

Challenges and Coping Strategies in Online Learning Among State University Students in South Central Mindanao, Philippines

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ABSTRACT

The globe was altered by the pandemic, and the educational system saw change as well. The study found out how much difficulty State University students in South Central Mindanao, the Philippines, faced and what coping mechanisms they used when learning online. A non-experimental research design employing the descriptive- correlational technique was utilized. Weighted Mean, Pearson Product-Moment Correlation, and Analysis of Variance were used in the data analysis. Results revealed that the level of challenges encountered by state university students in online learning indicated by adaptability struggle, connectivity issue, financial struggle is very high, while the coping strategies of the students indicated by time management, social support seeking, and self-regulation is high. There is a significant relationship between the challenges and coping strategies of state university students. There is a significant difference in the challenges and coping strategies of state university students when analyzed according to year level. Programs to help students develop self-regulation, social support seeking behavior, and time management may be implemented by the state university to help students cope with the challenges of online learning.

INTRODUCTION

The COVID-19 pandemic has brought significant challenges to students worldwide, including disrupted learning, social isolation, and increased stress levels United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020). Moreover, the shift to online learning has created new challenges for students, such as difficulties in accessing technology, lack of face-to-face interaction, and difficulties in staying motivated and focused (González et al., 2020). Despite these challenges, students have developed various coping strategies to deal with the pandemic's impact on their learning and mental health (American Psychological Association, 2020).

Understanding the plight of students is vital to guarantee the quality of students' education and learning in response to the numerous challenges related to online learning (Martin, 2020). Further, this can also lead to understanding suitable coping strategies to overcome the problems of remote learning and establish structural equivalence between a traditional institution and a distance learning type of higher education, particularly by students who are most likely to be affected (Onojetah, 2020).

In South Central Mindanao, Philippines, the exact condition was observed. However, limited studies examine the challenges and coping strategies in online learning among State University Students. To bridge this gap, this study was conducted to determine the challenges and the coping strategies of State University Students, the relationship between variables, and the significant difference in the level of challenges and coping strategies when analyzed according to year level.

LITERATURE REVIEW

Challenges in online learning

The pandemic emphasized the critical necessity to upgrade the educational system's technology infrastructure, as well as to broaden teachers' pedagogical expertise and students' learning repertory (Chiu, 2021). According to Pekrun, Lichtenfeld, Marsh, Murayama, and Goetz (2017) the combined stress and anxiety of the epidemic make learning harder and more disruptive for students, as previous studies have shown that negative emotions can interfere with learning. Although the application of different motivational theories in traditional face-to-face environments has been effective, little attention has been paid to how existing motivational theories are applied to understand online learning or student involvement learning skills Context (Chiu, 2021; Hsu, Wang, & Levesque-Bristol, 2019).

Adaptability Struggle is the first indicator of challenges. It is difficult for students with "normal" thinking to adapt. However, the new learning environment must be accepted with an open mind (Kumar, 2015). Since the majority of college students got their secondary and secondary-technical education in person, many may find it difficult to adapt to online learning (Bernard, 2011; US Department of Education, 2010). Moreover, the learning environment students have at home and the learning materials they have access to significantly affect the quality of education and the attainment of learning

objectives (Drane, Vernon, & O'Shea, 2020; Suryaman, Cahyono, Muliensyah, Bustani, Suryani, Fahlevi, & Munthe, 2020).

Connectivity Issue is the second indicator of challenges. According to Ratliff (2018) noted that professors and students in online learning should feel linked and connected. This could be accomplished by posing enough difficulties, outlining clear expectations and guidelines, receiving clear feedback, and facilitating dialogues with probing questions (Green, 2016). Long-term problems caused by lag were described as impeding participants' capacity to fully engage in the online learning experience (Hawthorne, 2020). Additionally, there is hardly any connection between teachers and students when learning is done online that students' interest in and enthusiasm for learning declines (Ardiana & Aristana, 2021).

Financial struggle is the fifth indicator of challenges. Falahati and Paim (2012) defined the term financial problem as the inability to control spending and the onset of the problem within six months. Planning and controlling cash flow are issues that are related to financial issues (Sabri, Hayhoe & Ai, 2006). Young individuals, especially university students, need to have a strong foundation in personal finance knowledge. This is because the group's reported financial status indicates a major management issue. Nelz (2020) claims that impoverished students acknowledged their struggles and challenges in attending online classes owing to a lack of funds and a heavy workload as a result of their poverty. Furthermore, a great deal of earlier research has been done to show a connection between students' financial challenges and their academic success. According to Olufemioladebinu, Adediran, and Oyediran (2018), a student's parent's social or economic standing has a beneficial influence on their academic success on a test. A previous study by Olufemioladebinu et al. (2018) further supports this, finding that students from lower socioeconomic family status are more likely to perform worse academically than those from higher socioeconomic family status.

Coping Strategies

A coping strategy is defined as the actions, attitudes, and feelings that students employ to cope with the changes that take place in their lives, such as journaling to process problems during COVID-19. Some colleges provide online teaching and graduation chances, but many students are unable to complete their studies in this fashion. Due to the COVID-19 outbreak, this study sought to offer information on the coping mechanisms employed by university students in China (Mohammad, Hossain, Chinna, Sundarasan, Khoshaim, Kamaludin, Baloch, Sukayt, & Shan (2020). Though over 400 coping strategies have been recorded (Skinner et al., 2003), they can be broadly classified into two groups: approach strategies, also called active strategies, and evasive strategies, also called disengagement strategies (see Zimmer-Gembeck & Skinner, 2016 for a comprehensive classification). In recent years, there has been a shift toward the adoption of a flexible coping strategy, based on the idea that an individual can mix different coping strategies, utilizing one or the other depending on the

specific situation they find themselves in (Eisenbarth, 2012; Kobyliska & Kusev, 2019).

Time management is the first indicator of coping strategies. According to Joubert (2020), in order to improve their time management skills, students should make a calendar of the chores they must perform, including planning ahead for class activities and providing additional time for learning assignments. She emphasized the importance of students making a commitment to include their online coursework into their weekly agenda. The current educational system has examined students' attitudes and behaviors about time management in order to concentrate on time management difficulties. karim and Mitra (2015). One of the best ways to forecast achieving a high level of academic success and performance is through time management skills (Fazal, 2012). Studies have shown that time management techniques are useful for many things besides raising pupils' performance standards (Faisal, Miqdadi, Abdulla & Mohammad, 2014).

Social support seeking is the second indicator of coping strategies. An interpersonal transaction including one or more of the following: first is the emotional concern (liking, affection, empathy); second is the instrumental aid (goods or services); third is information (about the environment), or fourth is assessment (information related to self-evaluation)" is how social support is described (House, 1981). Structure and functionality are frequently distinguished (Thoits, 2011; Uchino, 2004). Another coping technique is to look for assistance from peers in which students who struggle with a remote learning program frequently turn to their friends for social assistance (Gore et al., 2014). According to Bosio (2020), ties between pupils are quite strong. It aids kids in overcoming their sense of loneliness (Wang, 2005).

Self-Regulation is the third indicator of coping strategies. Self-regulation is the composition of "self-generated thoughts, feelings, and acts that are planned and cyclically tailored to the fulfillment of personal goals" is what is meant by this technique (Zimmerman, 2000). Self-regulation is a continuous process (Pintrich, 2000). It is described as a proactive, beneficial process in which pupils select learning objectives based on prior knowledge and the contextual elements of the current environment (Pintrich, 2000). According to Bayraktarolu (2017), when we encourage students to focus on the process of learning rather than the outcome, we help them consciously examine their own contribution to their learning.

Theoretical Framework

The study is primarily anchored on the Cognitive Load Theory, which posits that learners have limited cognitive resources, which can be overwhelmed by the complexities of online learning environments (Sweller, 1988). Navigating unfamiliar technology, managing multiple digital platforms, and contending with distractions in the home environment contribute to heightened cognitive load for students in online classes.

Additionally, it is anchored on the Social Learning Theory, which underscores the significance of social interactions in the learning process

(Bandura, 1977). In online learning environments, students may encounter reduced opportunities for meaningful social engagement compared to traditional classrooms, leading to feelings of isolation and disconnection. To counteract these challenges, students can proactively engage in online discussions, form virtual study groups, and collaborate on projects to foster a sense of community and support within the online classroom (Bates, 2015).

Moreover, the Self-Determination Theory, which emphasizes the importance of autonomy, competence, and relatedness in motivating individuals to engage in learning activities (Deci & Ryan, 1985). In online settings, students may struggle to maintain feelings of autonomy and competence due to the self-directed nature of learning and reduced instructor guidance.

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

Ho:

1. Students attending state universities do not exhibit a strong correlation between their coping mechanisms and challenges.
2. When analyzing state university students based on year level, there is no discernible variation in the degree of challenges and coping mechanisms.

METHODOLOGY

The study employed a descriptive-correlational research design. A quantitative research approach looks at how variables relate to one another (Creswell, 2012). Additionally, one of the broad categories of research designs is the non-experimental design, in which the researcher watches the phenomena unfold naturally without introducing extraneous variables, manipulating variables on purpose, or controlling the environment (Radhakrishnan, 2013).

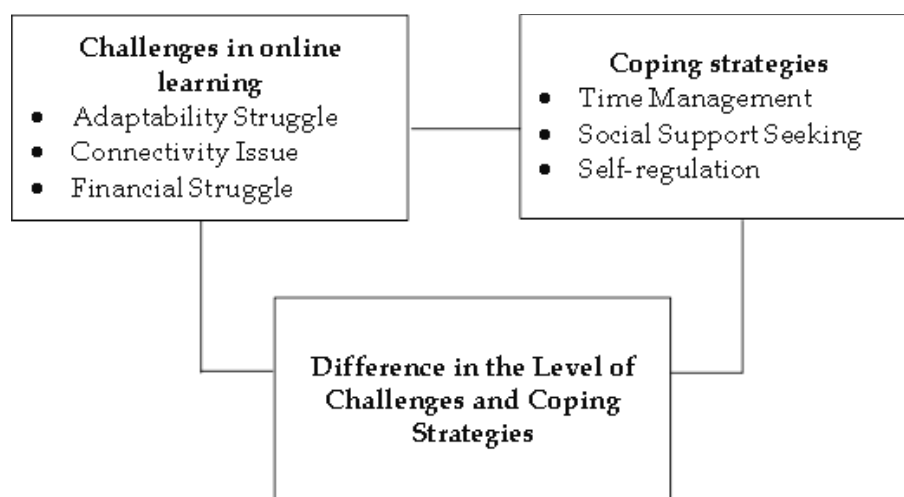


Figure 1. The Research Conceptual Framework

The study's respondents, 380 state university students from South and Central Mindanao, the Philippines, were chosen by stratified random selection. The components of the target population are separated into discrete groups or

strata, with the elements similar to one another with respect to specific survey-relevant criteria within each stratum (Parsons, 2017).

The study utilized an adapted and contextualized five-point likert scale survey instrument. The challenges in on line learning questionnaire was patterned from Barrot, Llenares and Del Rosario (2021) and the coping strategies questionnaire from Patias, Hohendorff and Scorsolini-Comin (2021). In the data analysis, weighted mean, Pearson product moment correlation, and Analysis of Variance (ANOVA) were used. According to Sekander (2014), data points that have a standard deviation close to zero are considered to be near the mean, while those with a high or low standard deviation are considered to be either above or below the mean. However, Analysis of Variance (ANOVA) is a statistical method that compares groups based on potential variations in the mean (average) of a continuous quantitative measure (interval or ratio) (Klugkist, 2008). Ethical considerations were observed in the study. The researchers secured consent forms, observed data privacy, and promoted willingness of participation.

RESEARCH RESULT

Table 1. Level of Challenges in Online Learning of State University Students

Indicator	SD	Mean	Descriptive Level
Adaptability Struggle	0.57	4.18	High
Connectivity Issue	0.65	4.29	Very High
Financial Struggle	0.44	4.65	Very High
Overall	0.44	4.37	Very High

The State University students' overall mean score on the difficulty of online learning is 4.37, with a standard deviation of 0.44. This is considered a very high score, indicating that the students faced difficulties with online learning. With a mean score of 4.65 and a standard deviation of 0.44, which is considered extremely high, financial hardship was the indicator that presented the biggest barrier for university students enrolled in online courses.

Table 2. Level of Coping Strategies of State University Students

Indicator	SD	Mean	Descriptive Level
Time Management	0.57	4.16	High
Social Support Seeking	0.65	4.18	High
Self-regulation	0.44	2.65	Moderate

Overall **0.44** **3.66** **High**

Findings regarding State University students' degree of difficulty with online learning reveal an overall mean score of 3.66 with a standard deviation of 0.44, which is considered high and indicates that respondents do not always use coping mechanisms. Social support seeking is the more effective technique for university students, as indicated by the indicators, which have a high mean score of 4.18 and a standard deviation of 0.65.

Table 3. Significance on the Relationship between Challenges in online learning and Coping Strategies of State University Students

Challenges	Coping strategies			Overall
	Time Management	Social Support Seeking	Self-regulation	
Adaptability Struggle	.524**	.441**	.281**	.535**
	.000	.000	.000	.000
Connectivity Issue	.456**	.350**	.285**	.461**
	.000	.000	.000	.000
Financial Struggle	.486**	.466**	.387**	.565**
	.000	.000	.000	.000
Overall	.596**	.515**	.391**	.638**
	.000	.000	.000	.000

$p < .05$

Result on the significant relationship of the challenges in online learning and coping strategies of State University Students revealed that the overall r-value obtained is 0.638 with a p-value of less than 0.05 which is lesser than .05 level of significance. The result is significant, and the null hypothesis of no significant relationship is rejected.

Table 4. Significant difference on the level of Challenges in online learning of State University students

Source of Variation	SS	df	MS	F	P-value
Between Groups	3.736	3	1.245	7.674	<.001
Within Groups	28.563	179	.162		
Total	32.300	179			

The ANOVA test result reveals that there is significant difference on the level of challenges in online learning among state university students at 5%

level of significance ($F=7.674$, $p<.05$). Thus, the null hypothesis of no significant differences is rejected.

Table 4. Significant difference on the level of Coping Strategies of State University students

Source of Variation	SS	df	MS	F	P-value
Between Groups	2.477	3	.826	5.665	.001
Within Groups	25.655	176	.146		
Total	28.132	179			

The ANOVA test result reveals that there is significant difference on the level of coping strategies of State University students at 5% level of significance ($F=5.665$, $p<.05$). Thus, the null hypothesis of no significant differences is rejected.

DISCUSSION

Challenges in online learning

The significantly very high level of challenges in online learning of State University students indicated by adaptability struggle, connectivity issue, and financial struggle implies that students suffers from these challenges perpetuated by the online delivery of learning. Students who engaged in remote learning during the pandemic experienced a decline in academic achievement, with the largest losses observed among lower-income students due to limited access to technology, lack of a dedicated study space, and the absence of in-person support from teachers and peers (Kuhfeld et al., 2020). According to a survey by the American Psychological Association (2021), nearly half of all college students reported experiencing increased feelings of loneliness and isolation during the pandemic). Additionally, the lack of access to a computer or internet connection at home has made it difficult for students to participate in remote learning and has exacerbated the achievement gap between low-income and higher-income students (NCES, 2020).

Coping strategies

The significantly low level of coping strategies of State University students indicated by time management, social support seeking, and self-regulation implies that State University students struggle to cope with the challenges and demands of online learning. Coping mechanisms such as social support seeking, time management, and self-regulation have become crucial for their academic success and well-being. Social support seeking involves reaching out to peers, instructors, or online communities for emotional support, guidance, and shared experiences and can help students feel connected and reduce feelings of isolation during remote learning (Smith & Jones, 2021). By allocating time for studying, breaks, and self-care, students can enhance their focus and reduce stress levels, ultimately improving their academic performance (Brown et al., 2020). Further, regulating one's self setting goals, monitoring progress, and adapting study habits to meet changing demands. By

practicing self-discipline, self-motivation, and self-reflection, students can enhance their learning outcomes, resilience, and overall well-being in the face of uncertainty and disruption (Johnson & Lee, 2022).

Significance on the Relationship between Challenges in Online Learning and Coping Strategies of State University Students

The significant relationship of the challenges in online learning and coping strategies of State University Students rejected the null hypothesis of no significant relationship between the two variables. This suggests that as the challenges faced by State University Students increases, the State University students tend to adapt to these challenges by observing different coping strategies. According to Hodges et al. (2020), online learning has become increasingly popular in recent years, and the COVID-19 pandemic has accelerated this trend and while it offers many benefits, such as flexibility and accessibility, it also presents unique challenges for students, particularly in terms of coping with the stress and anxiety associated with this new mode of learning.

Significant difference on the level of Challenges in online learning of State University students

The ANOVA test result reveals that there is significant difference on the level of challenges of state university students, rejecting the null hypothesis of no significant difference. This implies that challenges experienced by state university students varies when analyzed according to college. The interplay of different factors however results to common problems brought by online learning. Since the online learning posed unique challenges for students, according to Wang and Baker (2018), the absence of immediate feedback and personal connection can lead to feelings of isolation and disengagement among online learners, impacting their motivation and overall learning experience. Students may lack self-regulation required in online learning presents another hurdle for students. In a study by Artino (2019), it was found that managing time effectively, staying organized, and maintaining discipline are crucial skills for success in online courses.

Significant difference on the level of Coping Strategies of State University students

In terms of the level of coping strategies of state university students, the null hypothesis was rejected since there is a significant difference in the level of coping strategies. This implies that state university students differ in dealing with the challenges they experience in online learning. According to Al Qaysi and Al-Hamad (2021), students who used problem-focused coping strategies, such as seeking information and developing plans, had higher academic achievement and lower levels of anxiety than students who used emotion-focused coping strategies, such as avoiding or denying the problem. Further, Liu, Wang, and Wang (2020), emphasized that coping strategies of students in online learning environments differ since students who received more social

support from their peers and instructors were more likely to use problem-focused coping strategies and had higher levels of academic achievement than students who received less social support.

CONCLUSIONS AND RECOMMENDATIONS

The level of challenges encountered by state university students in online learning indicated by adaptability struggle, connectivity issue, financial struggle is very high, while the coping strategies of the students indicated by time management, social support seeking, and self-regulation is high. There is a significant relationship between the challenges and coping strategies of state university students. There is a significant difference in the challenges and coping strategies of state university students when analyzed according to year level. State university students should enhance and develop their self-regulation, social support seeking behavior, and time management practices. Programs to help students develop these skills may be implemented by the state university to help students cope with the challenges of online learning.

ADVANCED RESEARCH

The scope of the study is restricted to analyzing the difficulties associated with online learning, as indicated by difficulties with adaptability, connectivity, financial difficulties, and coping mechanisms, as indicated by self-control, time management, and seeking out social support. As a result, research into further potent predictors and indicators of these variables may be undertaken.

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