Influence of Students’ Academic Stress on Their Mental Health Amidst the COVID-19 Pandemic

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Abstract: The study aimed to ascertain the influence of academic stress on mental health among college students of the San Agustin Institute of Technology amidst COVID-19 Pandemic. The study surveyed two hundred sixty-four (264) respondents using an adapted standardized survey questionnaire. The qualified respondents were selected using simple random techniques. The data collected were analyzed using mean, Pearson r moment correlation, and simple regression techniques. The study reveals that most of the students experienced moderate to extreme stress (94.39% or 249 out of 264) and majority had moderate to high levels of mental health problems (75.36 or 199 out of 264) during the COVID-19 pandemic. Likewise, the results show that academic stress is significantly correlated with mental health using correlation analysis. Alternatively, using regression analysis, the result indicates that academic stress posited a significant influence on mental health. It suggests that the students stress on their academic engagement affects their mental health condition, especially amidst COVID-19 pandemic.

Keywords: Academic Stress; Mental Health; COVID-19 Pandemic; Regression; Philippines.

I. INTRODUCTION

Filipinos’ lives have considerably changed since the COVID-19 pandemic outbreak. When the emergence of COVID-19 soared globally, President Rodrigo Roa Duterte declared a State of Public Health Emergency in the entire Philippines. With the mandates of the Inter-Agency Task Force (IATF), an agency for the management of emerging infectious diseases, and efforts of the Department of Health, the government enforced public health and preventive measures such as border restrictions, public lockdowns, community quarantine, business and schools’ suspension, and strict social distancing in the hope to reduce the spread of COVID-19. However, still, millions of Filipino people have been infected. Department of Health recorded 2.8 million total cases of COVID-19 as of the end of December 2021. Among those infected by the virus, 2,778,242 (97.7%) million were cured, 14,233 (0.5%) were active, and rising to a mortality rate of 1.81% or killed 51,504 individuals already (Department of Health, 2021). The occurrence of the COVID-19 pandemic makes people face new realities. While many people are suffering from infections, several people are likewise scared and stressed out due to an increase in mortality rate and risk of infections. At worst, the devastating impact of the said contagious diseases drove individuals to economic downturns, unemployment, financial struggles, anxieties, depression, insecurities, and mental health problems, specifically among numbers of students (American Psychological Association (APA), 2020; UNESCO, 2021).

Before the devastating arrival of the COVID-19 pandemic that has impacted a million lives of people around the world, mental health problems existed already. Regardless of socio-demographic profile, everyone has some risks of developing mental health disorders (Grubic, Badovinac, & Johri, 2020; Holm-Hadulla, Klimov, Juchc, Molner & Herpetz, 2021). Mental health is a state of well-being that refers to cognitive, behavioral, and emotional health. It is related to how individuals think, feel, and behave. People sometimes use the term mental health to mean the absence of a mental disorder or illness (Zhu, Haegele, Liu, & Yu, 2021). Mental health is significant in the lives of a person since it affects individuals daily living, social connections, and physical well-being. Mental health preserves a person's quality of life and heightens psychological resilience (Baumann et al., 2021; Holm-Hadulla et al., 2021; Grubic et al., 2020). However, there are significant disruptions that potentially affect the individual mental health, such as stressful experiences, anxiety syndrome, depressive disorder, substance use disorder (alcohol and tobacco dependence), mood syndrome (e.g., bipolar), and other
psychological disorders (Dattani, Ritchie, & Roser, 2021). These psychological disorders are commonly categorized by an aggregation of abnormalities in the individual thoughts, perception, behavior, emotions, and relationships or social connection problems with others (Baumann et al., 2021; Holm-Hadulla et al., 2021; Grubic et al., 2020). World Health Organization [WHO] (2019) specified that anxiety and depression are common mental health disorders, but they also include bipolar disorder, psychoses, dementia, and developmental disorders.

In 2017, the Institute for Health Metrics and Evaluation reported a study on the Global Burden of Disease that around 792 million people suffer from a mental health disorder globally. In fact, one out of ten is the ratio who live with it across all countries (Dattani, Ritchie, & Roser, 2021). Further, World Health Organization declared that approximately 264 million are affected by depression, and 284 million suffer from anxiety disorders. Moreover, 45 million cases of bipolar disorder, 20 million suffered from schizophrenia and other psychoses, and 50 million cases of dementia. At worst, more or less 0.8 million die every year due to suicide (WHO, 2019; Department of Health, 2018). In the Philippine context, mental health disorders impact 10% to 15% of Filipino children between the ages of 5 and 15. According to the World Health Organization, 16.8% of Filipino adolescents aged 13 to 17 attempted suicide at least once in the preceding year, according to the 2015 Global School-based Student Health study (Malolos et al., 2021). This overwhelming information proposes that mental health problem occurs before the COVID-19 pandemic.

To date, the pandemic (COVID-19) even exacerbated the heightened pre-existing mental disorder condition which is prevalent around the world (Alyoubi, Halstead, Zambelli, & Dimitriou, 2021; APA, 2020; Wang et al., 2020). The psychological difficulties brought by COVID-19, such as stress, anxiety, and depression, were risk factors that lower psychological resilience and influence mental health conditions (Alyoubi et al., 2021; & Baumann et al., 2021). WHO (2020) has reported that during pandemic times, behavioral and mental conditions accounted for approximately 14% of the global population. More or less, 450 million people worldwide suffered from these psychological disorders. Evidently, among these millions of populations affected worldwide are students. UNESCO (2021) reported that the COVID-19 pandemic impacted the lives of more than 1.6 billion students and their studies globally. The pandemic (COVID-19) affects not only the psychological conditions of the students but also their academic engagement and overall personality (WHO, 2020). The said issues are also supported by the reports of APA (2020), where 81% of the teens aged 15-17 live under intense stress during the COVID-19 pandemic, which is likewise associated with their academic engagement.

Moreover, the current study administered by YoungMinds (2020) showed that 83% of the surveyed students globally worsen their existing mental health disorders due to the temporary closure of schools, loss of routines, and prohibited social interactions. Further, a recent study by Aslan, Ochner, and Cinar (2020) attested that 57% of their student participants experience anxiety disorders and 63% of them have a depressive disorder among 358 sample college students from 14 universities in Turkey. Meanwhile, Wang, and Zhao (2020) investigated the anxiety levels of Chinese university students during the pandemic. The results confirmed that 15.43% or 557 students out of 3,611 met the anxiety level above clinical cutoffs. Therefore, the findings suggest that students show higher anxiety due to COVID-19. In addition, 138 out of 195 Texas students from a large public university stipulated an increase in stress, anxiety, and depressive thoughts. Aside from 71% of them experienced an increase in stress and anxiety during the pandemic, 91% of the participants worried and feared about their own well-being and their loved ones, 89% of them had concentration difficulties, 86% had sleep disruptions, and 82% of them affected their academic engagement (Son, Hedge, Smith, Wang, and Sasangohar, 2020). The proposition is likewise parallel to the study of Chen and Lucock (2022) that 50% of 1,173 students of North England University experienced a high level above the clinical cutoff. The survey stipulated that they found high levels of anxiety and depression among them, especially among women. Furthermore, an online survey was conducted among the students of the University of Valladolid, Spain, which revealed that of 2,530 respondents, 21.34%, 34.19%, and 28.14% experience anxiety, depression, and stress, respectively. While, 50.43% of them agree that their lives and academic engagement have been affected (Odiozola-González, Planchuelo-Gomez, Irurita, & Luíz-Garcia, 2020). Another online survey made at the University of Applied Sciences and Arts, Switzerland revealed that among 557 college student participants, 85.8% of them feel intense anxieties brought by pandemic disruptions.

Like other nations, this phenomenal disruption drastically modified the educational system’s pedagogical methods to adopt the new normal or routines. Lockdowns pushed schools to implement educational changes such as online and modular learning setups to avoid physical contact to mitigate and prevent the risk of becoming infected. However, as students were employed to adopt to these abrupt educational changes, they felt isolated, unmotivated, and academically stressed (Ruiz-Robledillo et al., 2022; Yasmine, Khalil, & Mazhar, 2020).

Stress has been a common problem in human experiences. It is a negative psychological condition brought by intense pressures and tensions from work, situations, and events. Stress can vary depending on the environment and nature where it is generated. Stress is individuals’ physical, emotional, behavioral, and cognitive reactions (Yasmine, Khalil, & Mazhar, 2020). Stress has been an integral part of individual life and the body's responses that are affecting not only adults but increasingly affecting children and young. In the context of the academic discipline, unquestionably, stress was the main hindrance to academic performance. However, Gale, Westbury, and Cooper (2018) suggest that a certain level of stress is unavoidable and useful, specifically in academic studying. The findings revealed that this certain amount of stress levels supports the student to perform well and work harder as well as assists students in studying effectively. However, if it is too much, it will lead to psychological problems. At worst, this excessive stress might lead to suicidal
thoughts or incidents (Mahapatra & Sharma, 2021; Wang et al., 2020; Chi et al., 2020; Huckins et al., 2020).

In the context of tertiary students, academic stress also exists before the pandemic. Academic stress refers to the unpleasant psychological conditions that develop due to the educational expectations from parents, instructors, classmates, and family members, the pressure of parents on academic performance, and self-disappointment (Subramani & Kadhirawan, 2017). Excessive school demands, such as exams, activities, and assignments, poor academic performance, financial challenges, academic failure, poor interpersonal relationships with instructors and classmates, poor study habits, parental pressure, and low self-confidence are all factors that contribute to academic stress (Assaf, Al-Abassi, & Al-Binni, 2017; Nakalama & Ssenyonga, 2013). As a result of new learning setups, several researchers confirmed (Ruiz-Robledillo, 2022; Yasin et al., 2020) that numerous students were challenged in adapting to the shift from physical learning to virtual learning brought by the pandemic. Some authors agree that in this pandemic situation, COVID-19 acts as a catalyst in increasing stress among the number of students. When WHO declared COVID-19 a Pandemic, it led to public lockdowns that urged public establishments, businesses, and schools to close temporarily. Consequently, it suppresses physical (face-to-face) learning. Due to the risk of contagions, academic institutions drastically reform pedagogical methodology that can adapt to the consequences of the existence of the disease mentioned above (Zhu, Haegle, Liu, and Yu, 2021). Thus, the educational authorities in the country were left with no choice but to implement distance learning to continue the academic learning among students. However, various problems arose while implementing remote learning. Evidently, in some empirical studies, the integration of new learning modality generates stress (Ruiz-Robledillo et al., 2022). Aside from academic, social, and family demands, some researchers have presented new stressors that are visible in students’ academic endeavors in the midst of the pandemic (COVID-19). These stressors namely: fear of becoming infected, feeling of isolation, and difficulties with physical classroom engagement. Several authors account that COVID-19 causes an increased level of the stressful environment that yields anxiety, depression, and loss of motivation. At the same time, it leads to lower academic performance and causes students to drop out (Rao, M. & Rao, D., 2022; Holm-Hadulla et al., 2021). It must be noted that academic stress is associated with mental and emotional state problems. Students’ anxiety, tension, nervousness, fatigue, and depression spawned by the pressure of academic engagement and worsened by the COVID-19 pandemic and significantly influence their mental health resilience (Son et al., 2020).

One of the recent studies that conclude a significant relationship between academic stress and mental health is the proposition by Barbayannis, Bandari, Zheng, Baquerizo, Pecor and Ming (2022). Among the 843 college students surveyed, the majority of them have experienced academic stress and mental health during the pandemic. When the correlation analysis was done, the results exhibited that worse academic stress links with degraded mental health. Similarly, the abovementioned results paralleled the study of Zhu et al. (2021). They ascertain the influence of academic stress on their physical activity, sleep, and mental health. In general, the results showed that academic stress directly influences sleep routines, physical activity, anxiety, and depression. Further, a recent study conducted by Clabaugh, Duque, and Fields (2021) accounted that 295 students possess a higher level of academic failure insecurity, academic stress as well as difficulties in coping with the impact of a pandemic. Aside from related academic struggles, the author likewise indicated that the students also suffer from mental and emotional problems. Their results concluded that students’ academic stress and ambiguity affect their emotional well-being.

In the Philippines, Tee et al., (2020) established a study on the prevalence impact of COVID-19 on mental health among Filipino people. In a total of 1,879 participants, the results showed that 16.3 percent of the respondents were psychologically affected by the outbreak of the COVID-19 pandemic. The researchers added that 16.9 percent of them experience moderate to severe anxiety levels, and 13.4 percent experience moderate to severe stress levels. World Health Organization findings on the special initiative for mental health survey among Filipino people in the middle of 2020 showed that 3.6 million Filipinos suffer from at least one kind of mental health, neurological, and substance use syndrome (Department of Health, 2020). Thus, this valid observation glimmered an increasing interest for the researchers to conduct a study that would visit the mental health condition and academic stress among students of San Agustin Institute of Technology since the present researchers have found that several students complained about their academic engagement wherein they experienced tensions and anxiety that might be symptom of mental health problems. Besides, this research has not been conducted yet, particularly in a Catholic school in Valencia City, Bukidnon.

In this present study, the researchers attempt to identify the level of academic stress and mental health among college students amidst the COVID-19 pandemic. Likewise, the researcher aims to establish an association between academic stress and mental health as well as its influence.

II. METHODS

A. Research Design

The study utilized a well-established quantitative, non-experimental research design using descriptive-correlational techniques. This method emphasizes survey-based target estimations and statistical, mathematical, or numerical inquiry. It uses statistical analysis to evaluate a phenomenon (Creswell, 2014). As a result, descriptive-correlational approaches are used to establish a link between two variables, in this instance, academic stress and mental health.

B. Research Locale and Participant

The survey was administered among the college students of San Agustin Institute of Technology. The only tertiary school that was established in the heart of Valencia City Bukidnon. The school has providing basic and higher educational services and programs for more than 60 years. The researchers choose the college students of San Agustin
Institute of Technology since the school offers an online learning platform in the middle of the COVID-19 Pandemic occurrence. On the other hand, probability sampling or random sampling was employed to ascertain the sample of the present study. Using Raosoft—an online sample size calculator, the researchers targeted to select 264.

C. Research Instruments

In this research, the researcher used standardized and adapted survey instruments from Liu (2017) and administered to qualified respondents. The instruments were revised and contextualized to fit the objectives of the study under the criteria of appropriateness, objectivity, and adequacy, specifically on the experience of the students regarding their academic stress and mental health during the pandemic. The questionnaires underwent a rigid review through validation test and reliability test. These instruments underwent expert validation tests to assess the clarity of directions and are organized and presented logically. Also, the instrument scored a Cronbach’s Alpha of 0.949, confirming that the questionnaire was highly reliable or internally consistent.

D. Ethical Consent

The researchers made sure that ethical protocols in the conduct of the research were observed. Permission from the students, program heads, dean, and school president consent from the respondents were sought first before the conduct of the study. Respondents were fully informed of the study’s objectives and the possible risks entailed in the conduct of the study. Respondents were encouraged to participate in the study but were not obliged to do so when they refused to. In other words, the researchers ensured that all respondents who answered the questionnaires participated voluntarily. The researchers ensured that the privacy and confidentiality of the respondents' personal information were properly observed. No personal information from the respondents was divulged. No data in the study was falsified and fabricated. Any form of deceit was avoided. To assure the originality of the work, the researchers had their manuscript examined by a plagiarism software. All these ethical issues were avoided, and the researchers observed all ethical protocols to develop a quality and ethically-bound study.

III. RESULTS

A. Descriptive Results of Academic Stress

Presented in Table 1 are the descriptive results of academic stress among college students. Generally, the level of academic stress among college students obtained a mean value of 3.77 with a standard deviation of 1.08, described as "agree," which means the majority of the students felt stressed out. Likewise, the findings revealed that 94.39% or 249 out of 264 students experience moderate to extreme stress levels in their academic engagement. Specifically, the students felt moderate to extreme stress due to these 6 top reasons such as internet connection (96.30% or 254), risk of being infected (97.30% or 254), financial needs for their studies (92.60% or 254), concentration difficulties (94.50% or 254), and academic pressure (94.40% or 249).

B. Descriptive Results of Mental Health

Established in Table 2 are the descriptive results of mental health among San Agustin Institute of Technology college students. The result showed that the overall level of mental health garnered a mean of 3.26 with a standard deviation of 1.08, described as "Agree nor Disagree," which means moderate. The finding indicates that, on average, 75.36% or 199 out of 264 college students have moderate to high levels of mental health problems.
Specifically, the majority of the students felt nervous about the risk of being infected with the COVID-19 (92.60% or 244), felt isolated and anxious (85.80% or 227), had digestive problems (84.40% or 223), and had irregular sleeping habits (78.80% or 208), an uncontrollable feeling of fear (78.03% or 207), lack of confidence (80.20% or 212) and among others.

C. Correlation Analysis between Academic Stress and Mental Health.

Table 3 presents the correlation analysis between academic stress and the mental health of the respondents. Both of these variables were initially measured using mean and standard deviation. Then, to examine the relationship of these variables, Pearson r product-moment correlation analysis was used. When the test was done, the result revealed that there is a significant relationship between academic stress and mental health in the context of college students at San Agustin Institute of Technology. Results revealed further that academic stress got a correlation coefficient of 0.557 and p-value of 0.000, which is less than the 0.01 level of significance (2-tailed). The findings indicate that academic stress is strongly connected to mental health.

D. Regression Analysis between Academic Stress and Mental Health.

Table 4 presents the impact of academic stress on the mental health of students using a simple regression analysis. The test confirmed the substantial effect of academic stress on mental well-being among the college students of San Agustin Institute of Technology. Hence, the result revealed that the F-value is 35.445 and the p-value is 0.000, which is lesser than the 0.05 level of significance. This suggests that academic stress significantly influences mental health. Moreover, The R-square value of 0.310 implies that 31 percent of the variance of college students' academic stress is attributed to and can be explained by mental health. This likewise denotes that 69 percent of the variance can be attributed to factors not covered in this study. Thus, the computed S-value of 0.605 is the measure of the accuracy of the prediction. The smaller its value, the better.

IV. DISCUSSION AND PRACTICAL IMPLICATION

Overall, academic stress levels showed that most of the students experienced moderate to extreme stress amidst the COVID-19 pandemic. The finding suggests that students are stressed out about their online classes and academic work, worsened by the internet problem, fear of being infected, challenged financially, being pressured, having self-disappointments, and being unmotivated with their academic engagement. The abovementioned issues are parallel with the propositions of well-known authors (Ruiz-Robledillo et al., 2022; Yasmin, Khali, & Mazhar, 2020; Rao, M. & Rao, D., 2022; Holm-Hadulla et al., 2021) who acquiesced that academically stressed students are challenged by the excessive school demands such as test, requirements and other academic activities that exacerbated by the existence of pandemics COVID-19 such as fear of being infected, lack of social interaction, and lack of physical mobility.

On the other hand, a moderate to a high level of mental health problems of the college students of San Agustin Institute of technology has been observed. The result showed
that majority of college students feared being infected with the virus, feeling isolated and anxious, having the digestive syndrome occasionally, having irregular sleeping routines, and being emotionally and mentally disturbed during the COVID-19 pandemic. Thus, the problems stated above are congruent with the proposition of several experts (Hedge et al., 2020; Tee et al., 2020; YoungMinds, 2020; Wang & Zhao, 2020) who highlighted that COVID-19 worsen the mental problem among students nowadays. The moderate to severe levels of anxiety, stress, post-traumatic symptoms, and depression symptoms were evident during the COVID-19 pandemic due to temporary closure of schools, loss of routines, prohibited social interactions, fear of infection, and others.

Another objective of this study is to establish the relationship between academic stress and mental health as well as influence of the former to the latter. When the test of correlation was done, the finding exhibited that academic stress is significantly linked with the mental health among college students. When regressed, the findings likewise showed that academic stress significantly affects the mental health of college students. This empirical result suggests that the academic stress experienced by the students amidst the pandemic, such as internet connection problems, fear of COVID-19 infection, financial problems, interpersonal disappointments, and demotivation, influence mental health. Numerous articles from well-known authors (Rao, M. & Rao, D., 2022; Holm-Hadulla et al., 2021; Son et al., 2020) attested that academic stress is correlated with mental and emotional state problems. Excessive or high levels of academic stress form anxiety, tension, nervousness, fatigue, and depression. Several authors attested that academic stress increases significantly during pandemic, not only affecting their physical mobility and sleeping routines (Barbayaninis et al., 2022) but it contributing to their mental health degradation as well (Zhu et al., 2021). While disrupting their emotional well-being (Clabagh et al., 2021).

V. CONCLUSION AND RECOMMENDATION

The following conclusion is drawn based on the results of the study. The findings revealed that most of the students experienced moderate to extreme stress (94.39% or 249 out of 264) during the COVID-19 pandemic. In this context study, there are six major stressors that have formed. These stressors are internet connection problems (96.30% or 254), risk of being infected (97.30% or 254), financial needs for their studies (92.60% or 254), concentration difficulties (94.50 or 254), and academic pressure (94.40% or 254). It must be noted that the internet connection problem was the top concern among students. It is because the Philippines has poor internet quality among students. It is because the Philippines has poor internet quality. It must be noted that the Philippines has poor internet quality during the COVID-19 outbreak and lockdown. Therefore, a timely call to action for the institution, specifically to the guidance office, to conduct coping strategies to reduce the negative impact of academic distress and to reduce the adverse effect on the mental health of the students. They may come up with student-centered programs to mitigate their academic stress and mental health problems.

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