mental health concerns, and integrating mental health programs in educational institutions and communities (Lally et al., 2019). Mental health concerns among university students have been widely examined. Sahão and Kienen (2021) found that anxiety, stress, and depression are among the major concerns affecting students' adaptation to university life. These challenges highlight the importance of psychological adaptability, which allows individuals to adjust their thoughts, emotions, and behaviors in response to changing circumstances.

Existing literature identifies mental health as a significant concern among students experiencing educational transitions. Nagrampa (2022) explained that students' mental health difficulties during distance learning resulted from multiple interacting factors, including challenges in organizing academic responsibilities, limited resources, communication difficulties, and stressful home environments. Holt-Lunstad (2020) further emphasized that social isolation influences mental and cognitive health outcomes, including depression and reduced psychological functioning. In addition, Deng et al. (2016) found that gender differences may influence emotional responses, particularly in the relationship between individuals' emotional experiences and their outward emotional expressions. These differences suggest that demographic characteristics, such as sex, may contribute to variations in how students perceive, express, and manage psychological challenges. Learning conditions, academic expectations, and technological limitations contribute to student stress. Rotas and Cahapay (2020) noted that inadequate learning environments, insufficient hardware, and unstable networks may affect students' learning experiences. Reddy et al. (2018) identified academic expectations, fear of failure, interpersonal difficulties, and inadequate learning facilities as major sources of student stress.

Anxiety and depression remain among the most common mental health concerns among college students. Anxiety is commonly characterized by feelings of uncertainty, worry, and anticipation of negative outcomes. Deng et al. (2016) emphasized that gender differences influence emotional responses, particularly in the relationship between emotional experiences and emotional expressivity. These differences may contribute to variations in how students perceive, experience, and communicate psychological challenges such as anxiety and depression. Vanderlind (2017) emphasized that mental health concerns influence student learning and require attention from educators and institutions. Mohammed et al. (2022) identified depression as a significant concern among undergraduate students, while Drelich-Zbroja et al. (2021) found that students in hybrid learning environments may demonstrate more positive coping strategies compared with fully online learners. Remote and hybrid learning challenges have also been associated with increased psychological difficulties. Idrish et al. (2021) reported that increased independent learning demands and disrupted routines may contribute to stress, anxiety, and depression. Malik and Javed (2021) highlighted that prolonged stress negatively affects academic performance and overall health. Rotas and Cahapay (2020) identified difficulties such as unstable internet connectivity, inadequate learning resources, overloaded academic tasks, limited teacher support, and mental health struggles among Filipino university students. Similarly, Locion et al. (2022) found that students experienced academic challenges during the pandemic, including adjustments to new learning environments, increased academic demands, and difficulties in maintaining effective learning experiences amid changing educational conditions. These challenges demonstrate the need to examine students' adaptability and psychological responses within evolving learning modalities.

Psychological adaptability has emerged as an important factor in managing educational challenges. Martin et al. (2021) defined adaptability as the capacity to adjust behaviors, thoughts, and feelings in response to unfamiliar, uncertain, or changing situations. Holliman et al. (2022) emphasized that adaptability contributes to students' academic engagement, achievement, motivation, and social-emotional well-being. Similarly, Tarasova et al. (2017) emphasized that socio-psychological adaptation among university students involves the adjustment of personal, emotional, and social functioning as learners encounter new academic environments and responsibilities. Xiao et al. (2020) further explained that college students' adaptability involves their ability to respond effectively to changing environments and challenges in the new era of higher education. Hu (2022) further emphasized that psychological adaptability among college students plays an important role in adjusting to mixed learning environments. The study highlighted that adaptability is associated with students' ability to regulate learning behaviors, manage psychological challenges, and employ appropriate intervention strategies when facing changes in educational conditions. These dimensions of adaptation are relevant in understanding how criminology students manage psychological challenges within hybrid learning environments. Studies demonstrate that adaptability helps students manage academic demands and psychological difficulties. Xu and Jaggars (2013) found that students differ in their ability to adjust to online learning environments. Khoirunnisa et al. (2023) reported that hybrid learning changes may create academic stress among students. Zhang et al. (2022) found that adaptability negatively correlates with anxiety and depression and may protect students from psychological difficulties during remote learning. Santiago et al. (2021) further emphasized that students' adaptability in flexible learning environments is associated with their access to e-learning resources, digital meeting platforms, online learning systems, and level of learning engagement. These factors influence students' ability to adjust effectively to new educational modalities.

Research further suggests that adaptability involves cognitive, behavioral, and emotional adjustment. Sheriston et al. (2019) described adaptability as an individual's ability to respond effectively to novel and uncertain conditions. Yang and Pu (2022) conceptualized adaptability as the ability to regulate psychological and behavioral functions in response to changing circumstances. Holliman et al. (2022) emphasized the influence of personality traits and social support on adaptability and psychological well-being. Studies on hybrid learning indicate that this modality requires effective interaction between technology, instructional strategies, and learner readiness. Corpuz and Salandanan (2013) explained that blended learning combines different delivery modes, teaching approaches, and learning styles. Bernardo and Gonzales (2017) described blended learning as an educational program integrating online learning and supervised physical learning environments. Anthony (2019) emphasized that hybrid learning requires teachers to shift toward facilitation rather than traditional instruction. Alnajdi (2014) noted that hybrid environments provide opportunities for authentic learning experiences, while Raes et al. (2019) highlighted the importance of designing effective synchronous hybrid learning spaces. Eliveria et al. (2019) further explained that technological advancement has expanded opportunities for flexible education delivery.

Globally, higher education institutions adopted hybrid learning as a response to educational disruptions caused by the COVID-19 pandemic. Norrmén-Smith et al. (2022) noted that hybrid learning continues to support educational continuity amid changing circumstances. However, institutions continue to address concerns related to student engagement, technology access, and psychological well-being. In the Philippine context, hybrid learning introduced both opportunities and challenges among college students. Alvarez (2020) identified technological limitations, motivation concerns, and adjustment difficulties as major challenges in blended learning implementation. Similarly, Santiago et al. (2021) highlighted that flexible learning requires students to adapt to digital learning resources, online platforms, and new learning systems, which influence their engagement and adjustment to the new normal learning environment. The Department of Health (2022) emphasized that face-to-face learning contributes to academic performance, mental health improvement, and social engagement. Within the Bicol Region, mental health initiatives have been strengthened through programs such as the Lusog Isip Application introduced by The Department of Health Bicol Center for Health Development introduced the Lusog Isip Application to promote mental health awareness, self-monitoring, and appropriate help-seeking behaviors (Department of Health Bicol Center for Health Development, 2022). Despite these efforts, limited studies have examined the combined effects of hybrid learning, mental health, and psychological adaptability among criminology students.

This study is anchored on the Theory of Student Mental Health by Gutierrez (2016), which suggests that college students may experience greater mental health challenges compared with students in earlier educational levels. College environments introduce academic, social, and personal pressures that may influence students' psychological well-being. The study is also supported by Metacognitive Theory as cited by Neelakandan (2020), which focuses on learners' awareness and regulation of their own thinking processes. This theory explains how students develop strategies to understand and manage their learning experiences. Furthermore, the Behavioral Learning Theory cited by McLeod (2023) explains that behaviors develop through interactions with environmental stimuli. In the context of hybrid learning, this theory provides understanding of how learning environments, experiences, and feedback influence students' behaviors and adjustment.

Previous studies have examined mental health concerns, psychological adaptability, and hybrid learning separately. Research by Nagrampa (2022), Holt-Lunstad (2020), Reddy et al. (2018), Vanderlind (2017), and Rotas and Cahapay (2020) focused on student mental health challenges, while Martin et al. (2021), Xu and Jaggars (2013), Zhang et al. (2022), and Yang and Pu (2022) explored adaptability in educational settings. Although existing studies provide important insights, limited research has investigated the combined relationship between hybrid learning, mental health status, and psychological adaptability among criminology students in the Philippine setting. Specifically, there remains a need to examine how criminology students experience stress, anxiety, depression, and adjustment challenges within hybrid learning environments. Therefore, this study aims to address this gap by determining the mental health status and psychological adaptability of criminology students in the First District of Camarines Sur and by proposing an intervention program that may strengthen students' coping mechanisms and psychological adjustment.

This study aligns primarily with SDG 3 – Good Health and Well-Being by addressing mental health concerns among college students and emphasizing the importance of psychological well-being within educational environments. Understanding students' stress, anxiety, depression, and adaptability contribute to the development of healthier academic communities. The study also supports SDG 4 – Quality Education by examining how learning modalities influence students' educational experiences, adjustment, and ability to participate effectively in higher education. Promoting supportive learning environments contributes to educational sustainability. Additionally, the study relates to SDG 16 – Peace, Justice, and Strong Institutions by supporting institutional efforts to establish responsive student support systems, policies, and programs addressing mental health needs.

This study contributes to multidisciplinary sustainability through its focus on public health sustainability, educational sustainability, and institutional sustainability. Addressing students' mental health concerns strengthens the capacity of

educational institutions to provide supportive learning environments. From a public health perspective, understanding psychological challenges among students supports early identification of mental health concerns and encourages preventive interventions. From an educational perspective, strengthening psychological adaptability promotes students' ability to cope with changing learning environments. From an institutional perspective, the findings may guide higher education institutions in developing sustainable programs that support student well-being, academic continuity, and responsive educational practices.

2. Material and methods

2.1 Research Design

The study utilized a descriptive-correlational research design. The descriptive method was applied to determine the demographic profile of the respondents in terms of age, sex, and year level, as well as to assess the mental health status of criminology students in terms of stress, anxiety, and depression, and their level of psychological adaptability. The correlational method was used to determine the significant relationships between the respondents' demographic characteristics and mental health status, and between mental health status and psychological adaptability.

2.2 Locale of the Study

The study was conducted in two institutions offering criminology programs within the First District of Camarines Sur. These included Central Bicol State University of Agriculture–Sipocot Campus, a public higher education institution located in Sipocot, and Alfelor Senior Memorial College, a private institution located in Del Gallego. The study focused specifically on criminology students enrolled in these institutions during the Academic Year 2022–2023.

2.3 Respondents of the Study

The respondents were criminology students from first year to fourth year levels enrolled in the selected institutions in the First District of Camarines Sur. The participants served as the primary sources of information regarding their experiences, mental health status, and psychological adaptability during the implementation of the hybrid learning modality.

2.4 Sample and Sampling Procedure

The respondents were selected through simple random sampling. The required sample size was determined using the Yamane's (1967) sample size formula, where the total population of criminology students enrolled during Academic Year 2022–2023 was obtained from the registrar offices of the participating institutions. The formula developed by Yamane (1967) was used to determine the appropriate number of respondents based on the population size and a sampling error of 0.05. The final sample consisted of 329 criminology students, with 203 respondents from Central Bicol State University of Agriculture–Sipocot Campus and 126 respondents from Alfelor Senior Memorial College.

2.5 Research Instrument

The study utilized a researcher-made survey questionnaire designed to gather data on the mental health status and psychological adaptability of criminology students under the hybrid learning set-up. The instrument was developed based on related literature, articles, books, journals, published and unpublished research studies, and other electronic sources. The questionnaire was reviewed and validated through consultation with a psychologist, registered guidance counselor, research adviser, and panel members to ensure its suitability for the study. A pre-testing and dry run were also conducted among selected students who were not included as actual respondents to determine the clarity and appropriateness of the instrument. The questionnaire consisted of three parts: demographic profile of respondents, mental health status in terms of stress, anxiety, and depression, and psychological adaptability. A four-point Likert scale was used to measure responses. Mental health indicators were interpreted using the corresponding rating intervals, while psychological adaptability was assessed based on the prescribed scale ranging from very low to very high.

2.6 Data Gathering Procedure

The data gathering process began with the formulation and approval of the research problem and title. After receiving approval from the appropriate authorities, permission was secured from the concerned school administrators and offices. The researcher prepared, validated, and administered the survey questionnaire to the selected respondents. After the questionnaires were retrieved, responses were organized, tallied, and prepared for statistical analysis. The gathered data were submitted for statistical computation to ensure accurate interpretation and reliable findings. The results were analyzed and used as the basis for proposing an intervention program aimed at improving students' psychological adaptability and mental health.

2.7 Data Analysis Techniques

The collected data were analyzed using appropriate statistical tools. Frequency count and percentage techniques were used to describe the demographic characteristics of respondents. Weighted mean was utilized to determine the level of mental health status and psychological adaptability. Pearson Product Moment Correlation (PPMC) was applied to determine the

significant relationships between variables, particularly the relationship between demographic profile and mental health status, and between mental health status and psychological adaptability. The analyzed data served as the basis for interpreting the findings and developing a proposed intervention program focused on strengthening psychological adaptability and promoting mental health among criminology students experiencing hybrid learning.

3. Results and Discussion

3.1 Mental Health Status of Criminology Students

3.1.1 Stress, Anxiety, and Depression Levels

The findings revealed that the criminology students generally agreed on their mental health status during the hybrid learning set-up, obtaining an overall weighted mean of 2.64. Among the indicators, stress obtained an overall weighted mean of 2.81, anxiety obtained 2.69, and depression obtained 2.42. These results indicate that the respondents experienced moderate levels of stress, anxiety, and depression while adapting to the hybrid learning modality. The findings suggest that hybrid learning presented academic and personal challenges that affected students' psychological well-being. The results support Nagrampa (2022), who explained that students' mental health issues during distance learning resulted from multiple interacting factors rather than solely from changes in the educational system. Difficulties in adjusting to new learning demands, limited resources, and emotional exhaustion contributed to experiences of stress, anxiety, and depression among students.

3.2 Level of Psychological Adaptability Among Criminology Students

3.2.1 Psychological Adaptability in Managing Stress

The findings showed that the respondents obtained an overall mean of 3.11 for psychological adaptability in managing stress, interpreted as moderately high. The highest-rated indicator involved their efforts to achieve good class performance in quizzes, recitations, and examinations and their willingness to consult instructors or professors, while maintaining healthy diet, regular exercise, and adequate rest obtained the lowest rating, although still interpreted as moderately high. The result indicates that criminology students demonstrated adaptability by prioritizing academic responsibilities despite challenges brought by hybrid learning. This finding is consistent with Tarasova et al. (2017) and Xiao et al. (2020), who explained that university students' socio-psychological adaptation involves developing effective ways of responding to academic requirements, social interactions, and new environmental conditions. The moderately high adaptability observed among criminology students suggests that they were able to employ adjustment strategies that supported their functioning despite the demands of hybrid learning. However, self-care practices appeared to receive less attention due to academic demands. This implies that students may require stronger support mechanisms that balance academic achievement and personal well-being.

3.2.2 Psychological Adaptability in Managing Anxiety

The findings revealed that psychological adaptability in relation to anxiety obtained an overall mean of 3.22, interpreted as moderately high. The highest-rated indicator was performing well in school to avoid disappointing their parents, while approaching instructors or professors during face-to-face sessions to discuss personal concerns obtained the lowest rating but remained within the moderately high level. The result shows that family expectations and academic motivation influenced students' ability to cope with anxiety-related experiences. Students demonstrated adaptability through academic persistence and seeking support when necessary. This supports the view that adaptability involves adjusting thoughts, emotions, and behaviors in response to uncertain situations.

3.2.3 Psychological Adaptability in Managing Depression

The findings showed that psychological adaptability in relation to depression obtained an overall mean of 3.17, interpreted as moderately high. Establishing positive relationships at home and within the classroom environment obtained the highest rating, while seeking medical assistance for physical discomfort and consulting the school nurse regarding emotional concerns obtained the lowest rating. The findings indicate that social relationships and supportive environments contributed to students' ability to manage depressive experiences. A positive learning environment may help students develop coping strategies and maintain psychological stability during challenging educational conditions.

3.3 Relationship Between Demographic Profile and Mental Health Status

The findings showed that age was significantly related to stress, with an X^2 -value of 66.282 and p-value of 0.010, and significantly related to anxiety with an X^2 -value of 71.120 and p-value of 0.40 at the 5% level of significance. However, age was not significantly related to depression, with an X^2 -value of 77.194 and p-value of 0.021. Sex was significantly related to depression, with an X^2 -value of 49.949 and p-value of 0.026, but was not significantly related to stress and anxiety. Year level was significantly related to depression, with an X^2 -value of 105.516 and p-value of 0.030, but was not significantly related to stress and anxiety. The findings imply that demographic characteristics influence certain aspects of students' mental health, particularly stress and depression. Stress appeared to vary according to age, while depression showed relationships with demographic factors such as sex and year level. These results are consistent with Nagrampa

(2022), who emphasized that students' mental health concerns during flexible learning arise from an interaction of academic, personal, and environmental factors that may contribute to emotional exhaustion, anxiety, and depression.

3.4 Relationship Between Mental Health Status and Psychological Adaptability

The findings revealed that mental health status in terms of stress was not significantly related to psychological adaptability in stress, anxiety, and depression. Stress and psychological adaptability obtained correlation values of 0.019, 0.010, and -0.092, respectively, with all relationships showing no significant association. Mental health status in terms of anxiety was not significantly related to psychological adaptability in stress and anxiety; however, anxiety was significantly related to psychological adaptability in depression with an r -value of -0.131 and p -value of 0.018. Mental health status in terms of depression was significantly related to psychological adaptability in stress with an r -value of 0.113 and p -value of 0.041, while relationships with anxiety and depression adaptability were not significant. The results indicate that mental health conditions and psychological adaptability do not consistently influence one another across all dimensions. Some aspects of anxiety and depression showed significant relationships with specific adaptability behaviors, suggesting that students may respond differently depending on the psychological challenge experienced. The findings support the Theory of Student Mental Health by Gutierrez (2016), which explains that college students may experience greater mental health concerns, including anxiety, depression, and relationship difficulties, due to the demands and experiences associated with college life.

3.5 Proposed Intervention Program for Improving Psychological Adaptability and Mental Health

The findings revealed the need to address the mental health status and psychological adaptability of criminology students experiencing hybrid learning. Based on the results, the researcher proposed an intervention program focused on improving psychological adaptability and promoting mental health among college students. The proposed intervention program emphasized the importance of institutional support, teacher involvement, and student-centered activities to address mental health concerns in the new learning environment. The program aimed to provide guidance and assistance to schools, teachers, and students in developing a healthy and supportive learning environment despite the challenges of hybrid education. The proposed intervention program should also consider the instructional and technological requirements of hybrid learning. Palmiano (2023) emphasized that effective hybrid learning requires strategic planning, appropriate learning resources, and institutional support mechanisms to address challenges encountered by students and educators. Therefore, interventions promoting psychological adaptability should be complemented with improvements in learning systems, digital support, and accessible educational resources.

4. Conclusion & Recommendations

The study determined the mental health status and psychological adaptability of criminology students in a hybrid learning set-up in the First District of Camarines Sur during Academic Year 2022–2023. The findings revealed that the respondents experienced moderate levels of stress, anxiety, and depression. Their psychological adaptability was assessed as moderately high in managing stress, anxiety, and depression, demonstrating their ability to adjust despite challenges brought by the hybrid learning environment. The results further showed that some demographic variables had significant relationships with specific aspects of mental health, while the relationship between mental health status and psychological adaptability varied across dimensions. Based on these findings, an intervention program was proposed to improve students' psychological adaptability and promote better mental health and well-being within the educational setting.

The study recommends the implementation of programs that strengthen students' mental health awareness, psychological adaptability, and coping mechanisms in the hybrid learning environment. Schools and institutions may provide seminars, workshops, counseling support, and monitoring mechanisms in collaboration with relevant professionals to address students' mental health concerns. Faculty members and class advisers may develop supportive learning strategies, maintain positive relationships with students, and monitor their mental health status. Parents may continue building strong relationships with their children, while schools may implement the proposed intervention program, particularly the Blended Universities Learning and Teaching Model and Development of Psychological Adaptability for Good Mental Health Well-Being of College Students, to support students, teachers, and school stakeholders in addressing challenges in the new learning environment.

Compliance with ethical standards

The author declares no conflict of interest. This study complied with recognized ethical standards for human-participant research by ensuring voluntary participation with informed consent, the right to withdraw without penalty, and strict confidentiality through anonymous, secure, and aggregated data handling. Given the focus on psychological well-being, procedures were non-invasive, and safeguards were observed to minimize discomfort, with guidance to appropriate support services when needed, and required institutional permissions were secured for instrument use and access to academic records.

REFERENCES

- Alnajdi, S. M. (2014). *Hybrid learning in higher education*. ResearchGate. https://www.researchgate.net/publication/318361485_HYBRID_LEARNING_IN_HIGHER_EDUCATION
- Alvarez, A. V. (2020). Learning from the problems and challenges in blended learning: Basis for faculty development and program enhancement. *Asian Journal of Distance Education*, 15(2), 112–132. <https://doi.org/10.5281/zenodo.4292631>
- American College Health Association. (2022). *National College Health Assessment Spring 2022 reference group executive summary*.
- Anthony, J. (2019). *Education psychology* (3rd ed.). EdTech Press.
- Bernardo, A. S., & Gonzales, H. T. (2017). *Educational technology 1* (1st ed.). Rex Book Store, Inc.
- Bryant, J., & Welding, L. (2023, February 15). *College student mental health statistics*. BestColleges. <https://www.bestcolleges.com/research/college-student-mental-health-statistics/>
- Commission on Higher Education. (2022). *CHED Memorandum Order No. 16, series of 2022: Updates on onsite learning in higher education*. <https://legacy.ched.gov.ph/wp-content/uploads/CMO-16-2022.pdf>
- Corpuz, B. B., & Salandanan, G. G. (2013). *Principles of teaching* (3rd ed.). Lorimar Publishing, Inc.
- Deng, Y., Chang, L., Yang, M., Huo, M., & Zhou, R. (2016). Gender differences in emotional response: Inconsistency between experience and expressivity. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0158666>
- Department of Health. (2022, August 30). *DOH supports full face-to-face college classes*. <https://doh.gov.ph/press-release/DOH-SUPPORTS-FULL-FACE-TO-FACE-COLLEGE-CLASSES>
- Department of Health Bicol Center for Health Development. (2022). *DOH Bicol CHD celebrates World Mental Health Day, introduces Lusog-Isip app*.
- Drelich-Zbroja, A., Jamroz-Wisniewska, A., Kuczyńska, M., Zbroja, M., Cyranka, W., Drelich, K., Pustelniak, O., Dąbrowska, I., & Markiewicz, K. (2021). The impact of study mode (online vs. hybrid) on early symptoms of depression and coping strategies among university students in Poland in time of the COVID-19 pandemic: Preliminary study.
- Eliveria, A., Serami, L., Famorca, L. P., & Dela Cruz, J. S. (2019). Investigating students' engagement in a hybrid learning environment. *IOP Conference Series: Materials Science and Engineering*, 482, 012011. <https://doi.org/10.1088/1757-899X/482/1/012011>
- Gutierrez, B. (2016, December 2). *The theory of student mental health*. Medium.
- Holliman, A. J., Cheng, F., & Waldeck, D. (2022). Adaptability, personality, and social support: Examining links with psychological well-being among Chinese high school students. *International Journal of Educational Psychology*. <https://hipatiapress.com/hpjournals/index.php/ijep/article/view/8880>
- Holt-Lunstad, J. (2020). *The double pandemic of social isolation and COVID-19: Cross-sector policy must address both*. Health Affairs.
- Hu, K. (2022). Psychological adaptability and intervention strategies of college students' English learning under the mixed foreign language teaching environment monitoring. *Journal of Environmental and Public Health*, 2022, Article 7962225. <https://doi.org/10.1155/2022/7962225>
- Idrish, F., Zulkipli, I. N., Abdul-Mumin, K. H., Ahmad, S. R., Mitha, S., Abdul Rahman, H., Rajabalaya, R., David, S. R., & Naing, L. (2021). Academic experiences and physical and mental health impacts of the COVID-19 pandemic on students and lecturers in health care education. *BMC Medical Education*. <https://doi.org/10.1186/s12909-021-02968-2>
- Khoirunnisa, R. N., Darmawanti, I., Dewi, D. K., & Laksmiwati, H. (2023). *Students' academic stress in hybrid learning during the COVID-19 pandemic*. ResearchGate. https://www.researchgate.net/publication/369341315_Students'_Academic_Stress_in_Hybrid_Learning_During_the_COVID-19_Pandemic
- Lally, J., Samaniego, R. M., & Tully, J. (2019). Mental health legislation in the Philippines: The Philippine Mental Health Act. *BJPsych International*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6646847/>
- Locion, J. P., Sison, J. C., Suarez, S. B. C., de Jesus, M. T., Pelande, J. C., & Uy, M. S. (2022). *The academic experiences of senior high school students in the midst of pandemic*. *East Asian Journal of Multidisciplinary Research*, 1(6), 1017–1032. <https://doi.org/10.55927/eajmr.v1i6.684>
- Malik, M., & Javed, S. (2021). Perceived stress among university students in Oman during COVID-19-induced e-learning. *Middle East Current Psychiatry*. <https://doi.org/10.1186/s43045-021-00131-7>
- Martin, A. J., Collie, R. J., & Nagy, R. P. (2021). Adaptability and high school students' online learning during COVID-19: A job demands-resources perspective. *Frontiers in Psychology*, 12, Article 702163. <https://doi.org/10.3389/fpsyg.2021.702163>
- McLeod, S. (2023). *Behaviorist approach to psychology: Definition, history, concepts, and impact*. Simply Psychology. <https://www.simplypsychology.org/behaviorism.html>

- Mohammed, T. F., Gin, L. E., Wiesenthal, N. J., & Cooper, K. M. (2022). The experiences of undergraduates with depression in online science learning environments. *CBE—Life Sciences Education*. <https://doi.org/10.1187/cbe.21-09-0228>
- Nagrampa, J. A. (2022). *Emotional challenges and academic achievement in science of Grade 6 pupils amidst the new normal* [Unpublished graduate research]. Naga College Foundation.
- Neelakandan, N. (2020, March 13). *How adaptive learning will give a personalized experience in eLearning*. eLearning Industry. <https://elearningindustry.com/how-adaptive-learning-give-personalized-elearning-experience>
- Normén-Smith, J., Tse, H. M., & Winters, N. (2022). *Students connecting: Advancing hybrid teaching and learning at the University of Oxford*. University of Oxford. <https://ctl.web.ox.ac.uk/files/studentsconnecting-advancinghybridteachingandlearningattheuniversityofoxfordpdf>
- Palmiano, R. R. (2023). *A review of hybrid learning strategies in Asia-Pacific regions, Europe, USA, Middle East, and the Philippines between the years 2011–2022*. ResearchGate. https://www.researchgate.net/publication/369225825_A_Review_of_Hybrid_Learning_Strategies_in_AsiaPacif
- Raes, A., Detienne, L., Windey, I., & Depaepe, F. (2020). *A systematic literature review on synchronous hybrid learning: Gaps identified*. *Learning Environments Research*, 23(3), 269–290. <https://doi.org/10.1007/s10984-019-09303-z>
- Reddy, K. J., Menon, K. R., & Thattil, A. (2018). Academic stress and its sources among university students. *Biomedical and Pharmacology Journal*, 11(1). <https://biomedpharmajournal.org/vol11no1/academic-stress-and-its-sources-among-university-students/>
- Rotas, E. E., & Cahapay, M. B. (2020). Difficulties in remote learning: Voices of Philippine university students in the wake of the COVID-19 crisis. *Asian Journal of Distance Education*. <https://files.eric.ed.gov/fulltext/EJ1285295.pdf>
- Sahão, F. T., & Kienen, N. (2021). University student adaptation and mental health: A systematic review of literature. *Psicologia Escolar e Educacional*. <https://www.scielo.br/j/pee/a/tdnsrZFwKyb53nvNZG79p9n/?lang=en>
- Santiago, C. S., Jr., Ulanday, M. L. P., Centeno, Z. J. R., Bayla, M. C. D., & Callanta, J. S. (2021). Flexible learning adaptabilities in the new normal: E-learning resources, digital meeting platforms, online learning systems, and learning engagement. *Asian Journal of Distance Education*, 16(2), 38–56. <https://doi.org/10.5281/zenodo.5762474>
- Sheriston, L., Holliman, A. J., & Payne, A. (2019). Student adaptability and achievement on a psychology conversion course. *Psychology Teaching Review*, 25(1). <https://files.eric.ed.gov/fulltext/EJ1216446.pdf>
- Tarasova, S. I., Dukhina, T. N., Limonova, O. O., Kolesnikova, T. V., & Makhova, I. N. (2017). Socio-psychological adaptation of first-year university students. *Revista Espacios*, 38(56). <https://www.revistaespacios.com/a17v38n56/a17v38n56p35.pdf>
- Utami, I. S. (2018). The effect of blended learning model on senior high school students' achievement. *SHS Web of Conferences*, 42, Article 00027. https://www.shs-conferences.org/articles/shsconf/pdf/2018/03/shsconf_getale2018_00027.pdf
- Vanderlind, R. (2017). Effects of mental health on student learning. *Learning Assistance Review*. <https://files.eric.ed.gov/fulltext/EJ1154566.pdf>
- Vinikas, I. (2022, January 2). *Hybrid learning: All you need to know*. Kaltura. <https://corp.kaltura.com/blog/hybrid-learning-all-you-need-to-know/>
- Xiao, F., Hua, W., Han, J., & Yan, R. (2020). A preliminary study on adaptability of college students in the new era and its cultivating model. *Psychology*, 11, 2055–2065. <https://doi.org/10.4236/psych.2020.1112128>
- Xu, D., & Jaggars, S. S. (2013). *Adaptability to online learning: Differences across types of students and academic subject areas*. Community College Research Center, Teachers College, Columbia University. <https://ccrc.tc.columbia.edu/media/k2/attachments/adaptability-to-online-learning.pdf>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.
- Yang, S., & Pu, R. (2022). The effects of contextual factors, self-efficacy, and motivation on learners' adaptability to blended learning in college English: A structural equation modeling approach. *Frontiers in Psychology*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9020123/>
- Zhang, K., Mi, Z., Parks-Stamm, E. J., Cao, W., Ji, Y., & Jiang, R. (2022). Adaptability protects university students from anxiety, depression, and insomnia during remote learning: A three-wave longitudinal study from China. *Frontiers in Psychiatry*, 13, Article 868072. <https://doi.org/10.3389/fpsy.2022.868072>