# **Understanding the Stressors Experienced by RSU Students during the Pandemic and their Coping Strategies: A Mixed-Method Inquiry**

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# ABSTRACT

Using the convergent parallel mixed methods design, this study sought to identify the academic stressors experienced by Romblon State University education students during the COVID-19 pandemic and the coping strategies they employed to deal with the stressors. Four hundred seventy (470) students (96 males, 374 females) participated in the study. The inquiry focused on six stress-causing factors: relationship with teachers, relationship with classmates, technology-related factors, financial factors, psychological factors, and cognitive factors. Of these, technology-related factors were found to have caused the greatest amount of stress among the respondents, stating that they were "Stressed" by these factors. The remaining five stress-inducing factors were described by the respondents as having "Slightly Stressed" them. Qualitatively, four coping strategies emerged which were employed by the participants in dealing with stress, namely: spiritual strategies, connective strategies, cognitive-affective strategies, and divertive strategies in any intervention program the Romblon State University may initiate in the future for the purpose of enhancing students' capability in managing stress more effectively.

Keywords: academic stress, convergent parallel mixed method, coping strategies, SCCAD coping framework

## INTRODUCTION

The pandemic has caused tremendous upset to all human institutions, activities, and endeavors, making the educational sector one of the most adversely affected in its wake. Schools had to hurriedly find new instructional delivery modes as traditional face-to-face teaching and learning have become too risky for both teachers and students. The sudden shift in pedagogical approaches and the effects it had on learning caused a significant impact on student's emotional well-being, as evidenced by the myriad of complaints and expressions of exasperation about the voluminous modules and other learning materials they have to contend with (Douwes, et al., 2023; Córdova, et al., 2023; Latorre-Cosculluela, et al., 2022).

It can only be surmised that the sudden shift in learning modalities and perspectives has caused students

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significant stress. Stress is generally understood as the reaction of our body and mind to anything that upsets our internal balance and is considered an aspect of various human emotions such as frustration, worry, anxiety, sadness, fear, and anger, despair (Shahmohammadi, 2011). Every person experiences stress at one point or another. In the case of students, certain situations related to schooling can cause stress, specifically academic stress. Academic stress arises from an educational setting or context (Struthers et al., 2000), such as entering a new college or university, taking examinations, and dealing with friends (Shahmohammadi, 2011). As pointed out by Shadi et al. (2017), findings from different studies have reported that students experience tremendous stress during their schooling.

Arguably, reducing academic stress can significantly enhance students' academic performance. As pointed out by Pariat et al. (2014), very high levels of stress can impede academic accomplishments, especially if stress is perceived negatively. It follows, therefore, that less stress will most likely result in enhanced scholastic achievements.

The online learning modality during the pandemic affected the students' attitudes toward schooling to the

extent that some of our own students have decided to quit. Others were frustrated that they were learning less than they felt they should and could, resulting in further anxiety.

Students entering university are generally faced with academic stress due to the exposure to a new educational setting and social environment (Elias et al., 2011). This stress-inducing nature of college life and education has been enormously intensified during the COVID-19 pandemic, where students (and teachers alike) had to shift paradigms and employ modes of class interactions that have never been done before, at least to a pervasive extent.

Very few studies have been done to determine the exact effect of the closure of schools due to the pandemic on academic performance. However, in a study by Mahdy (2020) involving 1,392 participants, primarily veterinary students and researchers, it was reported that the lockdown brought about by the COVID pandemic affected the academic performance of a large majority (96.70%) of the study participants.

Relatedly, in their review of international literature on the effect of the COVID pandemic, Alvarado et al. (2021) pointed out that current reports suggest that the lockdown of schools has engendered a negative effect on the scholastic performance of study cohorts compared to the previous ones.

Abiding by the logic that stressors can lead to decreased academic performance, it, therefore, follows that identifying the stressors experienced by our students as well as their coping strategies, and understanding their lived experiences with these stressors and using them to strategize and devise programs or activities that will reduce their anxieties can pave the way for enhanced academic performance.

The transitional character of tertiary education and university life makes college students prone to stressors. As Hamaideh (2011) stated, high-stress levels are generally thought to cause adverse effects on the health of students as well as on their academic performance.

Additionally, in a study conducted by Yusoff et al. (2011), it was revealed that the top ten stressors, as experienced and reported by the medical students involved in the study, were examinations, an enormous amount of information to be processed, insufficient time for review, getting poor grades, the need to perform well, inadequate skills in medical practice, inability to follow reading schedules, tremendous workload, difficulties in comprehending lessons, and inability to answer questions.

However, the negative effects of stress on academic performance can be moderated or minimized through appropriate coping strategies. "Coping" generally refers to how a person deals with stress to control harmful, threatening, or challenging situations (Park & Adler, 2003 in Shahmohammadi, 2011). Appropriate coping strategies can alleviate the effects of stress on academic performance. For instance, a study conducted by Pariat et al. (2014) reported that students coped very effectively with academic stress through positive coping mechanisms such as prayers and meditation, as well as getting enough sleep. Interestingly, they reported in the same study that listening tos music and watching television, as well as using negative coping strategies such as drugs, smoking, and alcohol, were negatively correlated with academic stress (Pariat et al., 2014).

To synthesize, stress is a part of university life, and it causes adverse effects on physical and mental health and, consequently, academic performance. However, appropriate coping strategies, especially positive ones, can mitigate these adverse effects. Expectedly, more effective coping abilities will lead to less stress, resulting in enhanced well-being and, ultimately, better academic performance.

Identifying the stressors experienced by our students and the coping strategies they employ, as well as gaining a thorough understanding of their lived experiences concerning stressors, can provide valuable data for strategizing and policy-making purposes to improve not only the scholastic performance of our students but their overall well-being in general.

The primary objective of this inquiry is to identify the academic stressors experienced by Romblon State University students during the COVID-19 pandemic and their coping strategies as instruction was disrupted and as the University shifted from face-to-face classes to online and blended modalities. Specifically, this study sought to (1) identify the different kinds of stressors experienced by RSU students during the pandemic, particularly in connection with their studies; (2) determine the different types of coping strategies or mechanisms used by students to manage and deal with stressors they experienced, and; (3) gain a deeper understanding of the lived experiences of the students as they grappled with the different kinds of stressors they have encountered or experienced.

#### Significance

Although college education settings have always been generally considered a stressful milieu by students, further inquiry into the adverse effects of stress on learning needs to be undertaken if such harmful effects are to be minimized, if not eliminated. As Veena and Shastri (2016) warned, excessive stress can engender physical and mental health problems and may even result in diminished self-esteem and unsatisfactory academic performance. For their part, Yusoff et al. (2011) revealed that the top ten stressors, especially those experienced by medical students, were associated with academic concerns, including tests and examinations, an enormous amount of lessons to be

learned, and insufficient time for studying, among others.

Many studies have investigated the relationship between stress and school achievement among college students, and it has been established that stress definitely affects their academic performance (Elias et al., 2011). By identifying the academic stressors experienced by RSU students and their coping strategies and understanding their lived experiences, teachers will be better equipped to plan and implement instructional strategies designed to minimize academic stress among students. Failure to cope with academic stressors may result in unsatisfactory scholastic performance (Dwyer & Cummings, 2001, cited in Elias et al., 2011). Therefore, stress must be managed appropriately to prevent it from interfering with effective and meaningful learning and the student's mental health and general well-being.

#### **Theoretical Framework**

This study was framed by Lazarus and Folkman's transactional theory of stress and coping, in which they argued that people's constant assessment of their environment results in certain emotions, and when external stimuli are seen as threatening, that is, they are perceived as stressful, coping tendencies are triggered to manage emotions or directly address the stressful experience (Lazarus & Folkman, 1986, cited in Biggs et al., 2017).

Summarizing several studies by Folkman and Lazarus from various years, Biggs et al. (2017) pointed out that a change in the relationship between individuals and their environment usually occurs due to their effort to cope with stress. The coping process may produce favorable results, generating positive emotions. However, if the coping efforts fail and the results are unfavorable, the attendant emotions will be distressed, and the whole stressful situation will remain unresolved.

Specifically, Lazarus and Folkman (1986, in Biggs et al., 2017) identified two types of coping strategies: problem-focused and emotion-focused. In problemfocused coping, the intent is to handle the source or cause of stress directly, while in emotion-focused coping, the aim is to manage emotions engendered by stressful events.

College students frequently experience significant academic stress due to demanding school requirements, frequent assessments, and the pressure to stand out (Freire et al., 2020; Lazarus & Folkman,1986; Biggs et al., 2017). To manage this stress, students utilize various coping mechanisms, which, as already stated, Lazarus and Folkman (1986, in Biggs et al., 2017) categorized into two approaches: problem-focused coping and emotion-focused coping.

Problem-focused coping involves directly addressing the stressor through active measures,

planning, and minimizing distractions (Esia-donkoh, et al., 2011). This might involve students prioritizing tasks, developing detailed schedules, and reducing distractions to improve workload management. Two common problem-focused coping strategies are active coping and restraint coping (Esia-donkoh et al., 2011). These strategies aim to alter the stressful situation and are linked to positive academic results (Freire et al., 2020; Carver et al., 1989).

In contrast, emotion-focused coping focuses on regulating emotional responses to stress rather than directly tackling the source (Carver, et al, 1989). This can involve positive reappraisal and growth mindset, acceptance of the situation, and seeking social support for emotional well-being (Esia-donkoh et al., 2011). Examples include students reframing challenges as opportunities for growth, accepting the reality of their situation, or seeking comfort and understanding from loved ones (Esia-donkoh et al., 2011; Carver et al., 1989). While emotion-focused coping does not directly change the stressor, it helps students manage their emotional reactions and maintain well-being amidst academic pressure (Freire et al., 2020; Carver et al, 1989).

Utilizing problem-focused and emotion-focused coping strategies is crucial for students' academic success and overall mental health (Freire et al., 2020; Carver et al, 1989). Encouraging students to develop a flexible range of coping mechanisms and seek support when needed can equip them to navigate the challenges of university life more effectively (Freire, et al., 2020; Lazarus & Folkman, 1984).

## METHODOLOGY

The mixed method of inquiry was used in this study. Creswell (2014) defines mixed methods research as "an approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks" (p. 32). Specifically, the convergent parallel mixed methods design (Creswell, 2014) was used in this investigation, and adhering to the said design protocols, quantitative and qualitative data were gathered simultaneously, subjecting them to separate analysis afterward to determine whether the results corroborated or contradicted each other. According to Wisdom and Creswell (2013), comparing findings from quantitative and qualitative data sources and utilizing the two kinds of data to validate each other provides a robust framework from which conclusions may be drawn.

Romblon State University is located in Odiongan, Romblon, Philippines. It is a state university with a vision to become a research-based academic institution committed to excellence and service in nurturing a globally competitive workforce towards sustainable development. The university has established campuses in different islands within the province to cater to the local community's and neighboring provinces' needs, providing quality education without students needing to travel to major cities.

Education students (N=470; 96 males, 374 females) from all year levels in the nine campuses of the Romblon State University, namely RSU Main Campus, San Andres Campus, Calatrava Campus, San Agustin Campus, Sta. Maria Campus, Sta. Fe Campus, Romblon Campus, San Fernando Campus, and Cajidiocan Campus participated in this study. With regard to the selection of the participants, complete enumeration was the researchers' intent. However, only 470 students responded to the Google Forms used for data gathering. All 470 participants answered the research instrument's quantitative and qualitative parts.

A two-part researcher-made questionnaire was used in this study. The first part included six categories of questions about the factors that may cause stress students: relationships with teachers. among relationships with classmates, technology-related factors, financial factors, psychological factors, and cognitive factors. This part of the instrument aims to determine the factors that caused the highest stress levels among the participants. The second part of the instrument contained five open-ended questions designed to generate the qualitative data needed to provide further insights into the quantitative findings and pave the way for a deeper understanding of the participants' experiences during the pandemic.

The instrument was subjected to validation by experts and field-tested by thirty (30) students who were not part of the target research participants to determine the instrument's reliability. Thirty-one (31) statements were divided into six (6) categories, comprising the study instrument's first part. The statements in the questionnaire were in the form of Likert items, meaning they were mutually exclusive individual statements, as opposed to the Likert scale, which is "a series or battery of a minimum of four or more mutually inclusive Likert items that are combined into a single composite score/variable during the data analysis process" (Boone & Boone, 2012; Joshi et al., 2015, cited in Subedi, 2016, p. 6). Subedi (2016) further stated that Likert items create an ordinal type of data and that individual analysis of every item is vital in this kind of Likert data. For their part, Gadermann et al. (2012) asserted that Likert-type questions generate ordinal data, not continuous or interval data, and therefore call for using ordinal alpha for reliability testing instead of Cronbach's alpha. They stressed that ordinal alpha had demonstrated greater accuracy in determining reliability for ordinal responses than other measures (Gadermann et al., 2012). Further,

Sullivan and Artino (2013) observed that experts had preferred using the median in measuring the central tendency of Likert scale data, hence the researchers' decision to use it in estimating the reliability of the research instrument.

The six categories of Likert items produced the following standard alpha values: Relationship with Teachers = 0.81 (robust); Relationship with Classmates = 0.82 (robust); Technology-Related Factors = 0.91 (strong); Financial Factors = 0.66 (adequate); Psychological Factors = 0.81 (robust); and Cognitive Factors = 0.85 (reliable). The interpretations of the ordinal alpha values for each of the six categories of Likert items used in the study questionnaire were based on Taber's (2018) descriptions of Cronbach's alpha values. Ordinal alpha values and traditional Cronbach's alpha have the same interpretations (Hellström et al., 2019).

Having established the reliability of the research instrument, the researchers obtained permission from the dean of the College of Education from the Main Campus and the directors from the external campuses to send the instrument to target respondents via an online platform, specifically Google Forms. The potential respondents were expressly notified in the instrument that answering it and sending their answers to the link would constitute giving their informed consent to participate in the study.

With regard to the qualitative data, the original plan was for the researchers to conduct face-to-face focus group discussions (FGDs) with the research participants from each campus to facilitate data gathering. This would have allowed the researchers to probe deeper into the participants' experiences through follow-up questions during semi-structured interviews. However, a sudden, alarming increase in COVID cases in early January of 2023 rendered it too risky to travel around the province to gather data, hence the decision to conduct the data gathering through online modalities.

Once all the data were gathered, quantitative data were separated from qualitative data as they required different analysis methods. Quantitative data were subjected to statistical processing, specifically the computation of the median for each statement about the stress-causing factors under each category using SPSS (Statistical Package for Social Sciences).

On the other hand, the qualitative data were subjected to open coding, axial coding, and selective coding (Yin, 2011). During open coding, the significant statements were identified and labeled, paving the way for axial coding and generating concepts' various themes and sub-categories. Finally, the themes were grouped and integrated into categories through selective coding, forming the framework of coping strategies discussed in the subsequent section. Significant statements from the corpus of qualitative data were added to the discussion

of the tables to give flesh and blood to the quantitative data, this being a mixed-method study.

# **RESULTS AND DISCUSSION**

### **Quantitative Results**

Statistical analysis of the quantitative data yielded the values and descriptions for each statement below under the various categories of stress-causing factors.

As table 1 shows, under the relationship with teachers, the respondents indicated that they were slightly stressed with Item No. 1 (Establishing personal, intellectual, and emotional connection with teachers), Item No. 4 (Getting enough consideration from teachers in case of delays in submission of course requirements), and Item No. 5 (Coping with demands and meeting expectations from teachers), signified by the median score of two (2).

Overall, the relationship with teachers caused moderate stress to the students. One of the causes of stress is the perceived lack of consideration on the teacher's part, especially in late submissions. As two respondents wrote:

"When it comes to deadlines, they did not question some of students' reason why they passed the modules late. I know I am a student and I know too my responsibilities but, they need to understand every student's situation if it is valid or not." [Male, 22, Third Year]

"Some teachers can't understand the situation of the students. And they don't give enough consideration when it comes to our modules. They give [us] a lot of activities and sometimes we can't understand it, that's why we ask about the topic but instead of answering our question the teacher reasons that it is our job to understand our module." [Female, 20, Second Year]

The words of one participant are direct:

"Relationship with teachers becomes stressful to me because some teachers are not considerate and they have so high standards." [Female, 21, Second Year]

Also, getting the teacher's attention to ask for assistance posed problems for some students. As shared by two participants:

"Sometimes when we have questions about modules or something else they don't e-mail or answer us back, in fact they just send us 'Like' emoji." [Female, 20, Third Year]

"I have difficulty in reaching out [to] my teacher because I'm always afraid that they [would] ignore me or they [would] become angry. And I had an experience about that so I really don't want that to happen again." [Female, 19, Second Year]

Table 1 also shows that all the statements pertaining to their relationship with classmates caused

the respondents to feel slightly stressed, as seen in their median score of two (2).

With regard to relationships with classmates, one of the most common complaints from the participants is the lack of cooperation from their classmates, as represented by the following responses:

"They don't cooperate sometimes." [Female, 22, Fourth Year]

"They are difficult to approach." [Female, 21, Third Year]

"We are not complete to do the group activities, sometimes the others do not come on time" [Female, 19, First Year]

Concerns regarding communication with classmates also surfaced from the participants' sharing, as shown by the exemplars below:

"Every time there is an announcement, they don't even bother to interact with you." [Female, 20, Third Year]

"Sometimes if I have questions about the other subjects, they didn't answer." [Female, 22, Third Year]

Under technology-related factors, table 1 reveals that the study participants felt stressed with all the tasks identified, signified by the median score of three (3), except for Item No. 5 (Getting access to websites and web pages needed to comply with course requirements) with which they felt slightly stressed, indicated by the slightly lower median score of two (2). Among all the factors that can potentially cause stress to the participants, those related to technology registered the highest scores, signifying that these factors caused the highest level of stress to the students.

The major complaints from the respondents revolve around poor connectivity. The sentiments are represented by this sharing from a participant:

"Getting stable internet connection is so stressful for me, especially during online classes. It is difficult to join in our online class and also to download and upload videos and other learning materials because of poor connection that causes delay of submission of my course requirements." [Female, 26, Fourth Year]

Connectivity problems become even more stressful during examinations, as articulated by one of the respondents:

"It becomes stress[ful] when we are having online examination, midterm and quizzes and the connection isn't stable. It is hard for us to take examinations with poor connection. And you get more stressed when nearing submission - you get stressed the whole day." [Female, 19, Second Year]

As can be gleaned from Table 1, under the financial factors, Item No. 1 (Struggling with connectivity expenses such as "load" for cell phones,

Table 1. Respondents' Level of Stress

Table 1. Respondents' Level of Stress   Task/Activity	Med	Description
a. Relationship with Teachers		200011011
1. Establishing personal, intellectual, and emotional connection with teachers.	2	Slightly stressed
2. Getting motivation and encouragement from teachers during times of self-doubt.	1	Not stressed at all
3. Getting in touch and approaching teachers for assistance when needed.	1	Not stressed at all
4. Getting enough consideration from teachers in case of delays in submission of course		
requirements.	2	Slightly stressed
5. Coping with demands and meeting expectations from teachers.	2	Slightly stressed
Overall Median	2	Slightly stressed
b. Relationship with Classmates		8 )
1. Staying connected with classmates personally and academically.	2	Slightly stressed
2. Collaborating with classmates during group activities, group performances, or complying		
with group requirements.	2	Slightly stressed
3. Exchanging or sharing files, modules, reference books and other learning materials.	2	Slightly stressed
4. Getting updates regarding class activities, requirements and other submissions from		
classmates.	2	Slightly stressed
5. Getting in touch and approaching classmates for assistance when needed.	2	Slightly stressed
Overall Median	2	Slightly stressed
c. Technology-Related Factors		8 7
1. Getting stable internet signal during online classes.	3	Stressed
2. Getting internet signal fast enough for class requirements, such as for viewing,		G. 1
downloading and uploading videos and other learning materials.	3	Stressed
3. Acquiring computer and other ICT skills needed to comply with requirements for different		a. 1
courses.	3	Stressed
4. Getting gadgets and devices with appropriate hardware and software specifications to meet		
required storage capacity, speed, and processing power for online classes.	3	Stressed
5. Getting access to websites and web pages needed to comply with course requirements.	2	Slightly stressed
Overall Median	3	Slightly stressed
d. Financial Factors		
1. Struggling with connectivity expenses such as "load" for cell phones, wifi devices and		a. 1
other gadgets.	3	Stressed
2. Coping with expenses for printing, photocopying, binding, etc.	3	Stressed
3. Meeting expenses required for daily subsistence such as food and other personal needs		
(soap, toothpaste, shampoo, vitamins, medicines, etc.).	2	Slightly stressed
4. Contending with expenses for transportation, board and lodging, and others.	2	Slightly stressed
5. Meeting expenses for leisure and relaxation and for engaging in one's passion.	2	Slightly stressed
Overall Median	2	Slightly stressed
e. Psychological Factors		6 5
1. Sustaining one's motivation to learn and to continue studying.	2	Slightly stressed
2. Keeping focused on one's academic and life goals.	2	Slightly stressed
3. Maintaining one's self confidence, as well as having a positive self-concept and an	2	
optimistic outlook in life.	2	Slightly stressed
4. Coping with expectations from parents, siblings, peers and others.	2	Slightly stressed
5. Getting time to engage in one's passion or hobbies to break monotonous academic		
routines.	2	Slightly stressed
Overall Median	2	Slightly stressed
f. Cognitive Factors		
1. Understanding, absorbing, internalizing skills, information and concepts being taught.	2	Slightly stressed
2. Complying with, and meeting deadlines for submission of, course requirements (term		
papers, projects, portfolio, etc.)	2	Slightly stressed
3. Taking online examinations (quizzes, mid-term exams, final exams).	2	Slightly stressed
4. Understanding the relevance of what is being learned to the expected skills, knowledge and		
competencies required for the profession or degree.	2	Slightly stressed
5. Establishing a connection and a sense of continuity among the different topics and lessons	2	C1:-1-41 1
taken up in the course	2	Slightly stressed
6. Acquiring a holistic understanding of course content.	2	Slightly stressed
Overall Median	2	Slightly stressed

Wi-Fi devices, and other gadgets) and Item No. 2 (Coping with expenses for printing, photocopying, binding, etc.) under financial factors caused the study participants to feel stressed, as indicated by the median score of three (3). As shown by the higher median for the first two statements, most of the stress related to financial factors also have something to do with technology-related factors. The two factors seem to go together.

One participant shared this experience, thus: "I am always struggling when it comes to [buying] load and I also experienced that when my teacher required us to submit printed output. I am always struggling with financial expenses. I am stressed with these things because I am embarrassed and guilty when I always depend on my parents." [Female, 20, Third Year]

Another respondent echoed the same feeling: "It brings stress to me because we don't have enough money to buy laptop and to support weekly load for online class and for downloading files." [Female, 21, Third Year]

Sharing his experiences with regards to financial factors, a respondent wrote:

"I was stressed with this thing because they are badly needed every day to buy things we need like food, load for online class or connecting to the internet to do some task and activity that is given to me. The very stressful thing is even [if] I work hard and have some sidelines, sometimes it is not still enough to cope [with] my financial needs." [Male, 22, Fourth Year]

This response from one of the informants practically summarizes the sentiments expressed by the majority:

"Financial problems lead to stress and it is quite hard to comply with the needed requirements especially school stuffs." [No sex indicated in responses, 22, Fourth Year]

Under psychological factors, a median score of two (2) was registered, signifying that the study participants felt slightly stressed about the individual statements.

The descriptions below from two respondents give us a glimpse of how psychological factors have caused stress and what effects it can have:

"The problem which caused me the greatest stress are psychological factors, like over thinking, because I don't gain advice from my parents because we are from [a] broken family. Sometimes I felt alone and cried at night. I just feel hopeless especially that I'm not relying [for] my expenses on my parents as we're just poor." [Female, 22, Irregular]

"I cannot focus on answering my modules because of the existing family problems. And these existing problems made me think and think that leads to anxiety. It has been stressful for me to resolve and to think of answers for my modules." [Female, 20, Second Year]

Overall, stress caused by psychological factors has adversely affected learning, as can be inferred from a participant's description of the effects of such factors:

"... having anxiety, reduced motivation toward studies, increased pressures to learn independently, and loss of routine." [Female, 23, Fourth Year]

Table 1 also shows that each of the items under cognitive factors registered a median score of two (2), suggesting that the respondents felt slightly stressed with regard to the individual tasks described. It appears that the most common source of stress relative to cognitive factors is the physical absence of a teacher to guide and assist, which eventually resulted in reduced ability to learn, as reflected in the following responses from four participants:

"I am stressed because sometimes I don't understand the topic well and struggle in answering my modules. In my situation, I'm not used to this modular learning because for me it's better that I get guidance from a teacher." [Female, 22, Fourth Year]

"I struggled to absorb all the lessons without the teacher to actually present the topic. If I were to be asked what I have learned, I will say "None." [Male, 22, Fourth Year]

"I can't access some information regarding our lesson or discussions. Due to (pure) self-studying I can't understand some of the lessons in our modules. Unlike before, there is always a teacher to guide and teach us. I learned many things." [Female, 20, First Year]

"It becomes stressful to me if the contents of modules are very hard to understand or new to me, because there is no nearby teacher or people who can explain to me about the topic." [Male, 20, Third Year]

## **Qualitative Results**

From an in-depth analysis of the participants' articulations of their stress coping strategies, the SCCAD (spiritual, connective, cognitive-affective, and divertive strategies) framework emerged through which they handled stress.

### Spiritual Strategies

This cluster of strategies refers to the participants' tendency to draw strength from God in their effort to overcome stress. They disclosed that their faith is one of the things that kept them wanting to strive even through the most difficult times during the pandemic. Many of them found comfort and strength from prayers, which is one of the most used coping strategies among the respondents. This is seen in the following declarations from these participants:

"The best strategy that I have done to overcome my stress is by means of praying – it's a very helpful way to achieve inner peace within my mind and heart." [Female, 20, Third Year]

"First and foremost, nothing will make you at peace; only a sincere prayer together with hard work makes all things impossible possible." [Female, 21, Third Year]

"I overcome stress [and] continue to learn and make the most of the "new normal" situation through prayer and unending faith in God and trust to myself that I can handle this stressful situation." [Female, 20, First Year]

"I always pray to our Almighty God to give me strength everyday so that I could overcome all the hardships that I will encounter." [Female, 22, Third Year]

In addition to prayers, the participants' spiritual strategies also included active participation in church activities. The various activities mentioned by the respondents include attending church on Sunday, prayer meetings, reading the word of God or attending bible study, fellowship, singing and/or listening to worship songs, joining youth camp, and meeting their spiritual leader. Apparently, taking part in church activities or engaging in spiritual pursuits comprises a large part of the respondents' coping mechanisms. The role that participation in church endeavors plays is summarized by the following response from a participant:

"I prefer to engage more in church activities to gain spiritual knowledge that will help me overcome stress and keep my spirit up to face all the challenges and problems caused by the things around us during this time of pandemic." [Female, 26, Fourth Year]

Evidently, the participants' spiritual coping strategies are rooted in their strong faith in God. A study participant's concise description of one of his coping strategies exemplifies his belief in the potency of faith in enabling one to manage stressful experiences:

"One of the most important things I have done to cope with all of these [stress] is to never lose faith in our God Almighty and by always praying for His guidance and protection. [Male, 43, Fourth Year]"

This is reiterated in the responses from two other participants who have also expressed complete belief in the power of faith as an instrument for conquering stress:

"I always surrender my worries to God because I know He's always there for me no matter what. And I always strive to become a strong person so that I can do my best to achieve my goals and to overcome challenges in life." [Female, 21, Second Year]

"If I had nothing to help me [cope] and [nobody] to be with, I always have my God by my side. He is my strength. He is the reason why I overcome my stressful life when the pandemic started." [Female, 22, Fourth Year]

"I keep on praying and trusting God because I know that He will help and give me strength to overcome the stress and difficulties [I experience] in my studies." [Female, 21, Fourth Year]

### **Connective Strategies**

This set of strategies is characterized by the study participants' yearning to connect or bond with family and loved ones, including friends and classmates, to muster additional strength to manage and overcome stress. Expectedly, the family is one of the study participants' most frequently mentioned sources of motivation, considering that the Filipino family is generally close-knit.

The respondents' desire to connect with family and loved ones to reinforce their will to survive and prevail can be gleaned from the following narratives:

"I talk and bond with my family. I always share my worries about the semester with them - what's going on with my studies. It's my best way to cope with study stress." [Female, 19, First Year] "[What] I do to overcome stress and continue to learn and make the most of the new normal situation is become active all day. I also stay connected with the people I love and care [about]. I always call and text them, especially my family in Olongapo. I also spend time with the people who make me happy - my baby, family, friends and neighbors." [Female, 24, Fourth Year] "As a student experiencing stress, it is good to always have a connection or having a talk with family, friends, and other people you are comfortable with." [Female, 23, Fourth Year]

The corpus of data shows that the family has been one of the most reliable sources of motivation for many of the study participants, as evidenced by the following affirmations:

"I manage my stress by staying with my kids because every time I see them it pushes me to strive harder for their future, for our future. Being a mom is not a hindrance to achieve my goals in life. During pandemic I had built a strong relationship with my family which encourages me to fight and keep my pace at all times." [Female, 22, Fourth Year]

"My family gave me motivation and advised me to continue in spite of the challenges that I had experienced. And I am thankful because without

them, maybe I have already stopped studying." [Female, 21, Third Year]

"With the presence of my family, I am still standing and breathing. They are the ones who keep valuing my worth and believing in me that someday I will become who I want to be." [Female, 22, Fourth Year]

One aspect of connective strategies that has also helped the participants overcome stress is the social support they can access through friends, relatives, classmates, and even teachers. This is demonstrated in the following responses:

"The strategies that I used to keep myself from being overwhelmed by stress and still achieve my goals as a student in spite of the pandemic was to gain motivation from my family, relatives, and friends – that no matter how hard the situation is, I need to be strong to achieve [my goals] and overcome the struggle and challenges [I encounter]." [Female, 21, Fourth Year]

"I talk with my family and share my experiences and connect with my classmates and friends." [Female, 21, Fourth Year]

"My parents always taught me to be strong and to be always grateful for big or small things. Also, my teachers always cheer me up that I don't give up and just keep going." [Female, 22, Third Year]

Over and above everything else, however, the family is the pillar of support most of the participants relied on, as expressed in a brief but poignant pronouncement from a participant:

"[I consider] my family as my greatest support system." [Male, 22, Fourth Year]

## **Cognitive-Affective Strategies**

This group of strategies pertains to the selfregulatory coping techniques characterized by the participants' attempt to control the way they perceive their stressful experiences either by thinking about their difficult situation in a self-motivating way or by striving to have conducive feelings about the stressful circumstances surrounding them. These strategies have cognitive and affective dimensions that cannot be separated from one another in a clear, accurate, and defined manner, hence the category label "cognitiveaffective."

To cope with academic stress, many of the student respondents adopted a positive outlook towards the stress they encountered. Indeed, positive thinking played a crucial role as they tried to handle stress, as can be gathered from the following statements from a participant:

"I always think that those issues and problems of mine will be given solution if I just think positive and never give up for [I know] these are just a challenge for me as a student and as a person. We just need to think of the possibilities to survive those problems especially that I know we students are always experiencing such difficulties in our studies before achieving our goals." [Female, 19, Second Year]

"I always think positive, pray, and I tell myself, "I can do this! Don't give up!" [Female, 23, Fourth Year]

"As I am facing these struggles and stress, I always keep on believing that after all of these, I know there are good things that will also happen for sure. I know this is happening to me for a good reason." [Female, 23, Fourth Year]

Another approach employed by the participants is keeping themselves motivated. Self-motivation contributed significantly to the participants' attempt to handle stress, as seen in the following words from a respondent:

"Self-motivation is a must. I keep telling myself, "No other person will help you, but yourself". It is a matter of priorities and mindset for me. If you think you can do it, then you can do it. It is just a matter of [having a] positive outlook in life." [Female, 21, Third Year]

For others, the source of motivation is family and loved ones, as shown in the following explanations from three participants as to how they have managed stress:

"By believing in ourselves that no matter the hindrances we meet [we should] just focus on our dreams. Also, my loved ones, parents and peers motivate me." [Female, 22, Fourth Year]

"One of the reasons is that I have a dream that I want to reach someday. Yes, it's hard, it's stressful, but it's for my parents." [Female, 21, Second Year]

"I need to achieve my goals to pay back the sacrifices and the hard work that my parents do to put me through college and give them the life that they want to have." [Female, 19, Second Year]

Still, for some others, the source of motivation is the dream itself, the goal that they have set for themselves, as can be inferred from the following responses:

"I am just motivated to finish school even though there are many obstacles in life because I have to work hard and reach my dream of having a good life." [Female, 27, First Year]

"My dream to become a successful and competent teacher drives me to continue despite the stressful [situation] brought [about] by technology-related factors." [Male, 21, Third Year]

"In spite of the pandemic, I keep myself focused on achieving my goals and ignore all these stressful issues and problems. I just go with the flow of this new normal situation and continue to learn." [Female, 26, Fourth Year] "Just thinking about why I started and the challenges I've already overcome makes me realize that there is a finish line, and when it arrives, I'll smile and tell myself, "I'm proud of you." [Female, 20, Third Year]

#### **Divertive Strategies**

Another group of stress management techniques that emerged from the participants' coping narratives is divertive strategies. This set of strategies refers to the participants' effort to temporarily divert their energy and attention to other activities away from academic tasks. They aim to recharge themselves while their minds are tentatively removed from stress-inducing schoolwork. Undoubtedly, this stratagem has been effective for many of the participants, as expressed in the following responses:

"Taking a break is the only thing that kept my spirits up to avoid physical strain and mental burnout." [Female, 21, Third Year]

"The activities that I do to keep my spirits up include cleaning. I know it is very strange to hear but when I am cleaning, there are a lot of good thoughts that are hitting my mind. Good thoughts that helped me to have hope, clear my mind from over thinking and to continue." [Male, 20, Third Year]

Interestingly, engaging in domestic activities provided a substantial amount of respite from stressful coursework for the informants, as articulated in the following testimonies:

"Since we are modular, I decided to raise ducks and rabbits so that I won't be stressed while studying alone. I also plant vegetables like pepper and tomatoes. Now I'm starting to plant some lettuce so that I will never be overwhelmed with stress. In these things that I do, it also teaches me how to manage my time in doing household chores, [answering] modules and taking care of my pets." [Female, 25, First Year]

"I enjoy raising swine, chickens, and ducks. I also enjoy being a fur mommy to my dogs." [Female, 32, Third Year]

"During the pandemic, I found this crocheting as stress free and relaxing. I've learned a lot through crocheting. I have developed once again my selfconfidence and [enhanced my] fighting spirit as I've finished a project. Through crocheting, I can focus, I can think, learn and enjoy." [Female, 23, Fourth Year]

"Taking care of my plants and think positive always." [Female, 34, Second Year]

Furthermore, entertainment in the form of TV shows, movies, videos, and the like also provided a much-needed break to the participants, as can be deduced from the following accounts:

"I sometimes watch encouraging and inspiring videos to build my spirit up and also watch funny videos whenever I feel tired." [Female, 20, Third Year]

"I let myself have some fun sometimes. Instead of focusing so much on answering modules, I give myself a one-day or two-day break. I watch some movies and sometimes I don't answer modules during the break." [Female, 23, Fourth Year]

"The activities that I engaged in to keep my spirits up are spending some time alone, watching movies and K-dramas, hanging out with my friends, and taking a walk." [Female, 22, Fourth Year]

"Watching comedies - I know that it will not help me in answering my modules but I just want to remove my stress, even if it is just temporary." [Female, 20, Third Year]

Likewise, engaging in their hobbies or favorite pastimes provided opportunities for the participants to deviate tentatively from academic chores. In addition to singing, dancing, gardening, and communing with nature, the participants spent a significant amount of time reading, which enabled them to escape the dreariness and monotony of academic work. This is made evident in the following reports from the respondents:

"I engaged myself in reading books, a quick escape [from] reality. I love to read motivational quotes so I can keep going." [Female, 21, Third Year]

"I just read books. I know it is weird but reading books actually helps me to stay focused and not to be stressed. Reading interesting stories makes me happy so when I am stressed with school works and problems in [my] family, I just read books because it makes me calm and I forgot all the problems especially [during] this pandemic. So, to dissipate my stress in this situation I just focused on reading books because my fears, stress, and doubts disappear when I start to read interesting stories." [Female, 21, Fourth Year]

"Reading and watching movies are the activities I engaged in to keep my spirits up." [Female, 21, Third Year]

Finally, engaging in sports or performing other physical activities served as momentary relief from stress for some study participants. In addition to playing basketball or volleyball, other physical activities included doing exercises such as walking, jogging, and biking.

"I always try to be physically fit [by doing some exercise] like walking and jogging in the morning to relieve some stress and to give my mind some peace, because now, I don't want stress to bring me down." [Female, 21, Fourth Year]

"I exercise every morning, sometimes [I go] biking. It helps me to relax. When I have had my exercise, it takes out my stress and I feel the freedom from problems." [Female, 22, Fourth Year]

"To keep my spirits up, I exercise regularly, spending time with my family and friends, getting enough sleep, cooking, reading and watching inspirational movies. I always maintained my daily activities and routines to keep myself active and to avoid stress." [Female, 21, Fourth Year] "One thing I do is the breathing exercise. It helps me to find peace in a short time and bring back my focus as well as helps me to unleash negativity in mind." [Female, 20, Second Year]

To recapitulate, the quantitative data gathered from the study participants indicate that they were slightly stressed by the identified factors as shown by the grand median of 2, with the description of Slightly Stressed, except for technology-related factors, which registered an overall description of "Stressed." The qualitative data, on the other hand, revealed the coping strategies adopted by the respondents, namely, the spiritual, connective, cognitive-affective, and divertive strategies, or, in short, the SCCAD coping framework.

The quantitative data gathered for this study revealed that technology-related factors triggered the highest stress level among the study participants, as seen in Table 7 in the previous section. The problem lies not in the unavailability of devices but in poor connectivity.

The findings from recent studies corroborate the finding that technology-related factors were a significant source of stress for students during the COVID-19 pandemic. A study by Essel, et al. (2021) revealed that technology-induced stress was prevalent among Ghanaian university students, with poor internet connectivity being a major contributing factor. Similarly, Kulikowski, et al. (2022) found that the sudden shift to online learning and the associated technological challenges caused considerable stress and anxiety among students. These studies underscore that the problem lies not in the unavailability of devices but rather in the poor quality of internet connectivity, which exacerbated students' stress levels during the pandemic.

It should be noted that this study was conducted during the pandemic. Hence, students could not go to locations with stable signals due to restrictions on mobility imposed by the Inter-Agency Task Force (IATF). Against COVID, the government arm is primarily tasked to oversee state efforts to combat the virus locally. Since the pandemic has abated, this may not be a serious problem among RSU students, especially now that the University has provided free Wi-Fi access to all its colleges and campuses. Since this study was conducted to generate data for the University's guidance and health units regarding a potential academic stress management program, whatever aspects of the program intended to address technology-related factors should be recalibrated based on currently existing conditions.

All other categories of stress-causing factors included in the instrument garnered an overall description of "Slightly Stressed," indicating a moderate level of stress among the respondents. This can be attributed to the fact that getting a college degree can really be expected to cause, at the very least, a moderate amount of stress among students. As reported by Shadi et al. (2017), various research has shown that students generally experience enormous amounts of academic stress during their schooling. It is unreasonable, therefore, to expect to see a completely stress-free academic setting.

Additionally, the corpus of qualitative data surfaced the study participants' strategies for coping with academic stress, namely spiritual strategies, connective strategies, cognitive-affective strategies, and divertive strategies (SCCAD).

## Spiritual Strategies

As spirituality offers a sense of meaning, purpose, and belonging that can assist in reducing stress and offer comfort and support, religion can be a stress-coping method for many people. Spirituality is an important aspect of life, and many people turn to religion in times of stress to cope (Ellison, 2001). This is particularly true among Filipinos, generally considered religious people, who often manifest unshakeable faith in God even during difficult times, making them resilient against stress (Abad, 2001). Their firm belief in God gives them happiness, believing that God will answer their prayers, guide them, and never abandon them (Abad, 2001).

The participants' use of spiritual strategies, particularly praying, in coping with stress is consistent with findings from previous inquiries, confirming the potency of engaging in spiritual practices and activities to manage stress. For instance, LaBarbera and Hetzel (2016) wrote that most studies focusing on the effect of prayer have reported that praying generally affects one's mental health positively, including one's overall life satisfaction. LaBarbera and Hetzel (2016) reported further that prayer helps alleviate anxiety and depression and can serve as an effective stress-coping strategy (Wachholtz & Sambamthoori, 2013). Even the simple act of repeating holy names can have therapeutic effects (Oman & Driskill, 2003), making contemplative prayers an effective antidote to the pressures of a busy life (Wong, 2005). The correlation between prayer and reduced anxiety was demonstrated by Ferguson et al. (2010). In the academic realm, Belding et al. (2010) found that college students who prayed and engaged in positive self-talk experienced a lower level of stress. Further, Clements and Ermakova (2012) reported that

people who believe in a caring and all-powerful God find peace even in adverse situations because they are convinced that God will make a way for them to cope with difficult circumstances.

By and large, religious or spiritual coping is generally associated with more desirable reactions to stressful experiences. For example, Pargament et al. (1990, cited in Ellison, 2001) revealed that stress-coping strategies that involve faith in a compassionate God, feeling of having God as a partner, participation in religious activities, and finding spiritual support all lead to better results in terms of coping with stress. Indeed, any academic stress management program should provide ample opportunities for students to engage in spiritual pursuits, as they have been proven to produce affirmative results.

#### **Connective Strategies**

Family support (Patterson & McCubbin, 1987) and relationships within the family often provide the individual with an effective means to cope with stress, resulting in healthier behaviors, improved self-esteem, and an enhanced general sense of well-being (Thomas et al., 2017).

By and large, the Filipino family is a close-knit social unit. The cohesive character of the family often serves as the primary source of emotional support for many adolescents. Understandably, children's perceptions of having supportive parents lead to enhanced self-esteem and social assimilation, perception, control, and the general effectiveness of their coping strategies (Caycho, 2016). Family support, among other factors, helps shield individuals from the negative psychological and emotional effects of stress (Holahan & Moos, 1986). No wonder many study participants wanted to connect with family as one of their stress-coping strategies. Being loved and appreciated by one's parents is conducive to developing effective coping strategies (Caycho, 2016). Felner et al. (1985) stressed that the family's functioning level and organization are crucial factors in the adolescent's ability to adapt to stressors.

The family belongs to the larger concept of social support, including friends, relatives, neighbors, and even co-workers (Thoits, 1986). They primarily function as sources of socio-emotional and informational assistance, as well as instrumental aid (House, 1981; Turner, 1983, cited in Thoits, 1986). A significant number of the respondents indicated connecting with loved ones outside the immediate family as one of their stress-coping strategies. Many of them sought emotional support from relatives and friends. This is consistent with findings from other studies, which underscore the importance of connecting with friends as a coping strategy. Redhwan et al. (2009) reported "going out with friends" as one of their strategies for coping with stressful situations, together with availing of counseling services and sharing problems, among a few others.

The availability of strong social support is of foremost importance in coping with stress as it mitigates the adverse effects of stress on one's well-being (Thoits, 2010). Moreover, social support likewise fosters a positive sense of well-being through enhanced selfesteem, resulting in a more positive self-concept (Fukukawa et al., 2000). Indeed, people who receive support from family members feel a heightened sense of self-worth, which leads to enhanced self-esteem, which may promote optimism, positive emotions, and a healthy mindset (Symister & Friend, 2003).

All the foregoing implies that an intervention program aimed at enhancing the stress-coping capabilities of our students should include provisions for strengthening connections among family, relatives, and friends. As underscored in the foregoing discussion, the family and the larger social support play a key role in one's efforts to cope with stress.

## Cognitive-Affective Strategies

Based on the transactional stress theory (Lazarus & Folkman, 1986 in Caycho, 2016), coping is a cognitive and behavioral attempt to handle situations that are assessed as challenging or beyond the resources and capabilities of an individual. Lazarus and Folkman (1986, in Caycho, 2016) averred that there are two types of coping: problem-focused and emotion-focused. Problem-focused coping is more on the cognitive dimension, while emotion-focused coping is more affective in nature. This validates one of the themes generated in this study, which is the cognitive-affective dimension of coping, and the strategies related to this aspect of coping.

Deyreh (2012) reported that between the two categories into which stress responses may be classified, namely cognitive and affective, the former has been found to be more effective than the latter. When individuals employ cognitive coping strategies, they apply higher-order mental skills, including information processing, use of logic, and cognition. On the other hand, when affective strategies are used, the person's tendency is to resort to disengagement and avoidance, hence the low level of effectiveness in dealing with stress. It should be pointed out at this juncture that affective strategies do not only consist of disengagement and avoidance but also constructive ways of managing one's emotional reactions to stress (Holahan & Moos, 1987). In the end, Deyreh (2012) concluded that people who opt for cognitive coping strategies achieve a higher degree of success in managing stress.

One of the strategies identified by the study participants under this category is positive thinking. Sasson (2014) described positive thinking as a cognitive

and emotional approach in which the brighter side of an experience is given focus and positive results are expected. According to Garayeva (2022), positive thinking comprises cognitive, affective, and behavioral components. Apparently, adopting an optimistic view of their experiences during the pandemic helped the informants handle academic stress. As Naseem and Khalid (2010) pointed out, positive thinking leads to positive emotions, optimism, hope, and joy, among other constructs. By adopting a positive cognitive and affective stance, stress tends to be perceived as less threatening, resulting in an enhanced ability to deal effectively. In short, positive thinking can help reduce stress and amplify feelings of resilience and general well-being.

Motivation is another important component of the participants' cognitive-affective coping strategies. According to Rabideau (2005), motivation is the force that drives people towards certain courses of action. Based on one's emotions and individual goals, as well as on personal needs and aspirations, motivation strongly influences behavior (Rabideau, 2005). Motivation plays a crucial role in dealing with academic stress. The dynamics between academic stress and academic performance are affected by learners' coping strategies and motivation (Struthers et al., 2000). Struthers et al. (2000) further stressed that there exists a positive correlation between academic stress and motivation, explaining that this may have been caused by two factors, namely the value of performing well academically in specific courses and the importance of doing well in general.

Cognizant of the importance of motivation in dealing with stress, Struthers et al. (2000) advised teachers in college to fully understand how learners' coping styles affect their motivation and performance, as this can help instructors teach their students how to be more effective in managing stress. Finally, Struthers et al. (2000) concluded that coping and motivation are interrelated constructs and, therefore, should be considered in relation to one another.

## **Divertive Strategies**

Divertive strategies are enjoyable activities to distance oneself from the source of academic stress temporarily, but with the full intent of returning to it once recharged or reenergized.

Moderate and high stress levels are common experiences among college students (Çevik, 2020), and engaging in leisure activities is an important divertive strategy in processing stress (Iwasaki, 2001). It is hardly surprising, therefore, that among the stress coping strategies reported by the study participants, leisure activities feature prominently. The hobbies and relaxation activities mentioned by the respondents fall under Kim and McKenzie's (2014) leisure classifications: active, passive, and social. The active leisure activities they described consist of doing various forms of exercise, playing their favorite sports, taking care of their plants, going for a walk, cleaning the house and doing other household chores, raising animals, and caring for pets. Passive leisure activities, on the other hand, included reading, watching TV shows, movies, or online videos, crocheting, or simply taking a break. Only one type of social leisure was mentioned: hanging out with friends.

By and large, when people are exposed to stressful circumstances, they tend to employ certain coping techniques, such as leisure coping methods (Iwasaki & Mannel, 2000). Leisure coping is a common stress management strategy. A study by Lagunes-Córdoba et al. (2022) involving psychiatrists and trainees recommended engagement in leisure activities to improve the well-being of healthcare workers because leisure activities correlate with enhanced physical and mental health. Moreover, in their studies involving college students, Reich and Zautra (1981) found a correlation between regular participation in leisure activities and low levels of stress. Leisure activities generally serve as sources of enjoyment and satisfaction; hence, they play significant roles in people's coping resources (Cevik, 2020).

Iwasaki (2001) believed that one of the ways people may handle stress effectively is through coping by means of leisure, particularly through what he labeled leisure palliative coping, in which people temporarily take a break from a stressful event or experience to recharge, feel reenergized and take stock of their coping resources in order to be better equipped in solving their problems (Patterson & Carpenter, 1994). Lazarus et al. (1980, in Iwasaki, 2003), upholding the concept of leisure as a palliative coping strategy, argued that desirable leisure activities can act as "restorers" and "breathers" from stress that can sustain coping efforts. As "restorers," leisure pursuits (and other forms of meaningful positive events) help people to replenish coping resources – or even create new ones – enabling them to recover more quickly from the adverse effects of stress (Folkman et al., 1997 in Iwasaki, 2003). Even simple leisure such as a short vacation, a coffee break, or even a siesta or recess from school may provide opportunities for diversionary activities, thereby giving the individual a temporary respite from stress (Folkman et al., 1997, in Iwasaki, 2003). Furthermore, leisure and other fulfilling activities are sources of positive reinforcement for helpful coping, thereby motivating the individual to persist, with the effect of sustaining one's coping efforts (Folkman et al., 1997 in Iwasaki, 2003).

Leisure activities provide a tentative break from stressful events by keeping the mind and body occupied, making leisure palliative coping an escape-oriented coping mechanism (Iwasaki & Mannel, 2000). Many of the participants in this study resorted to various kinds of leisure in their effort to cope with academic stress. This underscores the importance of including leisure dimensions in intervention programs intended to help students cope with stress more effectively. As pointed out by Çevik (2020), university administrators may learn important insights from the interaction between the perceived degree of stress and leisure coping techniques, enabling them to design more effective school recreation programs intended to empower students against the negative effects of stress.

## CONCLUSION

By and large, university students experience varying degrees of academic stress and it is of foremost importance that they are able to manage stress if they are to maintain their mental health and general well-being. Through the convergent parallel mixed methods design, this inquiry disclosed that technology-related factors caused the greatest stress to Romblon State University education students during the COVID-19 pandemic as compared with other stressors like relationships with teachers, relationships with classmates, technologyrelated factors, financial factors, psychological factors, and cognitive factors. Additionally, this study phenomenologically surfaced the SCCAD strategies (spiritual, connective, cognitive-affective, and divertive strategies) through which the informants coped with academic stress during the COVID-19 scourge.

The findings in this study can be of value to the university particularly with respect to the design of intervention programs aimed at enhancing students' capability in managing stress more effectively. It is recommended that stress-coping intervention programs to be implemented in the university should focus on increasing knowledge and practice of any or all of the coping strategies that emerged in this investigation, namely spiritual, connective, cognitive-affective, and divertive strategies.

As this study focused solely on education students, it is likewise recommended that similar inquiries be made in other colleges and universities to explore similarities and uniqueness of the coping strategies of students from other disciplines

## **AUTHORS' CONTRIBUTIONS**

VF led the study while LM and MF served as his assistants and co-researchers.

## **CONFLICT OF INTEREST**

The authors declare no conflict of interest.

### REFERENCES

- Abad, R. G. (2001). Religion in the Philippines. *Philippine Studies*, 49(3), 337-367. <u>http://www.jstor.org/stable/42634448</u>
- Alvarado, L. K. A., Soler, S. C. G., González, J. C., Soler, S. C. G., & González, J. C. (2021). Gone with the pandemic: effects of Covid-19 on academic performance in Colombia (No. 19339). Universidad Javeriana-Bogotá.
- Belding, J. N., Howard, M. G., McGuire, A. M., Schwartz, A. C., & Wilson, J. H. (2010). Social buffering by God: Prayer and measures of stress. *Journal of religion and health*, 49, 179-187. https://doi.org/10.1007/s10943-009-9256-8
- Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. In *The handbook of stress and health: A* guide to research and practice, 349-364. https://doi.org/10.1002/9781118993811.ch21
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267-283. https://doi.org/10.1037/0022-3514.56.2.267
- Caycho, T. P. (2016). Relationship with Parents and Coping Strategies in Adolescents of Lima. *Journal of Educational Psychology-Propositos y Representaciones, 4*(1), 37-59.
- Çevik, H. (2020). Investigating the Relationship between Perceived Stress and Leisure Coping Strategies among University Students: Eskisehir Technical University Case. International Education Studies, 13(6), 67-77. https://doi.org/10.5539/ies.v13n6p67
- Clements, A. D., & Ermakova, A. V. (2012). Surrender to God and stress: A possible link between religiosity and health. *Psychology of Religion and Spirituality*, 4(2), 93. https://doi.org/10.1037/a0025109
- Córdova, A., Caballero-García, A., Drobnic, F., Roche, E., & Noriega, D. C. (2023, June). Influence of stress and emotions in the learning process: The example of Covid-19 on university students: a narrative review. *Healthcare*, *11*(12). https://doi.org/10.3390/healthcare11121787
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Sage.
- Deyreh, E. (2012). Comparison between high school students in cognitive and affective coping Strategies. *Procedia-Social and Behavioral Sciences, 46, 289–293.* https://doi.org/10.1016/j.sbspro.2012.05.108
- Douwes, R., Metselaar, J., Pijnenborg, G. H. M., & Boonstra, N. (2023). Well-being of students in

> higher education: The importance of a student perspective. *Cogent Education*, 10(1). <u>https://doi.org/10.1080/2331186X.2023.219069</u> 7

- Elias, H., Ping, W. S., & Abdullah, M. C. (2011). Stress and academic achievement among undergraduate students in Universiti Putra Malaysia. *Social and Behavioral Sciences*, 29, 646-655. https://doi.org/10.1016/j.sbspro.2011.11.288
- Pargament, K. I., Tarakeshwar, N., Ellison, C. G., & Wulff, K. M. (2001). Religious coping among the religious: The relationships between religious coping and well-being in a national sample of Presbyterian clergy, elders, and members. *Journal for the scientific study of religion*, 40(3), 497-513. <u>https://doi.org/10.1111/0021-8294.00073</u>
- Esia-Donkoh, K., Yelkpieri, D., & Esia-Donkoh, K. (2011). Coping With Stress: Strategies Adopted by Students at the Winneba Campus of University of Education, Winneba, Ghana. US-China Education Review, 290-299.
- Essel, H. B., Vlachopoulos, D., Tachie-Menson, A., Johnson, E. E., & Ebeheakey, A. K. (2021). Technology-induced stress, sociodemographic factors, and association with academic achievement and productivity in Ghanaian higher education during the COVID-19 pandemic. *Information*, 12(12), 497. https://doi.org/10.3390/info12120497
- Felner, R., Aber, M., Primavera, J., & Cauce, A. (1985). Adaptation and vulnerability in high-risk adolescents: An examination of environmental mediators. *American Journal of Community Psychology,* 13, 365-379. https://doi.org/10.1007/BF00911214
- Ferguson, J. K., Willemsen, E. W., & Castañeto, M. V. (2010). Centering prayer as a healing response to everyday stress: A psychological and spiritual process. *Pastoral psychology*, 59, 305-329. <u>https://doi.org/10.1007/s11089-009-0225-7</u>
- Freire, C., Ferradás, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Núñez, J. C. (2020). Coping strategies and self-efficacy in university students: A person-centered approach. *Frontiers in psychology*, *11*, 530329. <u>https://doi.org/doi:10.3389/fpsyg.2020.00841</u>
- Fukukawa, Y., Tsuboi, S., Niino, N., Ando, F., Kosugi, S., & Shimokata, H. (2000). Effects of social support and self-esteem on depressive symptoms in Japanese middle-aged and elderly people. *Journal of epidemiology*, 10(1sup), 63-69. https://doi.org/10.2188/jea.10.1sup 63
- Gadermann, A. M., Guhn, M., and Zumbo, B. D. (2012). Estimating ordinal reliability for Likert-type and ordinal item response data: A conceptual,

empirical, and practical guide. *Practical* Assessment, Research, and Evaluation, 17(3). https://doi.org/10.7275/n560-j767

- Garayeva, S. (2022). Can thinking positive go wrong? A mixed-method study of positive thinking at work [Unpublished doctoral dissertation]. University of London.
- Hamaideh, S. H. (2009). Stressors and reactions to stressors among university students. International Journal of Social Psychiatry. https://doi.org/10.1177/0020764009348442
- Hellström, A., Hagell, P., Broström, A., Ulander, M., Luik, A.I., Espie, C.A., et al. (2019) A classical test theory evaluation of the Sleep Condition Indicator accounting for the ordinal nature of item response data. PLoS ONE 14(3) :e0213533. <u>https://doi.org/10.1371/journal.pone.0213533</u>
- Holahan, C. J., & Moos, R. H. (1987). Personal and contextual determinants of coping strategies. *Journal of personality and social psychology*, 52(5), 946. <u>https://doi.org/10.1037//0022-</u> 3514.52.5.946
- Holahan, C. J., & Moos, R. H. (1986). Personality, coping, and family resources in stress resistance: a longitudinal analysis. *Journal of personality* and social psychology, 51(2), 389. <u>https://doi.org/10.1037/0022-3514.51.2.389</u>
- Iwasaki, Y. (2001). Contributions of leisure to coping with daily hassles in university students' lives. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 33(2), 128. https://doi.org/10.1037/h0087135
- Iwasaki, Y. (2003). The impact of leisure coping beliefs and strategies on adaptive outcomes. *Leisure Studies*, 22(2), 93-108. https://doi.org/10.1080/026143603200058777
- Iwasaki, Y., & Mannell, R. C. (2000). Hierarchical Dimensions of Leisure Stress Coping. *Leisure Sciences*, 22(3), 163-181. <u>https://doi.org/10.1080/01490409950121843</u>
- Kim, J. H., & McKenzie, L. A. (2014). The impacts of physical exercise on stress coping and well-being in university students in the context of leisure. *Health*, 6(19), 2570. https://doi.org/10.4236/health.2014.619296
- Kulikowski, K., Przytuła, S., Sułkowski, Ł., & Rašticová, M. (2022). Technostress of students during COVID-19-a sign of the time?. *Human Technology*, 18(3). https://doi.org/10.14254/1795-6889.2022.18-3.3
- LaBarbera, R., & Hetzel, J. (2016). Christian educators' use of prayer to cope with stress. *Journal of religion and health*, 55(4), 1433-1448. https://doi.org/10.1007/s10943-015-0118-2
- Lagunes-Córdoba E, Yoldi-Negrete M, Hewson T, Guízar-Sánchez D, Robles-García R, Tovilla-

Zárate CA, Tracy D, Saracco-Alvarez RA and Fresán A (2022) A better way of life: The role of leisure activities on self-perceived health, perceived stress, confidence in stress management, and satisfaction with social support in psychiatrists and psychiatry trainees in Mexico. *Front. Psychiatry* 13, 1052275. https://doi.org/10.3389/fpsyt.2022.1052275

Latorre-Cosculluela, C., Sierra-Sánchez, V., Rivera-Torres, P., & Liesa-Orús, M. (2022). Emotional well-being and social reinforcement as predictors of motivation and academic expectations. *International Journal of Educational Research*, 115, 102043. https://doi.org/10.1016/j.ijer.2022.102043

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* Springer publishing company.

- Mahdy, M. A. (2020). The impact of COVID-19 pandemic on the academic performance of veterinary medical students. *Frontiers in veterinary science*, 7, 594261. https://doi.org/10.3389/fvets.2020.594261
- Naseem, Z., & Khalid, R. (2010). Positive thinking in coping with stress and health outcomes: Literature review. *Journal of Research & Reflections in Education (JRRE), 4*(1).
- Oman, D., & Driskill, J. (2003). Holy name repetition as a spiritual exercise and therapeutic technique. *Journal of Psychology and Christianity*, 22(1), 5– 19.
- Pariat, L, Rynjah, A, Joplin, M. & Kharjanap, M. (2014). Stress levels of college students: Interrelationship between stressors and coping strategies. *Journal of Humanities and Social Science*, 19(8), 40-46.
- Patterson, I., & Carpenter, G. (1994). Participation in leisure activities after the death of a spouse. *Leisure Sciences, 16*(2), 105-117. https://doi.org/10.1080/01490409409513223
- Patterson, J., & McCubbin, H. (1987). Adolescent coping style and behaviors: Conceptualization and measurement. *Journal of Adolescence, 10*, 163-186. <u>https://doi.org/10.1016/S0140-</u> 1971(87)80086-6
- Rabideau, S. T. (2005). Effects of achievement motivation on behavior. Retrieved from <u>http://www.personalityresearch.org/papers/rabid</u> <u>eau.html</u>
- Redhwan, A. A. N., Sami, A. R., Karim, A., Chan, R., & Zaleha, M. (2009). Stress and coping strategies among Management and Science University students: A qualitative study. *IIUM Medical Journal Malaysia*, 8(2). https://doi.org/10.31436/imjm.v8i2.751
- Reich, J. W., & Zautra, A. (1981). Life events and personal causation: some relationships with

satisfaction and distress. *Journal of personality* and social psychology, 41(5), 1002-1012. https://doi.org/10.1037/0022-3514.41.5.1002

- Sasson, R. (2014). The power of positive thinking. Success Consciousness. <u>http://www.successconsciousness.com/index\_00</u> 0009.htm
- Shadi, M., Peyman, N., Taghipour, A., & Tehrani, H. (2017). Predictors of the academic stress and its determinants among students based on the theory of planned behavior. *Journal of Fundamentals of Mental Health*, 20(1), 87-98. https://doi/org/10.22038/jfmh.2017.10060
- Shahmohammadi, N. (2011). Students'coping with Stress at high school level particularly at 11th & 12th grade. *Procedia - Social and Behavioral Sciences*, 30, 395-401. https://doi.org/10.1016/j.sbspro.2011.10.078
- Struthers, C. W., Perry, R. P., & Menec, V. H. (2000). An examination of the relationship among academic stress, coping, motivation, and performance in college. *Research in higher education,* 41, 581-592. https://doi.org/10.1023/A:1007094931292
- Subedi, B. P. (2016). Using Likert type data in social science: Confusion, issues and challenges. *International Journal of Contemporary Applied Sciences*, *3*(2), 36-49.
- Sullivan, G. M., & Artino Jr, A. R. (2013). Analyzing and interpreting data from Likert-type scales. *Journal of Graduate Medical Education*, 5(4), 541–542. <u>https://doi.org/10.4300/JGME-5-4-18</u>
- Symister, P., & Friend, R. (2003). The influence of social support and problematic support on optimism and depression in chronic illness: a prospective study evaluating self-esteem as a mediator. Health psychology, 22(2), 123. https://doi.org/10.1037/0278-6133.22.2.123
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting Research instruments in science education. *Research in Science Education.* 48(6), 1273-1296. https://doi.org/10.1007/s11165-016-9602-2
- Thoits, P. A. (1986). Social support as coping assistance. Journal of consulting and clinical psychology, 54(4), 416. <u>https://doi.org/10.1037/0022-006X.54.4.416</u>
- Thoits, P. A. (2010). Stress and health: Major findings and policy implications. *Journal of health and social behavior*, *51*(1\_suppl), S41-S53. https://doi.org/10.1177/0022146510383499
- Thomas, P. A., Liu, H., & Umberson, D. (2017). Family relationships and well-being. *Innovation in aging*, *I*(3), igx025. https://doi.org/10.1093/geroni/igx025

- Veena, N., & Shastri, S. (2016). Stress and academic performance. *The International Journal of Indian Psychology*, 3(4), 71-82.
- Wachholtz, A. B., & Sambamthoori, U. (2013). National trends in prayer use as a coping mechanism for depression: Changes from 2002 to 2007. *Journal* of Religion and Health, 52, 1356–1368. <u>https://doi.org/10.1007/s10943-012-9649-y</u>
- Wisdom, J., & Creswell, J. W. (2013). Mixed methods: integrating quantitative and qualitative data collection and analysis while studying patientcentered medical home models. *Rockville: Agency for Healthcare Research and Quality, 13*, 1-5.
- Wong, J. (2005). The Jesus prayer and inner stillness. Religion East and West, 5, 85-97.
- Yin, R. K. (2016). *Qualitative research from start to finish* (2<sup>nd</sup> edition). The Guilford Publications.
- Yusoff, M. S. B., Yee, L. Y., Wei, L. H., Siong, T. C., Meng, L. H., Bin, L. X., & Rahim, A. F. A. (2011). A study on stress, stressors and coping strategies among Malaysian medical students. International Journal of Students' Research, 1(2). <u>https://doi.org/10.5549/IJSR.1.2.45-50</u>