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## THE CHALLENGES AND EFFECTS OF ASYNCHRONOUS LEARNING ON STUDENTS' MENTAL HEALTH AT ROMBLON STATE UNIVERSITY

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### Abstract

There is evidence that the COVID-19 pandemic has raised people's levels of stress and despair. The health and safety of everyone are the biggest priority leading to schools and colleges all over the world transitioning to online classes, which is the only viable choice during these times. In the Philippines, the long-term challenges and effects of online learning on college student's mental health have been recognized by students, parents, professors, and teachers. However, this hasn't been adequately documented. This paper, therefore, would make an additional contribution to the field of knowledge of mental health, particularly to Filipino students.

This study assessed and explained the challenges and effects of asynchronous learning on college students' mental health at Romblon State University. Utilizing a descriptive-quantitative method of research, purposive sampling design, Slovin's formula, and stratified proportional random sampling technique, face-to-face, and an online survey were conducted among the fourth-year students. The researcher-modified instruments gathered were tallied and assessed using frequency and percentage distribution, weighted mean, and the Pearson r test. Results show that the respondents, who were all single, mostly female, and mostly BSBA-Financial Management students RSU, who spends about 3-5 hours of asynchronous activities per week, encounter many challenges that can significantly affect their mental health. However, despite their experiences, the respondents perceived stress scale resulting in "Sometimes" only reflects a good level of confidence and capacity of the respondents to deal with and recognize emotions which may account for why students are confident in their ability to achieve.

**Keywords:** Asynchronous learning; College students; Mental health; Online learning; Challenges

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### Introduction

The abrupt adjustment to e-learning was not as smooth sailing as many had expected. Along with the transition came various problems, including lack of internet connectivity, loss of social interaction, computer vision syndrome, shortage of educational materials, and the uncertainty and inexperience of operating online educational platforms such as Google Meet, Google Classroom, Moodle, Zoom, and others (Roach, 2022). Sarah Sherren (2022) documented that learning during a pandemic is an unusual experience. She emphasized that every student had a slightly different experience because some universities provide all their courses online while others experiment with a combination of in-person conversations and online learning. There is evidence that the public's levels of stress and depression have typically grown as a result of the COVID-19 pandemic. Eventually, adding the impact of the sudden halt on education and transitioning to online classes, the students, parents, professors, and teachers realized the challenges of online classes, especially the impacts on individuals, which brought mental health concerns.

In the Philippines, these health problems have yet to be well-documented, particularly those experienced by tertiary-level students. This paper aims to contribute to the field of knowledge by providing information relating to asynchronous learning and college students' mental health. The study assessed and explained the challenges and effects of asynchronous learning on students' mental health in the College of Business and Accountancy at Romblon State University-Main Campus. Specifically, it answered the following questions:

1. What is the demographic profile of the students in the College of Business and Accountancy, Romblon State University-Main Campus, in terms of?
  - 1.1 Sex;
  - 1.2 Civil status; and
  - 1.3 Course

2. How much time is spent by the students in asynchronous learning?
3. What are the challenges encountered by the students during asynchronous learning?
4. What are the effects of asynchronous learning on students' mental health?
5. Is there a significant relationship between the amount of time spent in asynchronous learning and the degree of effects on students' mental health?
6. Is there a significant relationship between the respondents' profiles in terms of sex, civil status, and course, and the effects of asynchronous learning on mental health?

## Materials and Methods

The descriptive-quantitative method of research was utilized in this study. The study used a purposive sampling technique and Slovin's formula to determine the total number of respondents, which were eighty-one (81) fourth-year students who have experienced asynchronous learning and are currently enrolled in the College of Business and Accountancy at Romblon State University-Main Campus.

A researcher-modified survey based on gathered literature and studies was developed. It was validated by two highly qualified professionals from outside the country, a psychologist and a psychiatrist. Afterward, a reliability pre-test was carried out, yielding a Cronbach's Alpha score of .922 for 47 items. This means that the instrument's reliability is excellent. Then the researchers conducted the online survey via Google form, which included a letter asking respondents for their informed consent and to assure them of the confidentiality and privacy of the information.

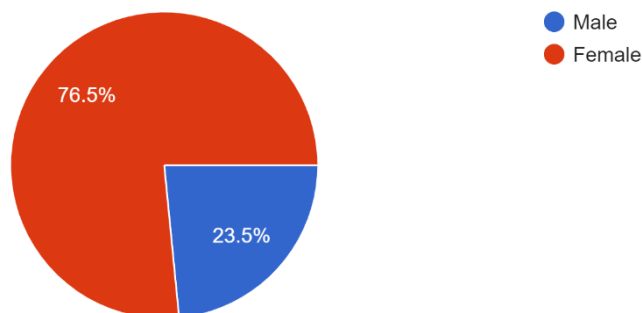
In analysing the data, the researchers used the frequency and percentage distribution for the profile, weighted mean to capture the challenges encountered and the effects of asynchronous learning on students' mental health, and Pearson moment correlation coefficient (Pearson  $r$ ) to test if there is a significant relationship between the two variables.

## Results and Discussions

### I. Respondents' Profile

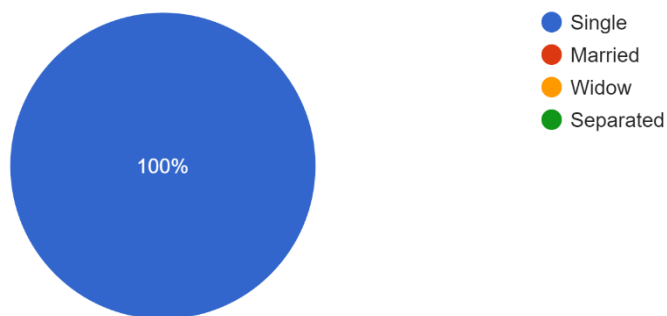
Sex

81 responses



The majority (76.5%) of the respondents are female. It is expected since the majority of the CBA students' population is female.

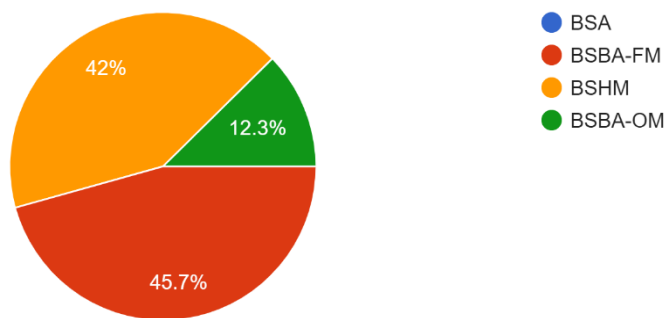
Civil Status  
81 responses



**Fig. 2. Respondents' Civil Status**

All (100%) respondents are single. This is probable since the respondents are still students.

Course  
81 responses



**Fig. 3. Respondents' Course**

Most (45.7%) of the respondents who answered the survey were Bachelor of Science in Business Administration Major in Financial Management students, followed by Bachelor of Science in Hospitality Management students (42%), and Bachelor of Science in Business Administration Major in Operations Management students only 12.3%. There were no Bachelor of Science in Accountancy students who answered the survey.

## II. Time Spent in Asynchronous Learning

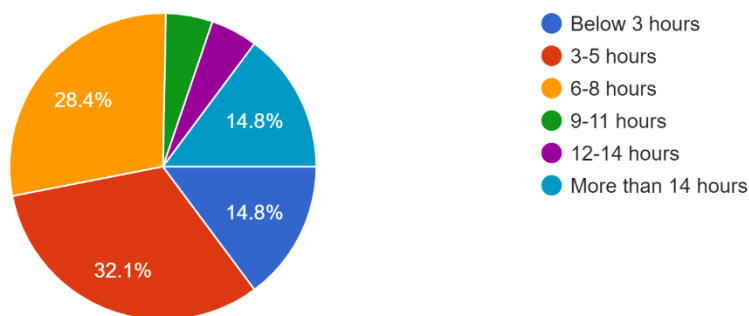
Out of 81 respondents, the majority or 32.1% responded with 3-5 hours spent for asynchronous activities per week, followed by 28.4% for 6-8 hours, then there are 14.8% who answered below 3 and more than 14 hours, while only 4.9% respondents spent 9-11 and 12-14 hours per week for their asynchronous activity.

The National Board of Professional Teaching Standard recommends 3-4 hours that grade 9-12 students should plan on spending number of hours learning online. As students advance to higher grades and work with more challenging course material, the amount of time spent in online learning increases. (EduWW, 2022).

Spending 3-5 up to 8 hours for asynchronous activities per week shows that our respondents lack engagement in online learning. According to the article by Morin, A. (2020), there are five reasons students are not engaging in distance learning: 1) Students' life circumstances have changed – family problems, no internet connection or a device to use or space to learn in; 2) Stress and trauma are being dealt with by students- Trauma and stress can impair executive functioning, interfere with cognitive processing, and make it harder for students to control their emotions. All of that makes it challenging to think, learn, and participate in meaningful ways; 3) The content is not accessible – Students may avoid utilizing the learning system if they don't feel comfortable using it. A new system requires time to create norms and practices, especially when technology is involved. Many students might be having trouble as well because they don't feel the material is relevant to their current situation. They could feel as though it has nothing to do with the events taken on in the world around them; 4) Students need more structure and support - Many students depend on the structure and assistance of traditional classrooms to keep them on task with their homework. When students get behind and skip a few assignments, trying to catch up can seem overwhelming. They might simply choose to disengage; 5) The teacher's expectation for engagement has not changed – It is crucial to understand that students participate in a variety of ways. Engagement won't necessarily look the same as it did in the past or for every student.

How many hours do you spend for your asynchronous activities (online - offline assignments, projects, modular outputs) per week?

81 responses



**Fig. 4. Hours spent on asynchronous activities**

In Table 1, although most respondents agreed that they encountered difficulty concentrating at home and that they could not focus on class when online, the total weighted mean is 2.50, verbally interpreted as Disagree. This can mean that the students are more likely to have interruptions from their family members and household duties (Son et al., 2020), and there may be a lack of an interactive learning environment in the asynchronous method of teaching. However, they do not lack accountability and motivation, they are not distracted by social media, the internet, and online games, and they can maintain a balanced life, avoiding a monotonous life pattern.

### III. Challenges of Asynchronous Learning on Students' Mental health

**Table 1**

<b>Difficulty in concentration</b>	<b>Mean</b>	<b>MI</b>
1. I'm having difficulty concentrating since I'm home. As I'm around all of my family, it's really hard to focus on what I need to do.	2.78	A
2. I just want to lay in my bed. Now no one is keeping me accountable. If I'm on my phone, I'm not paying attention to any of these lectures.	2.36	DA
3. My desk is right next to my bed so I could just go take a nap or watch Netflix or be on social media such as Twitter, Instagram, Facebook, YouTube, etc. the whole time.	2.46	DA
4. I cannot focus on class when it's online. Through the classes, I don't think there's a lot of instruction to make students engaged.	2.74	A
5. Now I'm stuck only doing everything on a computer. So, I'm pretty much on the computer all day and can divert my focus in playing online games.	2.17	DA
<b>Total</b>	2.50	DA

*Weighted Mean (WM): 3.51 - 4.50 - Strongly agree (SA); 2.51 - 3.50 - Agree (A); 1.51 - 2.50 - Disagree (DA); 1.00 - 1.50 - Strongly Disagree (SD)*

**Table 2**

<b>Sleeping habits</b>	<b>Mean</b>	<b>MI</b>
1. I'll be up until dawn, and sleep through the day. Now that most of my classes are online, I sleep through it and watch the lectures later.	2.25	DA
2. I now have an irregular sleeping pattern. I stay up really late and then I wake up very early or sometimes I go to sleep early. I wake up really late.	2.73	A
3. I'm sleeping a lot more now. I'm living at home. I don't have to do anything. I just have more time to sleep.	2.47	DA
4. Now I wake up constantly. I have a hard time staying asleep and going/staying asleep.	2.67	A
<b>Total</b>	2.53	A

As revealed in Table 2, the total weighted mean is verbally interpreted as "Agree", which implies that respondents experience an irregular sleeping pattern.

New research from Simon Fraser University (Anderer, 2021) suggests that while students spend less time traveling, working, or attending social activities, they develop a night owl habit rather than sleeping more. This suggests that despite not having early onsite classes, students less soundly, less at night, and more during the day, but did not sleep more overall compared to students in previous semesters. The lack of change in sleep duration was a bit of a surprise, as it goes against the assumption that young adults would sleep more if they had the time.

**Table 3**

<b>Social Relation/ Social Isolation</b>	<b>Mean</b>	<b>MI</b>
1. With the asynchronous method, there is significant social isolation from peers and from those whom I want to hang out with.	3.01	A
2. I don't see my friends that much and no face-to-face interaction but only through text.	3.04	A
3. I also like meeting new people and friends. The asynchronous learning method lessens my chance to do that.	3.27	A
<b>Total</b>	3.11	A

As shown in Table 3, all weighted means are verbally interpreted as "Agree", indicating a sense of social isolation among our respondents. Isolation is a major hurdle for online learners. A key component of remote education is asynchronous distance learning – Any lesson where the instructor instructs at a different time than the student attends the session is included, such as many pre-recorded e-learning platforms. Asynchronous learning provides convenience and flexibility. However, the trade-off results in a loss of connection and engagement.

Table 4

Academic Performance	Mean	MI
1. Meeting my module deadlines is difficult because it's hard comprehending the instructions compared to a face-to-face meeting.	3.04	A
2. I think my internship is going to be shortened. I need to get more work experience before graduation.	3.17	A
3. I feel like I started procrastinating. I was trying to avoid this situation, but still delaying the work which stresses me more academically.	3.15	A
<b>Total</b>	3.12	A

As revealed in table 4, all weighted means are verbally interpreted as “Agree”, implicating an effect of asynchronous learning on the students’ perception of their academic performance. Procrastination as defined by Zarrin (2020), usually occurs when one activity is unnecessarily delayed, and individuals experience extremely severe agitation when they start thinking about it (Motie et al., 2012). Procrastination often has negative consequences, such as late delivery of assignments, anxiety, and rush to exam preparation, and social anxiety. However, people are fully aware of the negative results of this delay, and this phenomenon can decrease the level of satisfaction with individual performance. The prevalence of this phenomenon is so high that one-fifth of the adult population is unable to keep up with their daily homework assignments (Klassen et al., 2008).

According to Kim, et al., (2019), students must be equipped with strong digital skills to perform academic work and successfully complete learning activities (Kim et al., 2019).

Unlike synchronous learning, asynchronous learning requires a real-time deadline that leads to greater expectations. In a completely asynchronous environment, students miss the camaraderie that comes from real-time conversation and face-to-face (or screen-to-screen) interaction. The solitary nature of asynchronous learning can be detrimental to students’ mental health and academic results if it’s not paired with some sort of real-time follow-up (Wind, 2020).

Table 5

Eating Patterns	Mean	MI
1. I've been munching a lot of snacks recently since I'm at home.	3.14	A
2. I'm home all the time. Sometimes I eat once or twice a day. Sometimes I don't eat at all. It's something I haven't done before.	2.57	A
3. I'm having trouble eating. I just don't eat when I'm anxious. So, I've had no appetite.	2.49	DA
4. I eat so much now just out of boredom because there's nothing to do really.	2.83	A
<b>Total</b>	2.76	A

The total weighted mean of 2.76 or verbally interpreted as “Agree” in table 5 shows an inconsistent eating pattern among the respondents. This is similar to the results of the study by Pung (2021) which revealed that more than half of the respondents skipped meals. Breakfast was the most skipped meal. The majority of the respondents snacked between meals. Biscuits, bread, and fruits were the most common snack foods.

Table 6

Changes in the Living Environment	Mean	MI
1. Things are different at home. I am studying now in my bedroom rather than in the library or on campus.	3.54	SA
2. By living with family, I don't have any privacy. I don't feel very focused because I am distracted.	2.37	DA
3. I live in the boarding house so there's basically no one around me. It makes me unhappy.	2.02	DA
4. Now I'm at home. I'm literally sitting on the same seat for five or six hours a day.	2.80	A
<b>Total</b>	2.69	A

As revealed in Table 6, all weighted means are verbally interpreted as “Agree”, pointing out that most of the respondents are learning at home. Asynchronous settings are temporally and geographically independent and defined as more individually based and self-paced as well as less instructor-dependent (Bernard et al., 2004; Murphy et al., 2011; Clark and Mayer, 2016; Xie et al., 2018).

Findings from the study of Barrot, et al. (2021) state that student’s most significant challenge was linked to their learning environment at home. Students are highly engaged in terms of their learning when it pertains to the asynchronous learning environment. This gives students a better opportunity to communicate with their peers, receive feedback from their peers, and evaluate the progress they have made toward their individual learning objectives (Er et al., 2009; Harris et al., 2009; Simonson et al., 2012. And albeit asynchronous teaching can enable students to work self-paced and independently of time and place (van der Keylen et al., 2020), not all learners are equipped with the according strategies to benefit from this potential advantage: Learning at home, especially in asynchronous contexts, requires more self-study skills to stay on track, including enough motivation and will to follow learning goals (cf. Hartnett, 2015).

**Table 7**

<b>Financial Difficulties</b>	<b>Mean</b>	<b>MI</b>
1. Not all the time do I have enough money to load.	3.47	A
2. I don't know until when are we going to afford to budget our money instead of buying essentials.	3.38	A
<b>Total</b>	3.43	A

In Table 7, all weighted means are verbally interpreted as “Agree”, indicating financial difficulties among our respondents. According to Barrot, et al. (2021) study findings, COVID-19 aggravated the financial difficulties experienced by some students, consequently affecting their online learning experience. This financial impact mainly revolved around the lack of funding for their online classes as a result of their parents’ unemployment and the high cost of Internet data.

**Table 8**

<b>Class Workload</b>	<b>Mean</b>	<b>MI</b>
1. [Professors] require us to go to a Zoom class. Some of them record those Zoom meetings and then you can watch them on your own time. It doubles the time I have to dedicate each week to that class.	2.83	A
2. Four or five out of my six professors have given me more work than they would have had if it were face-to-face.	2.83	A
<b>Total</b>	2.82	A

As revealed in Table 8, all weighted means are verbally interpreted as “Agree.” This expresses the students’ concern about workloads. This has been proven that many students reported an increased workload (Aristovnik et al., 2020). Overall, these findings stress the importance of carefully considering students’ learning experiences when tackling how to engage them in online learning.

The results of Fabriz (2021) study revealed that students in the mostly asynchronous group reported significantly more recorded lectures or student presentations, as well as more discussions via online forums (LMS), with both methods being an integral part of the concept of asynchronous settings.

**Table 9**

<b>Depressive Thoughts</b>	<b>Mean</b>	<b>MI</b>
1. I feel like I need to go out but there is nowhere to go.	3.31	A
2. I am suffering from chronic depression which has become worse through asynchronous learning.	2.30	DA
3. Asynchronous routine can become a routine, it makes me down. I feel hopeless about not being able to enjoy my normal day-to-day activities.	2.74	A
4. A lot of Extra-curricular activities that I wanted to participate in have all been cancelled. And now it feel like the skills I have are useless.	2.68	A
5. I'm overwhelmed with all the class subject requirements, which makes me go crazy.	2.68	A
<b>Total</b>	2.78	A

As revealed in Table 9, all weighted means are verbally interpreted as “Agree”, implying that students may be feeling depressed. College students report struggling with depression, and colleges and universities are beginning to recognize the importance of improving undergraduate mental health (Mistler et al., 2012; National Council on Disability, 2017; Center for Collegiate Mental Health, 2020; Hsu and Goldsmith, 2021). Depression is defined as frequent feelings of unhappiness, hopelessness, and often a loss of motivation or interest in actions that an individual previously enjoyed (American Psychiatric Association, 2013). In the United States, depression is believed to affect about 23% of college students (American College Health Association, 2020). However, some studies estimate that depression affects a far greater percentage of undergraduates (Garlow et al., 2008; Mohammed et al., 2021). Additionally, depression rates among college students are currently estimated to be at an all-time high, likely due to the emotional stress caused by the COVID-19 pandemic (Keckojevic et al., 2020; Kujawa et al., 2020; Son et al., 2020; Wang et al., 2020; Lee et al., 2021).

**Table 10**

<b>Suicidal Thoughts</b>	<b>Mean</b>	<b>MI</b>
1. [Suicidal thoughts] go hand in hand with depressive thoughts. I am just tired of existing because I feel worthless.	2.27	DA
2. It just has to do with depressive thoughts and just overthinking. I have a lot of time to think about things that happened in the past. But there's no fixing it.	2.62	A
3. It comes up daily. Sometimes as a joke, I want to die. But it's something that I know I have no intention to ever act on and never would like. It's just become incorporated in my life purposely or unconsciously when I do something especially related to academics.	2.44	DA
4. I have some problems with my family. And now I'm stuck at home with them. I guess it's more often than normal.	2.12	DA
5. I feel afraid, and I often think that the worst part is more fear of what is to come and what will be the outcome.	2.93	A
<b>Total</b>	2.48	A

As revealed in Table 10, all weighted means are verbally interpreted as “Disagree”, showing that the respondents sometimes overthink, but not to the point of having suicidal thoughts.

A recent study during the COVID-19 pandemic, showed that online learning has led, among undergraduate students, to anxiety and depression. Students' satisfaction and prevalence of anxiety were significantly correlated in the heavy workload involved; anxiety and depression symptoms, among a large number of students, were generated by the rapid move to online learning.

Rehman (2016) identified the causes of anxiety among Indian higher education students and results show that personal, family, institutional, social and political factors are considered to be potential threats to students' serious academic anxiety.



**IV. Effects of Asynchronous Learning on Students’ Mental Health**

**Table 11**

Suicidal Thoughts	Mean	MI
1. In the last month, how often have you been upset because of something that happened unexpectedly?	3.44	O
2. In the last month, how often have you felt that you were unable to control the important things in your life?	3.27	S
3. In the last month, how often have you felt nervous and stressed?	3.70	O
4. In the last month, how often have you felt confident about your ability to handle your problems?	3.26	S
5. In the last month, how often have you felt that you have been making the right decisions?	3.27	S
6. In the last month, how often have you found that you could not cope with all the school works that you had to do?	3.15	S
7. In the last month, how often have you been able to control the negative emotions in your life?	3.19	S
8. In the last month, how often have you felt that you were in control of situations?	2.99	S
9. In the last month, how often have you been angered because of situations that were outside of your control?	3.26	S
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	3.23	S
<b>Total</b>	<b>3.28</b>	<b>S</b>

Weighted Mean (WM): 4.21 – 5.00 – Always (A); 3.41 – 4.20 – Often (O); 2.61 – 3.40 – Sometimes (S); 1.81 – 2.60 – Rarely (R); 1.0 – 1.80 – Never (N)

The total weighted mean of 3.28 shows that the respondents are “Sometimes” feeling stressed. This reveals that the students may be feeling worried and overwhelmed occasionally, or undergoing increased stress, anxiety, fatigue, and burnout at times.

**V. The Relationship between the Amount of Time Spent in Asynchronous**

Learning and the Degree of Effects on Students’ Mental Health

Table 12. The significant relationship between the amount of time spent by the CBA students in asynchronous learning and the degree of effects on their mental health

Perceived stress Scale	Coefficient	Sig. (2-tailed)	Interpretation	Decision
Amount of time spent by the CBA students in asynchronous learning	.097	.391	NS	Accept

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

The above table disclosed that respondents’ amount of time spent showed no significant relationship to the degree of effects on their mental health as evidenced by its obtained (r-.097= p=.391) hence the null hypothesis is accepted.

**VI. The Relationship between the Respondents’ Profiles in Terms of Sex, Civil Status, and Course, and the Effects of Asynchronous Learning on Mental Health**

**Table 13.**

The significant relationship between the respondents’ demographic profile and the effects of asynchronous learning on CBA students in terms of Difficulty in Concentration

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.050	.656	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321**	.004	Significant	Reject

**\*\***. Correlation is significant at the 0.01 level (2-tailed). **\***. Correlation is significant at the 0.05 level (2-tailed). **a**. Cannot be computed because at least one of the variables is constant. **S** = Significant. **NS** = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of difficulty in concentration as evidenced by its obtained ( $r = -.050 = p = .656$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p = .004$ ) therefore the null hypothesis is rejected.

**Table 14.**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Sleeping Habits

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.068	.546	NS	Accept
Civil status	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

**\*\***. Correlation is significant at the 0.01 level (2-tailed). **\***. Correlation is significant at the 0.05 level (2-tailed). **a**. Cannot be computed because at least one of the variables is constant. **S** = Significant. **NS** = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of sleeping habits as evidenced by its obtained ( $r = -.068 = p = .546$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p = .004$ ) therefore the null hypothesis is rejected.

**Table 15.**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Social Relation/Social Isolation

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.031	.783	NS	Accept
Civil status	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

**\*\***. Correlation is significant at the 0.01 level (2-tailed). **\***. Correlation is significant at the 0.05 level (2-tailed). **a**. Cannot be computed because at least one of the variables is constant. **S** = Significant. **NS** = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of social relation/social isolation as evidenced by its obtained ( $r = -.031 = p = .783$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p = .004$ ) therefore the null hypothesis is rejected.

**Table 16**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Academic Performance

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.070	.537	NS	Accept
Civil status	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>	<sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

**\*\***. Correlation is significant at the 0.01 level (2-tailed). **\***. Correlation is significant at the 0.05 level (2-tailed). **a**. Cannot be computed because at least one of the variables is constant. **S** = Significant. **NS** = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of academic performance as evidenced by its obtained ( $r=.070= p=.537$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

**Table 17**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Eating Patterns

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	.083	.459	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

*\*\**. Correlation is significant at the 0.01 level (2-tailed). *\**. Correlation is significant at the 0.05 level (2-tailed). *a*. Cannot be computed because at least one of the variables is constant. *S* = Significant. *NS* = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of eating patterns as evidenced by its obtained ( $r=.083= p=.459$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

**Table 18**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Changes in the Living Environment

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.086	.443	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

*\*\**. Correlation is significant at the 0.01 level (2-tailed). *\**. Correlation is significant at the 0.05 level (2-tailed). *a*. Cannot be computed because at least one of the variables is constant. *S* = Significant. *NS* = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of changes in the living environment as evidenced by its obtained ( $r=.086= p=.443$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

**Table 19**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Financial Difficulties

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	.004	.973	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

*\*\**. Correlation is significant at the 0.01 level (2-tailed). *\**. Correlation is significant at the 0.05 level (2-tailed). *a*. Cannot be computed because at least one of the variables is constant. *S* = Significant. *NS* = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of financial difficulties as evidenced by its obtained ( $r=.004= p=.973$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is

constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

**Table 20**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Class Workload

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.079	.482	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

*\*\*.* Correlation is significant at the 0.01 level (2-tailed). *\** Correlation is significant at the 0.05 level (2-tailed). *a.* Cannot be computed because at least one of the variables is constant. *S* = Significant. *NS* = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of class workload as evidenced by its obtained ( $r=.079= p=.482$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

**Table 21**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Depressive Thoughts

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.176	.117	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

*\*\*.* Correlation is significant at the 0.01 level (2-tailed). *\** Correlation is significant at the 0.05 level (2-tailed). *a.* Cannot be computed because at least one of the variables is constant. *S* = Significant. *NS* = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of depressive thoughts as evidenced by its obtained ( $r=.176= p=.117$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

**Table 22**

The significant relationship between the respondents' demographic profile and the effects of asynchronous learning on CBA students in terms of Suicidal Thoughts

Variables	Coefficient	Sig.(2 tailed)	Interpretation	Decision
Sex	-.011	.920	NS	Accept
Civil status	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
Course	-.321 <sup>**</sup>	.004	Significant	Reject

*\*\*.* Correlation is significant at the 0.01 level (2-tailed). *\** Correlation is significant at the 0.05 level (2-tailed). *a.* Cannot be computed because at least one of the variables is constant. *S* = Significant. *NS* = Not Significant

The above table disclosed that respondents' sex showed no significant relationship to their perceived level on the effects of asynchronous learning in terms of suicidal thoughts as evidenced by its obtained ( $r=.011= p=.920$ ) hence the null hypothesis is accepted. As to civil status, the result shows that it cannot be computed because the variable is constant meaning all respondents were single. However, on the respondents' course, it was found that a significant relationship existed as evidently shown by the obtained ( $r = -.321^{**}$ ,  $p=.004$ ) therefore the null hypothesis is rejected.

## Conclusion

Based on the findings of the study, all were single, mostly female and mostly BSBA-Financial Management students of College of Business and Accountancy (CBA) at Romblon State University (RSU), who spends about 3-5 hours for asynchronous activities per week, encounter many challenges that can significantly affect their mental health. These include finding their surroundings at home distracting i.e., interruptions from their family members and household duties; a lack of an interactive learning environment in the asynchronous method of teaching; becoming night owls; a loss of connection and engagement; procrastination leading to late delivery of assignments, anxiety, rush to exam preparation, and social anxiety; irregular eating patterns; learning at home, especially in asynchronous contexts, requires more self-study skills to stay on track, including enough motivation and will to follow learning goals; the lack of funding for their online classes/ the high cost of Internet data; the increased workload; depression, and anxiety.

However, despite these experiences, the respondents don't seem to lack accountability and motivation, they are not distracted by social media, the internet, and online games, and they can maintain a balanced, non-monotonous life pattern. In addition, on the perceived stress scale resulting in "Sometimes" only, it can suggest that respondents have a good level of confidence in handling their personal problems, in making decisions, and in dealing with their school work; and a good level of E.Q. or emotional intelligence which is described by Miao et al. (2017) as one's capacity for dealing with, recognizing, expressing, and comprehending emotions. This may account for why students are confident in their ability to achieve.

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## References

Barrot, J. S., Llenares, I. I., & Del Rosario, L. S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Education and Information Technologies*, 26(6), 7321-7338.

Chang, M.C., Chen, P.F., Lee, T.H., Lin, C.C., Chiang, K.T., Tsai, M.F., Kuo, H.F., & Lung, F.W. (2021). The Effect of Religion on Psychological Resilience in Healthcare Workers During the Coronavirus Disease 2019 Pandemic. *Frontiers in Psychology*, 12, 1-8. <https://doi.org/10.3389/fpsyg.2021.628894>

EduWW. (2022). How Much Time Should Students Spend Studying Online? <http://edu.ww.net/how-much-time-should-students-spend-studying-online>

Kentucky Counseling Center (2021, April 20). Mental Health Effects of Online Learning. <https://kentuckycounselingcenter.com/mental-health-effects-of-online-learning/?fbclid=IwAR3tUH41Zl4Y4wiWVKltNz9GOjqg0rxGjV0>

Gharetepeh, A., Safari, Y., Pashaei, T., Razaeei, M., & Bagher Kajbaf, M. (2015). Emotional intelligence as a predictor of self-efficacy among students with different levels of academic achievement at Kermanshah University of Medical Sciences. *Journal of advances in medical education & professionalism*, 3(2), 50–55.

Luszczynska, A. & Schwarzer, R.A.L.F. (2005). Social cognitive theory. Predicting health behaviour, 2, 127-169.

Miao, C., Humphrey, R. H., & Qian, S. (2017). A meta-analysis of emotional intelligence effects on job satisfaction mediated by job resources, and a test of moderators. *Personality and Individual Differences*, 116, 281-288. <https://doi.org/10.1016/j.paid.2017.04.031>.

Morin, A. (2020). 5 Reasons Students Aren't Engaging in Distance Learning. Child Mind Institute. <https://childmind.org/article/5-reasons-students-arent-engaging-in-distance-learning/>

Roach, K. (2022). Impact of Covid-19 on perceptions of asynchronous learning in higher education: Students' perspective. 4th World Conference on Research in Teaching and Education held on March 18-20, 2022 at Prague, Czech Republic. <https://www.dpublication.com/wp-content/uploads/2022/03/24-6433.pdf>

Sherren, S. (2022, March 29). How College Students Are Handling Pandemic Learning. Best Colleges. <https://www.bestcolleges.com/blog/how-college-students-handle-pandemic-learning/?fbclid=IwAR002fnSCKqzo2362IFBXo>

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, 22(9), e21279. doi: 10.2196/21279