

Depression, Anxiety, and Stress among Students in an Island Higher Education Institution amidst the COVID-19 Pandemic

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Abstract

As countries across the globe succumb to COVID-19, students found the new normal stressful. Students are particularly vulnerable to the adverse mental health consequence of strict guidelines such as lockdowns. This study employed a parallel mixed methods research design that aimed to determine the depression, anxiety, and stress levels, and explored the challenges encountered among college students at Saint Dominic College of Batanes, Inc., during the COVID-19 pandemic. The findings served as bases for a wellness program. Survey questionnaires and a semi-structured interview guide were utilized to gather data. Frequency counts, means, percentages, chi-square test, t-test, ANOVA, and thematic analysis were employed to treat the data gathered from 92 students. Results showed moderate depression, severe anxiety, and mild stress among students. A strong significant link between age and depression was also found. Students between the ages of 18 and 22 exhibited moderate to extremely severe levels of depression, while those between the ages of 23 and 40 showed normal and mild levels of depression. In terms of age, depression, anxiety, and stress levels were significantly higher for the younger group than the older group. The challenges encountered by the students include lack of guidance and supervision, poor internet connection, psychological distress, limited access to technology, and teachers' failure to meet students' expectations. Results revealed that students cope by social support, managing tasks, changing environment, connecting with a higher being, motivating oneself, seeking advice, and borrowing and renting devices. Hence, proactive efforts are needed to support college students' mental health.

Keywords: depression, anxiety, stress, challenges, coping, COVID-19 pandemic

On March 11, 2020, the Coronavirus Disease 2019 [COVID-19] was declared a pandemic by the World Health Organization [WHO]. The first case of the novel COVID-19 dates back to November 17, 2019. Then it

became a worldwide crisis in December 2019. Between January and March 2020, the virus spread to more than 110 countries, and the number outside China has increased.

In the Philippines, the first case of COVID-19 was reported early in 2020. Following the sharp increase in the number of confirmed COVID-19 cases in the Philippines, on March 17, 2020, President Rodrigo Roa Duterte signed the Proclamation No. 929 and 922, series of 2020, stating the Philippines, specifically the entire Luzon, to be placed under the Enhanced Community Quarantine [ECQ]. Moreover, the virus reached Cagayan Valley on March 21, 2020, when the first case was confirmed in Tuguegarao. All provinces have confirmed at least one COVID-19 case. However, Batanes was the last province to confirm a COVID-19 case on September 28, 2020. Because of this, curfew, check-points, and travel restrictions have been put in place. Business and school activities were then suspended indefinitely, and people were forced to stay in their homes. Particularly, the COVID-19 pandemic had a huge impact on the mental health of people in many countries. There has been an increase in mental health disorders, especially depression, anxiety, and stress, in Asian and European countries – the first continents affected by the pandemic.

Young people such as higher education students are particularly vulnerable to the adverse mental health consequences of strict guidelines such as lockdown measures. Considering college and university restrictions, teaching presence was also suspended in schools, including Batanes. Only faculty and administrative staff were allowed to access campuses. Online teaching service had been activated through which discussions and exams were carried out.

Social interaction is an important event in their lives. This makes isolating themselves at home during lockdown hard. Therefore, due to the radical changes in their educational experience, the burden on the mental health of this vulnerable population has been amplified. As countries across the globe succumb to COVID-19, students found the new normal stressful and unbearable.

Mental health is described as a state of complete physical, mental and social well-being. However, mental health problems occurred when schools around the globe shifted to the new normal way of teaching and learning. The

pandemic harmed the psychological well-being of higher education students. Home quarantine coupled with the precariousness of academic and professional careers has a wide range of effects on students' mental health. Felman (2020) defined mental health as the individual's way of thinking, feeling, and behaving. This concept can stretch out to people's interactions and external factors in the community, prompting one's mental health issues.

Depression, anxiety, and stress are common health problems experienced by college and university students. According to the World Health Organization [WHO] (2021), depression is a well-known mental illness on a global scale. An estimated 280 million people worldwide have this mental illness, which can be indicated as an unusual type of mood change with "short-lived emotional responses" when obstacles are confronted. Anxiety refers to an individual's involuntary reaction when experiencing stress. Fear and apprehension of future occurrences can also refer to anxiety. On the other hand, stress is defined as a change due to physical, emotional, or psychological factors that lead to tension. It is also how an individual's body responds to an event or thing, similar to anxiety.

Thus, being in higher education alongside many stressors and transitional events in their lives can cause mental health problems at their developmental peak. Mental illnesses have many causes, known as "risk factors." These risk factors can develop at a moderate pace, or other stimuli trigger one's mental illness. It is worth note-taking for individuals to apply themselves in such situations, by which they can affect or trigger one's mental health.

With many schools resorting to online distance learning, being exposed to social media platforms such as Instagram, Facebook, and Twitter can have ramifications to a person's mental well-being. According to Sherrell (2021), technological advancements can be associated with many mental illnesses, such as depression, anxiety, and others, with a 2015 survey revealing the average time of 9 hours a teenager spends online for a day. Furthermore, lack of sleep is a radical effect of being too exposed to mental health disorders, prevalent in memory loss and depression. Moreover, cyberbullying is a well-known social issue that has a severe and

damaging impact on people, especially adolescents, with over 3,000 people from 10 to 18 years old experiencing cyberbullying in a 2020 survey.

According to a well-known psychiatrist in the Philippines, different factors aggravate students' mental health issues while having distance learning. Thus, the new normal's pedagogical curriculum is not the mere cause of mental illnesses (Magsambol, 2020). Nevertheless, students today have to experience depression and stress due to this new normal educational system. Additionally, another struggle students face is the need for teachers to connect with their students as it provides a sense of routine and purpose, especially during this pandemic and amidst uncertainties. Sometimes, the unclear expectations and clarification on procedures from teachers led to difficulty in their academic performance. They are left on their own to figure out what they are supposed to do (Casagrande et al., 2020). Remote learning also reveals a digital divide among Filipino students (Santos, 2020). The current situation in remote learning exacerbates the existing inequalities and may translate to barriers in online learning. Challenges regarding this challenging situation may threaten the students' mental health. For example, a nationwide study reported that 32% and 22% out of 3,670 Filipino students have difficulties adjusting to new learning styles and do not have access to reliable internet (Baticulon et al., 2020). Others experience difficulty in availing a facilitative learning device that helps them easily tune in to online classes and immediately turn in works in the online system. Despite the efforts to make education accessible for every student, especially during this pandemic, there are still many difficulties confronting Filipino higher education students in the practice of online distance learning. Several studies also report that students encounter stress in virtual learning spaces (AlAteeq et al., 2020; Baloran, 2020). Additionally, the COVID-19 pandemic has brought many changes in the different areas of the students' lives. This includes, but is not limited to, social life, emotional life, and personal circumstances.

As a result, it impairs students' academic performance and social functioning,

causes a significant burden, and potentially affects their future career opportunities. The students of Saint Dominic College of Batanes Inc. [SDCBI] are not an exemption to this.

This study is anchored on the Diathesis-Stress Model, known as the Vulnerability Stress Model, by Meehl, Bleuler, and Rosenthal (1960, as cited in Kendler, 2020). The Diathesis-Stress Model attempts to explain the occurrence of a disorder. This theory suggests that the combination of a pre-existing diathesis, such as a negative cognitive style and stress, can predict the development of any mental health disorder. Moreover, perception of the future self and the world can directly cause mental health issues. People who have a positive future orientation can maintain optimism and hope for the future whenever a problem occurs, such as a pandemic. Thus, they are likely to have more adaptable and modifiable behaviors in stressful situations, making it easier to handle depression, anxiety, or stress (Pallini et al., 2018).

It is in this premise that the researchers determined the prevalence of adverse mental health issues among students during this pandemic and alleviate its psychological risks. Studies on the islands of Batanes have been conducted about the impacts of the pandemic, but their main focus is on the general population. To date, there are limited studies that examine the effects of the COVID-19 pandemic on higher education students in Batanes.

Therefore, the researchers were encouraged to conduct this study to identify the levels of depression, anxiety, stress, and challenges encountered by higher education students and to develop protective measures that would help these students cope with the present situation brought about by the pandemic. The study aimed to determine the depression, anxiety, and stress levels, and explored the challenges encountered among college students at Saint Dominic College of Batanes, Inc. [SDCBI] and the coping strategies they utilize with the identified challenges during the COVID-19 pandemic.

Results of this study created effective interventions and approaches, such as a wellness program that will help address the mental health problems of the island higher education students during this time of the pandemic. The Mental

Health Act is the legal basis of this study in the development of the wellness program for higher education students who are suffering from depression, anxiety and stress. The wellness program aims to create activities and interventions that are designed to enhance protective factors and minimize risk factors or vulnerability among higher education students.

Method

Participants

For the quantitative part, the study was conducted with 92 students from first to fourth year who were currently enrolled for the First Semester, Academic Year 2021-2022 in an island Higher Education Institution in the Province of Batanes. The respondents came from the two departments – the Department of Business Administration and the Department of Teacher Education.

Since the study population was relatively small, a complete enumeration was utilized in this study. Complete enumeration, known as census, refers to the process of obtaining responses to all the members of the statistical population (European Commission, 2019).

On the other hand, for the qualitative part, the researcher collected data randomly to 15 students from first to fourth year who were currently enrolled for the First Semester, Academic Year 2021-2022 in an island Higher Education Institution in the Province of Batanes. The participants came from the three different courses or programs, wherein five participants per course or program were interviewed.

Measures

Depression, Anxiety, and Stress Scale-21 (DASS-21). The DASS-21 is comprised of three self-report scales designed to measure the emotional states of depression, anxiety, and stress. Each of the three DASS-21 scales contains seven items, divided into subscales with similar content. The *depression scale* assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. The *anxiety scale* assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The *stress scale* is sensitive to levels of chronic non-specific arousal. It assesses difficulty

relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive, and impatient.

Interview Guide. The questions that were asked by the researchers were categorized according to the participants' demographic profile, the challenges the participants encountered, the way the participants cope with the challenges they have encountered, and the support the participants wish to receive from others.

Procedure

The parallel mixed methods research design was employed in this study. According to Shorten and Smith (2017), quantitative and qualitative data are collected and analyzed concurrently in a parallel mixed methods research design. For the quantitative part, a descriptive-correlational research design was utilized. According to Quaranta (2017), a descriptive-correlational research design describes a phenomenon, its characteristics, and the relationships between and among them. It identified the different levels of depression, anxiety, and stress among students in an island Higher Education Institution. It also identified significant relationships between the different levels of mental health difficulty and the profile of the respondents.

For the quantitative data to be gathered in the study, the respondents were given a three-part survey questionnaire, which includes the Transmittal Letter with Informed Consent, the Demographic Profile, and the Depression, Anxiety, and Stress Scale-21 [DASS-21]. The DASS-21 is accurate, legitimate, and simple to administer in terms of reliability and validity. According to Coker and colleagues (2018), the DASS-21's reliability is outstanding, with Cronbach's alpha values of 0.81, 0.89, and 0.78 for the depression, anxiety, and stress subscales, respectively. It was discovered to have excellent internal consistency, discriminative, concurrent, and convergent validities in the same analysis. The self-rating depression scale and state-trait anxiety inventory have strong associations with the depression and anxiety subscales of the DASS-21. It has been designed to match the three-way model by differentiating the discrete features of depression, anxiety, and stress from each other. Although the reliability and validity

of the DASS-21 were established, a pre-testing was conducted by the researchers. Results revealed Cronbach's alpha values of 0.742, 0.792, and 0.825 for the depression, anxiety, and stress subscales, respectively. The computed values suggest that the subscales are adequately reliable.

On the other hand, for the qualitative part, a descriptive-interpretive qualitative research design was utilized. It explored the challenges encountered by the participants in their studies amid the COVID-19 pandemic and their coping. The researchers used an interview protocol that has two parts – the Consent Form and the Interview Guide. A recorder was also utilized by the researchers in order to record the interviews with the participants.

Filipino Translations were also included in the survey questionnaire, wherein co-raters specializing in Education Major in Filipino and English helped in the translations for the students to better comprehend the items included in the tool. Also, to ensure that the tool fitted in the current study's respondents, the data gathering tool was content-validated by co-raters specializing in Psychology, Education, and Guidance and Counseling.

The interview guide, which was used to gather qualitative data, was also reviewed and content-validated by the same co-raters to ensure that the interview questions were deemed appropriate to answer the problems sought in this study.

Analyses Strategies

For the quantitative aspect, descriptive and inferential statistics were used to aid in the analysis and interpretation of the data gathered. Computations were carried out using appropriate software, particularly Microsoft Excel 2013 and IBM SPSS Statistics Version 23.

To identify the respondents' demographic profile, frequency counts, means, and percentages were computed. *Frequency counts* refer to the number of times a certain unit, event, behavior, or response occur in a specific period of time. *Means* refer to the average of a certain set of numbers. *Percentages* refer to the rate or proportion of a certain set of numbers that is expressed as a fraction of 100.

To analyze the level of mental health difficulty felt among the respondents in terms of

depression, anxiety, and stress, mean analysis was utilized. *Mean analysis* is a method used in statistics in understanding differences among means.

To understand the relationship between the demographic profile and their level of mental health difficulty, a chi-square test was used. A *chi-square test* is a statistical test that measures the relationship between ordinal and nominal variables.

To look into significant differences on the level of mental health difficulty felt among respondents when grouped by its profile, independent samples t-Test and one-way ANOVA were employed. An *independent samples t-Test* is a type of inferential statistics that seeks to determine a significant difference between the means of two groups or categories. On the other hand, a *one-way ANOVA* seeks to determine significant differences between the means of two or more groups.

For the qualitative aspect, *thematic analysis*, which involves the identification of themes or patterns of meaning within a certain set of data, was used to analyze and interpret data on the challenges encountered by the participants during the period of COVID-19 pandemic and their coping. Responses of the participants were transcribed, clustered and coded to come up with themes which were given analysis and interpretation.

Results

Quantitative Results

Demographic Profile

The respondents' ages ranged from 18 to 40. Of the 92 respondents, 53 or 57.61% have ages between 18 and 22, while 39 or 42.39% have ages between 23 and 40. The respondents' mean age is 23.26. In terms of gender, of the 92 respondents, 30 or 32.61% are males, while 62 or 67.39% are females. The majority of the respondents are within the age range of 18 and 22, and that majority are female respondents.

Of the 92 respondents, 58 or 63.04% are taking Bachelor of Science in Business Administration, 5 or 5.43% are taking Bachelor of Elementary Education, and 29 or 31.54% are taking Bachelor of Secondary Education. In terms of year level, 30 or 32.61% are in first year, 16 or 17.39% are in second year, 20 or 21.74% are in third year, and 26 or 28.26% are

in fourth year. The majority of the respondents are pursuing the degree, Bachelor of Science in Business Administration, and that majority are first year college students.

Level of Mental Health Difficulty

Based from the results, the respondents' level of depression is moderate (\bar{x} = 15.20, SD = 9.24). The level for anxiety is severe (\bar{x} = 16.09, SD = 9.98) and the respondents' level of stress is mild (\bar{x} = 16.89, SD = 9.86).

Table 1. Summary on the Respondents' Level of Mental Health Difficulty

Mental Health Difficulty	Mean Score	Standard Deviation	Qualitative Interpretation
Depression	15.20	9.24	Moderate
Anxiety	16.09	9.98	Severe
Stress	16.89	9.86	Mild

$N = 92$

Relationship Between Demographic Profile and Level of Mental Health Difficulty

The chi-square test reveal that age and depression have a strong significant relationship, $\chi^2(4) = 11.077$, $p < .05$, $V = .347$. College students whose age ranged from 18 to 22 are strongly associated with moderate, severe, and extremely severe levels of depression. On the other hand, those students whose age ranged from 23 to 40 years old are strongly associated with normal and mild levels of depression.

Differences on the Level of Mental Health Activity According to Profile

Age and Mental Health Difficulty. 18 to 22 years old and 23 to 40 years old significantly differ in terms of their level of mental health difficulty, which suggests that 18 to 22 years old respondents experience higher level of mental health difficulty compared to those 23 to 40 years old respondents.

Table 2. Age Differences on the Level of Mental Health Difficulty

Mental Health Difficulty	t	Critical Value	Interpretation	Result
Depression	2.657	.009	Significant	Reject Hypothesis
Anxiety	2.792	.006	Significant	Reject Hypothesis
Stress	2.339	.022	Significant	Reject Hypothesis

$N = 92$

Gender and Mental Health Difficulty. Males and females do not significantly differ in terms of their level of mental health difficulty, which suggests that they experience these to more or less the same extent.

Table 3. Gender Differences on the Level of Mental Health Difficulty

		Sum Squares	df	Mean Square	F	Critical Value	Interpretation	Result
Depression	Between Groups	15.794	1	15.794	.184	.669	Not Significant	Accept Hypothesis
	Within Groups	7744.684	90	86.052				
	Total	7760.478	91					
Anxiety	Between Groups	219.451	1	219.451	2.233	.139	Not Significant	Accept Hypothesis
	Within Groups	8843.854	90	98.265				
	Total	9063.304	91					
Stress	Between Groups	117.498	1	117.498	1.211	.274	Not Significant	Accept Hypothesis
	Within Groups	8733.415	90	97.038				
	Total	8850.913	91					

$N = 92$

Course and Mental Health Difficulty. The one-way ANOVA reveals that the level of mental health difficulty, particularly stress, felt by the respondents when grouped according to their course did not significantly vary. This implies that respondents taking Bachelor of

Science in Business Administration, Bachelor of Elementary Education, and Bachelor of Secondary Education experience mental health difficulty to more or less the same extent.

Table 4. Course Differences on the Level of Mental Health Difficulty

		Sum Squares	of df	Mean Square	<i>F</i>	Critical Value	Interpretation	Result
Depression	Between Groups	100.547	2	50.274	.584	.560	Not Significant	Accept Hypothesis
	Within Groups	7659.931	89	86.067				
	Total	7760.478	91					
Anxiety	Between Groups	97.828	2	48.914	.486	.617	Not Significant	Accept Hypothesis
	Within Groups	8965.476	89	100.736				
	Total	9063.304	91					
Stress	Between Groups	129.423	2	64.712	.660	.519	Not Significant	Accept Hypothesis
	Within Groups	8721.490	89	97.994				
	Total	8850.913	91					

$N = 92$

Year Level and Mental Health Difficulty. Results reveal that the level of mental health difficulty, particularly stress, felt by the respondents when grouped according to their year level did not significantly vary. This implies that first year, second year, third year and fourth year respondents experience mental health difficulty to more or less the same extent.

Table 5. Year Level Differences on the Level of Mental Health Difficulty

		Sum Squares	of df	Mean Square	<i>F</i>	Critical Value	Interpretation	Result
Depression	Between Groups	244.965	3	81.655	.956	.417	Not Significant	Accept Hypothesis
	Within Groups	7515.513	88	85.404				
	Total	7760.478	91					
Anxiety	Between Groups	472.349	3	157.450	1.613	.192	Not Significant	Accept Hypothesis
	Within Groups	8590.955	88	97.624				
	Total	9063.304	91					
Stress	Between Groups	226.681	3	75.560	.771	.513	Not Significant	Accept Hypothesis
	Within Groups	8624.232	88	98.003				
	Total	8850.913	91					

$N = 92$

Qualitative Results

Challenges Encountered by the Participants in Their Studies

Guidance and Supervision. One of the most recurring themes in the narratives is the perceived lack of guidance and supervision from the teachers. With the transition to remote learning set-up, the students struggled to understand the lessons as they felt that they were on their own and the absence of academic support they once had during the pre-pandemic days has significantly affected the quality of learning. The difficulty was further compounded by the fact that some modules do not contain the lessons, students rarely receive any feedback from the teachers. Aside from academic support, they would have wanted their teachers to check in on them if they are experiencing other more personal problems that may be affecting their mental health and/or academic performance.

Internet Connection. Another common theme that emerged from the responses is dealing with poor internet connection. Aside from geographic location, environmental factors such as natural disasters and pandemic exacerbated the situation. Others had to go to another town to have a stronger signal so she can do her research and work on her modules. one of the working students in the group, would consider doing his academic requirements in their office because his workplace has better internet connection.

Psychological Distress. Narratives reveal that many of the participants experienced psychological distress during the height of the pandemic. The distress, however, comes from different sources and is experienced differently such as completing academic tasks and level of difficulty of requirements, high expectations from parents and self, meeting the demands at home while studying, lack of support from family, anxiety and stress because of concern for family's safety and the community's lack of understanding about the students' mental health situation.

Access to Technology. The mental health difficulties of the students stem from restricted or limited access to technology due to

financial difficulties and adapting to new technological advancements.

Expectations of Students. It was shown that on some occasions, expectations of the students were not satisfied by their teachers. For instance, some of the teachers of the participants have not met them yet as a class and some online classes and activities were not scheduled. Others complained that there were teachers who have not released their grades yet, and such delay can affect their scholarship.

Participants' Coping in the Challenges They Encountered

Social Support. Verbal disclosure of problems to another trusted individual was observed to be a recurring theme among the participants' narratives. Opening up to a friend or a family member provides an almost immediate relief to some of the participants.

Task Management. Analysis of the responses revealed that participants employ systematic ways of approaching tasks. Another way the participants approached their tasks was by taking a pause to clear their mind, then they would carefully think about the steps they have to do before taking action.

Change of Environment. Some of the participants tend to cope with challenges by going somewhere else. Participants perceived the change of environment as an opportunity to ease tension and temporarily forget problems.

Spirituality. The prevailing religious belief in the country is that people can have a personal relationship with this being and that this relationship can offer a profound sense of meaning and comfort. From the narratives, some of the participants tap their spiritual connection with God to help them cope with their problems.

Self-Motivation. While support from other people has been observed to be an important part of their ability to cope, it seems that self-affirmations are just as important to strengthen their resolve and to develop an extra layer of resilience. The ability to motivate oneself was one of the key observations in the narratives of the participants.

Seeking Advice. It was observed that participants recognize that other people can offer

alternative perspectives and recommendations to the challenging situations they were in.

Borrowing and Renting. One of the less common themes that surfaced in the narratives was borrowing and renting. One of the financially challenged participants shared that she would borrow and rent computers from friends or shops, and at times, she would ask someone else to do an activity for her.

Discussion

For higher education students aged 18 to 22, heightened uncertainty and its effects on academic performance and progress were associated with increased mental health difficulty. The easy access that social media gives can be exhausting as it may often take a toll on students' mental health. Add to this is the 24/7 media coverage making it seem like COVID-19 is all-pervading as well. Sundarasan and colleagues (2020) states that students, especially those living alone, experienced a higher level of mental health difficulty. Those staying alone are usually away from their loved ones, and the sudden threat to their safety and security during this pandemic made students feel lonely. Additionally, the current crisis has created a continual pattern of social distancing. It has created a lack of emotional support and broader societal effects leading to increased mental health difficulties (Brooks et al., 2020).

On the other hand, the sudden joblessness and financial insecurity are putting higher education students aged 23 to 40 in an unpleasant situation, affecting their mental well-being. This pandemic has brought extreme financial pressure on this population. According to the World Health Organization, individuals from this age group are suffering from unmanageable debts and a decline in income, leaving the family in a traumatized situation.

However, according to the study of Luchetti and colleagues (2020), living with families generates reassurance among adults, therefore reducing the mental effects brought by the pandemic. This is why higher education students aged 23 to 40 experience lower levels of mental health difficulties.

In regard to the gender differences of the respondents, both male and female students are at a stage where they are planning for their future careers and trying to set up conditions to

become independent from their parents and fend for themselves. This led to more significant difficulties among male and female students to access and adapt to the new teaching-learning methods. These issues may have increased depression, anxiety, and stress levels, leading to higher levels of mental health difficulty. However, according to the findings of Wang and colleagues (2020), female students' uncertainty tolerance threshold is lower than that of males, and going beyond that threshold triggers undue mental health difficulty such as depression, anxiety, and stress.

Additionally, because traditional on-site teaching and learning are not guaranteed, students across the country have utilized online distance learning since then. As social distancing is essential, there is now a rapid shift from traditional to online class sessions, face-to-face to virtual, and seminars to webinars. Because of this, higher education students, regardless of their course, experience the same challenges and difficulties with this shift in learning. Also, it also reported that there is an increase in the vulnerability to psychological problems across year levels. Liang and colleagues (2020) found that higher education students experienced mental health difficulties during the pandemic and, as a result, led to poor quality of life and academic difficulties. A recent study indicated that mental health difficulties are prevalent among students of any year level and are associated with higher risks of suicide and disease prevalence (AlAzzam et al., 2020).

Moreover, five themes were identified for the challenges encountered by the students in their studies amid the COVID-19 pandemic. One barrier during the pandemic is the lack of guidance and supervision from teachers. The unclear expectations and clarification on teachers' procedures led to difficulty in students' academic performance. School closures have lead exhaustion and less confidence in the ability of teachers to do their jobs. Because of this, it makes it more difficult for them to manage and provide guidance and support to their students during this challenging situation. Students are then left on their own to figure out what they are supposed to do (Hawkins, 2020, as cited in Garbe et al., 2020).

Another challenge faced by the respondents is internet connection. When the educational system has faced an unexpected health crisis due to the COVID-19 pandemic, governments across the globe have launched a crisis response to mitigate the impact of the pandemic on education. Part of the response includes curriculum revisions and provisions for technology resources. Raes and colleagues (2019, as cited in Rasheed et al., 2019), report that variation in connectivity may impact the type of online distance learning that higher education students receive. Similarly, Casillano (2019) reported that only a minimum number of higher education students have internet access. Thus, this hampers their access to the e-learning platform.

Psychological distress was also experienced at the height of the pandemic. Based on this study's findings, several stressors and factors affect the psychological distress of students. These include their academic future, task overload, interpersonal issues or conflicts, online learning challenges, restrictions on social contact, economic situation, daily life, academic delays, and social support.

Moreover, as technology plays a very significant role in facilitating school activities through online learning during the pandemic, it has also become a challenge to higher education students. Students who live in far-flung areas or rural areas lack knowledge in using technology, which is one of the barriers in online distance learning during the pandemic (Muttaqin, 2018; Almazova et al., 2020). The complexity and accessibility of technology used in the teaching and learning process also pose a challenge to the respondents.

Additionally, with the absence of physical presence of teachers, the expectation of students is to meet their teachers virtually; with the abrupt changes in the world and with the absence of solid structure in the current learning arrangement, the students expect to have a sense of routine and predictability; and with the limited resources that students have, they expect to maximize available opportunities they have.

With these challenges, the participants' coping strategies were also analyzed. Seven themes were found under the category of coping. Seeking social support have been found to

provide immediate relief to the respondents. Regular communication online with friends and their improved relationship at home facilitates the much needed social and emotional support that they need during the pandemic. Social support is strongly associated with good mental health. Different resources of social support during the COVID-19 pandemic significantly influence higher education students' mental health (Wise et al., 2019; Watson et al., 2019).

Curriculums in higher education institutions are designed in ways that get to peak in the workload of students, requiring them to manage work- or school-life balance. This is why managing tasks during difficult situations provides students ways for structuring and controlling their activities. The ability to successfully manage tasks during difficult situations is the benchmark of students in developing better work and academic habits and strategies for success (Razali et al., 2018; Ganguly et al., 2017).

Moreover, environmental conditions are antecedent factors in stress-related mechanisms. They operate as a coping strategy. As people respond to coping strategies, an individual's physical environment can ameliorate coping resources, reducing mental health problems. According to Harvey and colleagues (2017), exposure to different environments produces favorable mood chances. A change in environment can mediate the negative effect of stress, minimizing mood state and at the same time enhancing positive emotions.

Another coping strategy used by the respondents is spirituality. It produces positive psychological outcomes that include an individual's core values and beliefs that aid mental health. González-Sanguino and colleagues (2020) reports that the level of spirituality is potentially a valuable coping strategy as it restrains mental health difficulties and their psychological impacts. Spirituality assumes a role during the COVID-19 pandemic. It gives more profound meaning to the perplexity that people are confronted with when faced with a pervasive and disruptive event that creates fear and uncertainty.

It is also noted that dealing with stressful situations consists of psychological needs that can lead to success, such as self-

motivation. A study has shown that self-motivation significantly impacts student motivation, thinking, and learning performance. According to Naji and colleagues (2020), higher education students' self-motivation represents a critical factor in how they advance their knowledge and ability to manage their online learning and other work. It helps them control any challenging situations they encounter. self-motivation contributes to higher education students' well-being and the quality of their academic performance (Zeeshan et al., 2020).

Seeking advice and guidance from friends and family play also play crucial role in helping higher education students to manage stressful situations such as disease outbreaks. According to Yu and colleagues (2020), seeking advice may be understood as behavioral attempts to seek information, advice, or assistance through social relations with people or groups. This coping during difficult situations such as the pandemic can influence people's physical and mental health as it benefits all individuals and acts to mitigate stress.

More so, borrowing and renting needs from other people have made students resourceful in finding solutions to new or different situations (Lee, 2018). Cook (2019) reports that finding a place with a good internet connection, such as computer shops, helps students deal with academic demands. Students who do not have resources used for remote learning cope with this challenge by looking for every possible alternative to pass their requirements. Since course tasks in higher education institutions require laptops or computers, a common coping strategy utilized by students is asking for help from family, relatives, or friends who can immediately assist them (Akomaning & Osafo, 2021).

Future Directions

The current study's respondents or participants were only limited to college students. Thus, future researchers may also consider including teachers, non-academic staff, school administrators, and parents in their study.

Additionally, results of this can give an insight to school administrators to consider the students' desire to go back to classrooms for face-to-face classes. This would alleviate the frustrations experienced by students with limited

access to technology, and they argued that they get immediate feedback and guidance when their teachers are physically around. However, the implementation of face-to-face classes is still limited to some country regions. The school's level of preparedness and the infection rate in the area are factors to be considered should this route be taken. Invest in enhancing the technical competence of teachers and students in using computers and online applications to help them better navigate online platforms and make the completion of their tasks more efficient and less stressful. Consider ways and means to help students who have limited access to the internet, consider allocating the budget for providing students with offline learning resources or materials. This could be in physical or digital versions of relevant books that complement their modules.

Results suggest that some students employed management strategies to approach their home, school, and work tasks systematically. However, students can still refine their strategies and unlearn counterproductive habits to save more energy and avoid burnout. In setting goals and activities for the upcoming academic year, consider organizing fun and creative extra-curricular activities that students and teachers can participate in to ensure the holistic development of every member of the school. If deemed necessary, an academic break may also be considered. Create an online community where teachers and students can interact, ask questions, offer support, and make announcements. Aside from pushing for academic excellence, craft more policies sensitive to the school's social and psycho-emotional needs. This is to respond to the findings that students' levels of depression and anxiety were alarmingly high.

Future studies can increase the depth or breadth of this study. To further improve the breadth, there can be an increase in the sample size to include more students from more schools and regions in the country. The use of more sophisticated analytic tools in a qualitative study will make the sample size remain low. However, the exploration and analysis would be more extensive and rigorous.

Compliance with Ethical Standards

All study procedures involving human participants followed institutional and/or national research committee ethical standards and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study has been reviewed and approved by a university. It is an original work, has not been submitted or published elsewhere, and complies with all ethical standards established by the American Psychological Association.

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References

Akomaning, E., & Osafo, A. (2021). Challenges and coping strategies of student mothers of 'UCC' college of distance education: The case of the Cape Coast centre. *Journal of Educational Management*, 11. <https://doi.org/10.47963/jem.v11i.242>

AlAteeq, D. A., Aljhani, S., & AlEesa, D. (2020). Perceived stress among students in virtual classrooms during the COVID-19 outbreak in KSA. *Journal of Taibah University Medical Sciences*, 15(5), 398-403. <https://doi.org/10.1016/j.jtumed.2020.07.004>

AlAzzam, M., Abuhammad, S., Twalbeh, L., & Dalky, H. (2020). Prevalence and correlates of depression, anxiety and suicidality among high school students: A national study. *Journal of Psychosocial Nursing and Mental Health Services*, 23(2), 23-28.

Almazova, N., Krylova, E., Rubtsova, A., & Odinokaya, M. (2020). Challenges and opportunities for Russian higher education amid COVID-19: Teachers' perspective. *Education Sciences*, 10(12). <https://doi.org/10.3390/educsci10120368>

Baloran, E. T. (2020). Knowledge, attitudes, anxiety, and coping strategies of students during COVID-19 pandemic. *Journal of Loss and*

Trauma, 8, 635-642. <https://doi.org/10.1080/15325024.2020.1769300>

Baticulon, R. E., Alberto, N. R., Baron, M. B., Mabulay, R. E., Rizada, L. G., Sy, J. J., Tiu, C. J., Clarion, C. A., & Reyes, J. C. (2020). Barriers to online learning in the time of COVID-19: A national survey of medical students in the Philippines. *Medical Science Educator*. <https://doi.org/10.1007/s40670-021-01231-z>

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet*, 395(10227), 912-920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)

Casagrande, M., Favieri, F., Tambelli, R., & Forte, G. (2020). The enemy who sealed the world: Effects quarantine due to the COVID-19 on sleep quality, anxiety, and psychological distress in the Italian population. *Sleep Medicine*, 75, 12-20. <https://doi.org/10.1016/j.sleep.2020.05.011>

Casillano, N. (2019). Challenges of implementing an e-learning platform in an internet struggling province in the Philippines. *Indian Journal of Science and Technology*, 12(10), 1-4. <https://doi.org/10.17485/ijst/2019/v12i10/137594>

Coker, A. O., Coker, O. O., & Sanni, D. (2018). Psychometric properties of the 21-item depression, anxiety, and stress scale (DASS-21). *African Research Review*, 12(2). <https://doi.org/10.4314/afrrrev.v12i2.13>

Cook, S. (2019). *How to speed up your internet connection – 15 tips and tricks*. <https://www.comparitech.com/internet-providers/speed-up-internet-connection/>

European Commission. (2019, May 8). *Census*. https://ec.europa.eu/eurostat/cros/content/census_en

Felman, A. (2020, April 14). *What is mental health?* <https://www.medicalnewstoday.com/articles/154543>

Ganguly, S., Kulkarni, M., & Gupta, M. (2017). Predictors of academic performance among Indian students. *Social Psychology of Education*, 20, 139-157. <https://doi.org/10.1007/s11218-016-9345-y>

Garbe, A., Ogurlu, U., Logan, N., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research*, 4(3), 45-65. <https://doi.org/10.29333/ajqr/8471>

González-Sanguino, C., Ausín, B., Castellanos, M. A., Saiz, J., López-Gómez, A., Ugidos, C., & Muñoz, M. (2020). Mental health consequences during the initial stage of the 2020 coronavirus pandemic (COVID-19) in Spain. *Brain, Behavior, and Immunity*, 87, 172-176. <https://doi.org/10.1016/j.bbi.2020.05.040>

Harvey, S., Modini, M., Joyce, S., Milligan-Saville, J., Tan, L., Mykletun, A., Bryant, R., Christensen, H., & Mitchell, P. B. (2017). Can work make you mentally ill? A systematic meta-review of work-related risk factors for common mental health problems. *Occupational and Environmental Medicine*, 74(4), 301-310. <https://doi.org/10.1136/oemed-2016-104015>

Kendler, K. S. (2020). A prehistory of the diathesis-stress model: Predisposing and exciting causes of insanity in the 19th century. *American Journal of Psychiatry*, 177(7), 576-588. <https://doi.org/10.1176/appi.ajp.2020.19111213>

Lee, A. (2018). Be resourceful – One of the most important skills to succeed in data science. <https://towardsdatascience.com/be-resourceful-one-of-the-most-important-skills-to-succeed-in-data-science-6ed5f33c2939>

Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., & Mei, S. (2020). The effect of COVID-19 on youth mental health. *Psychiatric Quarterly*. <https://doi.org/10.1007/s1126-020-09744-3>

Luchetti, M., Lee, J. H., Aschwanden, D., Sesker, A., Strickhouser, J. E., Terracciano, A., & Sutin, A. R. (2020). The trajectory of loneliness in response to COVID-19. *American Psychologist*, 75(7), 897-908. <https://doi.org/10.1037/amp0000690>

Magsambol, B. (2020, October 22). *Students' mental health issues during distance learning due to "interplay of factors."* <https://www.rappler.com/nation/students-mental-health-concerns-distance-learning-due-interplay-factors>

Muttaqin, T. (2018). Determinants of unequal access to and quality of education in Indonesia. *Indonesian Journal of Development Planning*, 2, 1-23. <https://doi.org/10.36574/jpp.v2i1.27>

Naji, K. K., Du, X., Tarlochan, F., Ebead, U., Hasan, M. A., & Al-Ali, A. K. (2020). Engineering students' readiness to transition to emergency online learning in response to COVID-19: Case of Qatar. *EURASIA Journal of Mathematics, Science, and Technology Education*, 16(10). <https://doi.org/10.29333/ejmste/8474>

Pallini, S., Milioni, M., Laghi, F., & Vecchio, G. M. (2018). The ant and the grasshopper: Adolescents' time perspective, satisfaction with life and the mediating role of hope. *Journal of Happiness Studies*, 19, 351-364. <https://doi.org/10.1007/s10902-016-9821-2>

Quaranta, J. (2017). *Descriptive correlational research: Asthma management by school nurses*. <https://doi.org/10.4135/9781526407696>

Rasheed, R., Kamsin, A., & Abdullah, N. (2019). Challenges in the online component of blended learning: A systematic review. *Computers and Education*, 144(1). <https://doi.org/10.1016/j.compedu.2019.103701>

Razali, S. N., Rusiman, M. S., Gan, W. S., & Arbin, N. (2018). The impact of time management on students' academic achievement. *Journal of Physics*. <https://doi.org/10.1088/1742-6596/995/1/012042>

Santos, A. P. (2020, October 6). *In the Philippines, distance learning reveals the digital divide*. <https://eu.boell.org/en/2020/10/06/philippines-distance-learning-reveals-digital-divide>

Sherrell, Z. (2021, September 15). What to know about social media and mental health? <https://www.medicalnewstoday.com/articles/social-media-and-mental-health>

Shorten, A., & Smith, J. (2017). Mixed methods research: Expanding the evidence base. *Evidence-Based Nursing*, 20(3), 74-75. <http://dx.doi.org/10.1136/eb-2017-102699>

Sundarasan, S., Chinna, K., Kamaludin, K., Nurunnabi, M., Baloch, G. M., Khoshaim, H. B., Hossain, S. F., & Sukayt, A. (2020). Psychological impact of COVID-19 and lockdown among university students in Malaysia: Implications and policy recommendations. *International Journal of Environmental Research and Public Health*, 17, 1-13. <https://doi.org/10.3390/ijerph17176206>

Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *Lancet*, 395(10228), 945-947. [https://doi.org/10.1016/S0140-6736\(20\)30547-X](https://doi.org/10.1016/S0140-6736(20)30547-X)

Watson, R. J., Grossman, A. H., & Russell, S. T. (2019). Sources of social support and mental health among LGB youth. *Youth and Society*, 51(1), 30-48. <https://doi.org/10.1177/0044118X16660110>

Wise, A., Smith, B., Armelie, A., Boarts, J., & Delahanty, D. L. (2019). Age moderates the relationship between source of social support and mental health in racial minority lesbian, gay, and bisexual youth. *Journal of Health Psychology*, 24(7), 888-897. <https://doi.org/10.1177/1359105316686667>

World Health Organization [WHO]. (2021, September 13). *Depression*. <https://www.who.int/news-room/fact-sheets/detail/depression>

Yu, H., Li, M., Li, Z., Xiang, W., Yuan, Y., Liu, Y., Li, Z., & Xiong, Z. (2020). Coping style, social support and psychological distress in the general Chinese population in the early stages of the COVID-19 epidemic. *BMC Psychiatry*, 20, 2-11. <https://doi.org/10.1186/s12888-020-02826-3>

Zeeshan, M., Chaudhry, A. G., & Khan, S. E. (2020). Pandemic preparedness and techno stress among faculty of DAIs in COVID-19. *Sir Syed Journal of Education and Social Research*, 3(2), 383-396. [https://doi.org/10.36902/sjesr-vol3-iss2-2020\(383-396\)](https://doi.org/10.36902/sjesr-vol3-iss2-2020(383-396))