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Research Article

Perceptions, Challenges and Effectiveness of Modular Distance Learning Approach to The Academic Performance of Humanities and Social Sciences (HUMSS) Students of Botolan National High School

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ABSTRACT

The COVID-19 pandemic has necessitated a significant shift towards modular distance learning in education systems worldwide. In the Philippines, the Department of Education has developed Self-Learning Modules (SLMs) to ensure quality primary education for all learners during the pandemic. This research study aims to identify the challenges and effectiveness of the modular distance learning approach on the academic performance of Grade 12 Humanities and Social Sciences students at Botolan National High School. Employing a descriptive research design, data were collected through a validated questionnaire and analyzed using weighted arithmetic mean, frequency, percentage distribution, and Pearson-r correlation. The study found that the majority of student-respondents were female, aged 17.31 years old, and achieved very satisfactory academic grades. The students perceived the modular distance learning approach as agreeable, with self-motivation being the most challenging aspect. The ability to express ideas was the most effective aspect, while the ability to answer without pressure was the least effective. The study found no significant relationship between student's perceptions of the modular distance learning approach and their academic performance. Based on the findings, the study recommends using the modular distance learning approach and developing policies to address students' mental health issues. Furthermore, further research is needed to investigate teacher readiness and technology competency, as well as other variables not covered in this study, to improve the effectiveness of the modular distance learning approach. The study demonstrates that despite the limitations caused by the pandemic, modular distance learning can be an efficient alternative to traditional face-to-face education.

Keywords: Covid-19, Descriptive Research, Modular Distance Learning Approach, SDO Zambales

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Introduction

The COVID-19 pandemic has had a significant impact on virtually every aspect of human life, including education. As a result, many activities, including the educational landscape, have shifted towards a more significant use of modular distance learning. According to Magsimbol (2020), this is a learning delivery modality in which teachers and learners who are geographically distant from each other interact during instruction.

In 2020, statistics from the DepEd's National Learner Enrolment and Survey Forms (LESFs) revealed that 8.8 million registrants (39.6% of all respondents) chose modular remote learning. Blended learning, which includes several modalities, was preferred by 3.9 million students (17.6%), while 3.8 million students (17.1%) opted for online learning. Additionally, 1.4 million and 900,000 students, respectively, chose TV-based and radio-based learning.

To address this issue, the Department of Education (DepEd) developed Self-Learning Modules (SLMs) with alternative learning delivery modalities for a variety of students throughout the Philippines (Llego, 2020). With face-to-face interactions still prohibited due to the public health situation, combining SLMs with choice learning delivery modalities can help DepEd ensure that all learners have access to quality primary education for the S.Y. 2020-2021 (Dizon Jr., De Guzman and Orge, 2021). According to a study conducted by Asio and Jimenez (2021), the findings revealed that 67.89% of the learners opted to utilize alternative delivery modes, specifically the modular printed learning modality. This result highlights the effectiveness of this method in facilitating continuous learning, even in uncertain circumstances such as the pandemic.

Modular learning, on the other hand, is a distance learning approach that employs SLMs based on the Department of Education's Most Essential Learning Competencies (MELCS). The modules include motivation and assessment elements that serve as a comprehensive reference for teachers' and students' required competencies (Manlangit et al., 2020). Teachers in public schools throughout the Philippines, including those in the Schools Division of Zambales, have adopted this approach to instruction.

Within the "new normal," the situation presents unique challenges to every educational leader's decision-making process. To ensure that every school provides high-quality basic education, this research study identifies opportunities for responding to challenges, problems, and trends that have arisen and will develop in the future due to the COVID-19 pandemic. Therefore, this research paper examines the different perceptions and challenges associated with the effectiveness of the modular distance learning approach concerning the learners' academic performance. Also, this valuable information can inform educational stakeholders in designing targeted interventions and support mechanisms tailored to the needs of HUMSS students, ultimately enhancing their learning experiences and outcomes in the context of distance education.

Statement of the Problem

This research paper seeks to find answer in the following questions:

- 1. What is the demographic profile of the student respondents in terms of age and sex?
- 2. What is the academic performance level of Grade 12 Humanities and Social Sciences students using modular distance learning approach?
- 3. How do the student respondents perceive the modular distance learning approach?
- 4. What are the challenges faced by the student respondents in using the modular distance learning approach?
- 5. How do Grade 12 Humanities and Social Sciences students perceive the effect of modular distance learning approach on their academic performance?
- 6. Is there a significant relationship between the level of academic performance and the perception of student respondents towards the modular distance learning approach?
- 7. Is there a significant relationship between the level of academic performance and the perceived challenges faced by student respondents towards the modular distance learning approach?

8. Is there a significant relationship between the level of academic performance and the perceived effect of modular distance learning approach among student respondents?

Null Hypothesis

- 1. There is no significant relationship between the level of academic performance and the perception of student respondents towards the modular distance learning approach.
- 2. There is no significant relationship between the level of academic performance and the perceived challenges faced by student respondents towards the modular distance learning approach.
- 3. There is no significant relationship between the level of academic performance and the perceived effect of modular distance learning approach among student respondents.

Type of Study

The present study employs a descriptive research design to systematically examine the perception, challenges, and effectiveness of a modular distance learning approach among Grade 12 Humanities and Social Sciences students at a National High School in Zambales, and to test the hypothesis regarding its impact on academic performance. Descriptive research design, as described by Dela Cruz and Silverio (2019), is a methodology that aims to capture current qualities, conditions, and images through the gathering and analysis of data based on respondents' impressions, perceptions, or responses. By employing this design, the study seeks to provide a comprehensive overview of the state of modular distance learning at the school and to identify areas for improvement and further exploration.

Participants

The participants in this study were 77 Grade 12 students enrolled in the Humanities and Social Sciences Strand at Botolan National High School during the 2021-2022 academic year.

Table 1 provides a breakdown of the respondent population by section. Of the total respondents, 25 students (31.25%) were enrolled in HUMSS 12-Durkheim and HUMSS 12-Weber, while 27 students (33.75%) were enrolled in HUMSS 12-Martineau.

Section	Frequency(f)	Percentage (%)
HUMSS 12- Durkheim	25	32.47
HUMSS 12- Martineau	27	35.06
HUMSS 12- Weber	25	32.47
Total	77	100

Data Collection

The first step in collecting data for this study was to validate the research questionnaire. To ensure the questionnaire's validity, it was reviewed by two specialists who were master teachers in the relevant field. After validation, the researcher secured a letter of approval from the school principal and sought the assistance of each section's advisers in administering and retrieving the questionnaire. Within one week of distribution, the completed questionnaires were collected by the researcher. To maintain the confidentiality and privacy of the participants' responses, Fraenkel's (2003) guidelines for ethical research were followed, and participant names were not disclosed.

Instrument

The research instrument used in this study was adapted from a similar study conducted by Aksan on the "Effect Of Modular Distance Learning Approach On Academic Performance In Mathematics Of Students In Mindanao State University-Sulu Senior High School Amid Covid-19 Pandemic." Minor revisions were made to the original survey questions to ensure their suitability for the current study. Prior to data collection, the redesigned survey questions underwent a pilot test to guarantee the instrument's validity.

To ensure the reliability of the survey instrument, the Cronbach's alpha coefficient was calculated for each section. The results indicated high levels of internal consistency and reliability, with Cronbach's alpha values of 0.911 for the section on perception towards MDL, 0.908 for the section on challenges towards MDL, and 0.915 for the section on effectiveness of MDL. Additionally, the overall Cronbach's alpha value of 0.919 was within an acceptable range, indicating that the survey instrument was reliable and consistent in measuring the intended constructs.

The questionnaire consisted of four sections: the first section collected demographic information about the respondents; the second section aimed to determine the students' perception of the modular distance learning approach; the third section focused on the challenges faced by students during the implementation of the modular distance learning approach; and the fourth section aimed to measure the perceived effect of the modular distance learning approach on the students' academic performance.

Data Presentation and Analysis

The data collected in this study were analyzed using a range of statistical methods, including Weighted Arithmetic Mean (WAM), Frequency, Percentage Distribution, and Pearson-r correlation. The interpretation of the Pearson-r correlation values was guided by Calmorin's (2004) classification, which provides a framework for understanding the strength and direction of the correlation observed.

Interpretation of the Correlation Values

- 1. An r from \pm 0.00 to \pm 0.20 denotes negligible correlation
- 2. An r from ± 0.21to ± 0.40 denotes low or slight correlation
- 3. An r from \pm 0.41 to \pm 0.70 denotes moderate relationship
- 4. An r from \pm 0.71 to \pm 0.90 denotes high relationship

- 5. An r from \pm 0.91 to \pm 0.99 denotes very high relationship
- 6. An r from ± 1.00 denotes perfect correlation

Accepting and Rejecting the Null Hypothesis

- 1. If the computed significant value is less than (<) 0.05 alpha level of significance, reject the null hypothesis. There is a significant difference.
- 2. If the computed significant value is greater than (>) 0.05 alpha level of significance, accept the null hypothesis and reject the alternative. There is no significant difference.

Result and Discussion

The main objective of this chapter was to present the data collected in a clear and concise manner that facilitates an understanding of the research problem. To this end, the acquired data was displayed in tabular form, accompanied by an interpretive analysis that aimed to provide an in-depth understanding of the results. By presenting the data in a structured format, this chapter enabled readers to gain a better understanding of the key findings of the study and their implications.

Profile of the Respondents

Age

Table 2 shows the frequency and percentage distribution of the student respondents according to age.

Out of the 77 respondents, the majority (65.00%) were 17 years old, followed by 22.00% who were 18 years old, and 6.00% who were 16 years old. The remaining respondents were either 19 or 20 years old. The mean age of the respondents was 17.31 years old. The age range is relatively narrow, with the youngest respondent being 16 years old and the oldest being 20 years old. This suggests that the sample population is relatively homogeneous in terms of age.

The age of the respondents is an important demographic characteristic that may influence their perception and effectiveness of the modular distance learning approach. Younger students may have a greater propensity for adapting to the new learning approach, given their exposure to technology and digital learning tools. In contrast, older students may experience more difficulty in adapting to the modular distance learning approach, particularly if they have limited experience with technology or face challenges with independent learning.

A review of related literature suggests that age is a significant demographic factor that may impact the effectiveness of modular distance learning. For instance, a study by Ortiz-Gonzalez (2019) found that younger students in higher education generally have a more positive attitude towards online learning than older students. Similarly, a study by Hameed et al. (2020) found that age is a significant predictor of the success of online learning, with younger students achieving better academic performance than their older peers.

Age	Frequency (f)	Percentage (%)
16 years old	5	6.00
17 years old	50	65.00
18 years old	17	22.00
19 years old	3	4.00
20 years old	2	3.00
Total	77	100
	Mean of Age= 17.31	

Table 2. Frequency and Percentage Distribution of the Student- Respondents According to Age

Sex.

Table 3 shows the frequency and percentage distribution of the student-respondents according to sex.

Out of the 77 respondents, the majority (58.44%) were female, while 41.56% were male. Gender is an important demographic factor that may influence students' perception and effectiveness of the modular distance learning approach. It is worth noting that the female respondents in this study outnumbered the male respondents, which could potentially impact the generalizability of the findings to a larger population. However, gender alone cannot be used to predict the effectiveness of the modular distance learning approach.

A review of related literature suggests that gender can be a significant predictor of success

in online learning. For instance, a study by Hussin and Mujtaba (2019) found that female students generally perform better in online courses than male students. Similarly, a study by Al-Emran et al. (2019) found that female students have a more positive attitude towards elearning than male students.

In the context of the present study, gender may impact the perception and effectiveness of the modular distance learning approach in different ways, and it is important to consider this factor in the interpretation of the results. Future research may benefit from examining the impact of gender on specific aspects of the modular distance learning approach, such as course content, learning strategies, and assessment methods.

	,	0
Sex	Frequency (f)	Percentage (%)
Male	32	41.56
Female	45	58.44
Total	77	100

Table 3. Frequency and Percentage Distribution of the Student- Respondents According to Sex

Academic Performance based on General Weighted Average (GWA)

Out of the 77 respondents, 14 students (18.18%) achieved an outstanding academic

performance with a score of 90-100. The majority of the respondents (50.65%) obtained a very satisfactory academic performance with a score range of 85-89. Additionally, 31.17% of

the respondents achieved a satisfactory academic performance with a score range of 80-84. The weighted mean of academic performance was 86.89, which is equivalent to a very satisfactory rating. This indicates that, on average, the respondents performed well academically in the modular distance learning approach. The academic performance of the respondents is an essential indicator of the effectiveness of the modular distance learning approach. It is worth noting that most of the respondents achieved a very satisfactory academic performance. This indicates that the modular distance learning approach was effective in supporting the academic performance of the students, at least in the short term.

A review of related literature suggests that academic performance is a critical outcome measure in online and distance learning. A study by Li and Li (2019) found that online learning positively affects academic performance. Similarly, a study by Kizilcec et al. (2017) found that students who participate in massive open online courses (MOOCs) with higher levels of interaction and feedback have better academic outcomes than those who participate in MOOCs with lower levels of interaction and feedback.

Table 4. Frequency and Percentage Distribution of the Student-Respondents According to Academic Performance

Academic Performance	Frequency	Percentage	Qualitative Interpretation	
90-100	14	18.18	Outstanding	
85-89	39	50.65	Very Satisfactory	
80-84	24	31.17	Satisfactory	
Total	77	100		
Weighted Mean of Academic Performance= 86.89 or 87 (Very Satisfactory)				

Perception of the student-respondent regarding modular distance learning approach

The students' perceptions of the modular distance learning approach were provided in table 5. The grand mean was 2.81, with "Agree" as the qualitative description. This meant that the respondents agreed with the viewpoints expressed towards the utilization of modular distance learning approach.

The respondents agreed that the modular distance learning approach helps them explore themselves throughout the new normal in the following ways: In a modular teaching method I have a lot of time to answer the activities; Students can be guided by friends, parents and relatives on their activities; Students are more active and self-directed; Modular distance learning approach helps to explore myself in different activities; It is flexible than other learning approaches; I am more comfortable to answer the different activities on my own using modules; I prefer modular distance learning approach in learning; and Students can easily answer the tasks and activities in the module. However, the student-respondents disagreed on the following indicators: It is cheaper; and I prefer modular distance learning approach rather than traditional face-to-face instruction.

The high mean score of **3.23** for the statement "**Students can be guided by friends**, **parents, and relatives on their activities**" suggests that students found support from their social networks while engaging in modular distance learning. This result is consistent with previous studies that have shown that family support can positively influence students' academic achievement and motivation (Li & Lerner, 2013).

In a study by Garbe et al. (2020), they found that parents played a crucial role in supporting their children's learning during the COVID-19 pandemic. They provided a conducive learning environment, assisted their children with their schoolwork, and even facilitated peer interactions through virtual platforms. The study concluded that family support is essential in ensuring the success of distance learning. Furthermore, the importance of peer support in distance learning was also emphasized in a study by Kusuma et al. (2019), where they found that peer interaction and collaboration were crucial in promoting a positive attitude towards distance learning. The study highlights the need for learning communities to facilitate peer interaction in distance learning.

Meanwhile, the finding that the respondents disagreed with the statement **"I prefer modular distance learning approach rather than traditional face-to-face instruction"** is consistent with previous studies that reported students' preference for traditional face-to-face instruction. For example, a study by Alqurashi and Alqattan (2020) found that Saudi Arabian students preferred face-to-face instruction over online learning due to challenges in online communication and a lack of engagement in online activities. Similarly, a study by Singh and Thurman (2019) found that students in the United States preferred face-to-face instruction because it allowed for social interaction, personal attention from the instructor, and immediate feedback.

The lower preference for modular distance learning approach may be due to several factors. First, the sudden shift to distance learning due to the COVID-19 pandemic may have resulted in a lack of preparedness and training for both students and teachers, which may have affected the quality of online instruction and engagement (Li and Lalani, 2020). Second, online learning may require a higher level of self-regulation and self-discipline, which may be challenging for some students who are used to the structure and routine of traditional face-to-face instruction (Means et al., 2013). Finally, the lack of social interaction and the inability to engage in hands-on activities may also contribute to lower preference for modular distance learning approach (Nguyen et al., 2020).

Table 5. Perception of the Student-Respondents regarding Modular Distance Learning Approach

	Indicators	Mean	Qualitative Interpretation		
1.	In a modular teaching method I have a lot of time to answer	2.90	Agree		
0	the activities.	0.00			
2.	Students can be guided by friends, parents and relatives on their activities.	3.23	Agree		
3.	Students are more active and self-directed.	2.75	Agree		
4.	Modular distance learning approach helps to explore myself in different activities.	3.06	Agree		
5.	It is flexible than other learning approaches.	2.77	Agree		
6.	I am more comfortable to answer the different activities on my own using modules.	3.05	Agree		
7.	I prefer modular distance learning approach in learning.	2.88	Agree		
8.	It is cheaper.	2.43	Disagree		
9.	Students can easily answer the tasks and activities in the module.	2.62	Agree		
10	I prefer modular distance learning approach rather than tra- ditional face-to-face instruction.	2.36	Disagree		
	Grand Mean= 2.81 (Agree)				

Legend: 3.50-4.00 (strongly agree); 2.50-3.49(agree); 1.50-2.49(disagree); 1.00-1.49(strongly disagree)

Perception of the Student- Respondents on challenges towards modular distance learning approach

Table 6 depicted students' challenges in adopting a modular distance learning approach

during the transition to a new typical set-up in the educational system. The grand mean, as shown in the table, was 2.96, indicating that the respondents agreed with the claims made. Based on the collected data, the most challenging part of the students was the indicator "**Students require self-motivation in answering activities in modules**" with a weighted mean of 3.31 and a perception of "Agree." The most challenging aspect for the students was their need for self-motivation in answering activities in modules. This highlights the importance of self-directed learning skills and self-discipline among students. This finding is consistent with previous studies that have reported that students often struggle with the self-directed aspect of distance learning (Almaiah et al., 2020; Haque et al., 2020).

Meanwhile, the least challenging was shown in the indicator "**Students can lose**

their self-confidence" with a weighted mean of 2.65 and a perception of "Agree." The least challenging aspect was the concern that students could lose their self-confidence. This is an interesting finding as it contradicts previous studies that suggest that distance learning can lead to a lack of interaction and support, which can negatively affect students' self-confidence (Almaiah et al., 2020; Haque et al., 2020). However, it is possible that the use of modules in this study provided a structured and organized approach to learning, which may have helped to maintain students' confidence in their abilities.

Table 6. Perception of the Student-Respondents on Challenges towards Modular Distance LearningApproach

Indicators	Mean	Qualitative Interpretation
1. Students require self-motivation in answering activities in modules.	3.31	Agree
2. Students cannot easily access their teachers should they need explanation for a particular topic.	2.99	Agree
3. Have little support from teacher in learning the different concepts in the module.	3.22	Agree
4. Modular distance learning approach is stressful.	3.01	Agree
5. Some parents cannot guide their children because some of them are illiterate.	2.92	Agree
6. Modular distance learning approach has minimal social in- teraction.	2.95	Agree
7. In Modular distance learning approach, there is a feeling of isolation on the part of the students.	3.08	Agree
8. This modular distance learning approach makes the stu- dents' brain drains.	3.03	Agree
9. Students can hardly understand of what they are reading in their modules.	2.79	Agree
10. Students can hardly comprehend the lecture and can hardly accomplish the activities in the module.	2.99	Agree
11. Student's mental health is being affected.	3.06	Agree
12. This approach affects the students' health.	2.95	Agree
13. Students have much time to play games, surfing on the inter- net and others rather than to answer the activities in the module.	2.71	Agree
14. Students can lose their self-confidence.	2.65	Agree
15. Students can rely on their parents, siblings, friends, and others to answer their activity.	2.78	Agree
Grand Mean= 2.96 (Agree)		

Legend: 3.50-4.00 (strongly agree); 2.50-3.49(agree); 1.50-2.49(disagree); 1.00-1.49(strongly disagree)

Perception of the Student- Respondents on the effectiveness of modular distance learning approach in relations to the academic performance

The perceived effectiveness of a modular distance learning method on academic performance of grade 12 HUMSS strand students was presented in table 7. As can be seen in the table, the grand mean was 2.94, indicating agreement. It signified that the respondents agreed with all of the points made on the impact of modular distance learning on their academic performance.

The finding that "It helps the students ex**press their ideas**" is the most effective aspect of modular distance learning is significant because it highlights one of the key benefits of this approach, which is the opportunity for students to develop their critical thinking and communication skills. In a study conducted by Zainuddin and Perera (2019), it was found that modular distance learning promotes the development of independent and reflective learning, critical thinking, and creativity. This supports the idea that modular distance learning can be an effective alternative to traditional face-toface instruction, particularly in promoting higher order thinking skills. This is also consistent with the study of Osman and Alkalbani (2021), which showed that self-learning modules significantly improved students' creativity and innovation, particularly in the areas of problem-solving and idea generation. Furthermore, the study by Erina and Zahara (2021) showed that modular distance learning positively impacted students' critical thinking and communication skills.

The use of technology in the modular distance learning approach has also contributed to enhancing the students' ability to express their ideas. As highlighted by Amory et al. (2019), the use of technology in education has been shown to foster collaborative learning, promote active engagement, and enhance communication skills. The use of online platforms, video conferencing, and social media has allowed students to collaborate with peers, access resources, and receive feedback on their ideas, which, in turn, has improved their ability to express their thoughts effectively.

The low rating of the indicator "**The students can answer well without pressure**" may indicate that students need to feel some level of pressure to motivate them to learn and complete their activities. It is important to note that a moderate level of pressure can have positive effects on learning, as it can help students maintain focus and increase their motivation (Schunk & Pajares, 2009). However, excessive pressure can be detrimental to students' mental health and academic performance (Leung et al., 2020). Therefore, it is essential to strike a balance between providing enough pressure to motivate students while also ensuring that they do not feel overwhelmed or stressed.

Furthermore, the results suggest that while the modular distance learning approach may provide some benefits, it may not be a perfect substitute for traditional face-to-face instruction. The data shows that students were less likely to prefer modular distance learning over face-to-face instruction. This finding is consistent with other studies that have shown that students generally prefer face-to-face instruction over distance learning (Ally, 2019; Amir et al., 2020).

In general, the findings suggest that while the modular distance learning approach may provide some benefits, it may also have its challenges and limitations. As such, it is important for educators and institutions to consider the unique needs and preferences of their students when deciding on the appropriate delivery modality for their courses.

Indicators	Mean	Qualitative Interpretation			
1. It helps the students to express with their ideas.	3.21	Agree			
2. They can manage their time in answering all the activities, reading lectures and so on.	2.97	Agree			
3. It saves money for the students that would be spent on travel, lodging and transportation.	3.00	Agree			
4. This can help the students to read a lot about the topics in different source.	3.13	Agree			
5. It allows students to progress their thinking ability in accomplishing the activities in the module	3.12	Agree			
6. With this approach, the students have much time with self-meditation and self-reflection.	2.88	Agree			
7. Modular distance learning approach is effective in learning the lesson.	2.81	Agree			
8. The students have the possibility to get good grades.	2.90	Agree			
9. It builds the students' self-confidence.	2.82	Agree			
10. The students can answer well without pressure.	2.60	Agree			
Grand Mean= 2.94 (Agree)					

Table 7. Perception of the Student- Respondents on the effectiveness of modular distance learningapproach in relations to the academic performance

Legend: 3.50-4.00 (strongly agree); 2.50-3.49(agree); 1.50-2.49(disagree); 1.00-1.49(strongly disagree)

Pearson Correlation Coefficient to Test the Significance on the Relationship between the Perception of the Student-Respondents regarding Modular Distance Learning Approach and their Academic Performance

Based on the data presented in Table 8, the Pearson correlation coefficient value of r (77) = 0.012 indicates that there is a negligible correlation between the students' perception of modular distance learning approach and their academic performance. Additionally, the obtained significant value of 0.92 is higher than the alpha level of significance, which is set at 0.05. Therefore, the null hypothesis is accepted, indicating that there is no significant relationship between the perception of the student-respondents regarding modular distance learning approach and their level of academic performance.

The finding is consistent with some studies conducted in the past, suggesting that there is no significant relationship between distance learning and academic performance (Abioye & Adeyemi, 2021; Oyekunle, 2019). However, other studies found that there is a significant positive relationship between distance learning and academic performance (Bhatti, 2021; Liu, Liu, & Li, 2019).

It is important to note that the relationship between distance learning and academic performance may vary based on factors such as the quality of the learning materials, students' learning styles, and their level of engagement and motivation. Hence, more research is needed to explore the relationship between modular distance learning approach and academic performance, considering these factors. Overall, the study's findings suggest that students' perception of modular distance learning approach does not significantly affect their academic performance. However, it is still essential to continue improving and enhancing the quality of modular distance learning to ensure that students can maximize their learning potential regardless of the learning mode they are in.

Table 8. Relationship between the Perception of the Student-Respondents regarding Modular Dis	;-
tance Learning Approach and their Academic Performance	

Academic Perfo	rmance	Grade	Decision	Interpretation
Perception of the Student-	Pearson Correlation	0.012	A agont U o	Nagligihla
Respondents on Modular	Sig. (2-tailed)	0.92	Accept Ho	Negligible
Distance Learning Approach	N	77	Not Significant	Correlation

Pearson Correlation Coefficient to Test the Significance on the Relationship between the Perception of the Student-Respondents on the Challenges of Modular Distance Learning Approach and their Academic Performance

The results from Table 9 suggest that there is no significant relationship between the perception of student-respondents regarding the challenges of Modular Distance Learning Approach and their academic performance. This finding implies that even though students may find certain aspects of modular distance learning challenging, these challenges may not necessarily impact their academic performance. Other factors may be at play, such as the students' own motivation, their access to resources and support, and their ability to adapt to new modes of learning.

A study by Okeke and Ezeudu (2020) found that students' academic performance during

the COVID-19 pandemic was affected by various factors, such as their access to technology, their level of self-motivation, and the quality of teaching provided through distance learning. Similarly, a study by Sahu (2020) found that factors such as lack of resources, poor internet connectivity, and family-related issues had an impact on students' academic performance during the pandemic.

It is important for educators and policymakers to consider these factors when designing and implementing distance learning programs, to ensure that students are provided with the necessary resources and support to succeed in their academic pursuits. This may include providing access to technology and internet connectivity, offering support for mental health and wellbeing, and ensuring that teachers are adequately trained to deliver high-quality instruction through distance learning.

 Table 9. Relationship between the Perception of the Student-Respondents regarding on the Challenges of Modular Distance Learning Approach and their Academic Performance

Academic Perf	ormance	Grade	Decision	Interpretation
Perception of the Student-	Pearson Correlation	0.017		
Respondents on the Chal- lenges of Modular Distance	Sig. (2-tailed)	0.88	 Accept Ho Not Significant 	Negligible Correlation
Learning Approach	N	77	-	

Pearson Correlation Coefficient to Test the Significance on the Relationship between the Perception of the Student-Respondents on the Effectiveness of Modular Distance Learning Approach and their Academic Performance

Table 10 shows that there is no relationship between the students' perception of the effectiveness of the modular distance learning approach and their academic performance. This implies that regardless of the student's perception of the effectiveness of the modular distance learning approach, their academic performance is not significantly affected. The computed Pearson-r correlation value of 0.021 indicates a negligible correlation, and the computed significant value of 0.86 is greater than the 0.05 alpha level of significance, suggesting that the null hypothesis is accepted.

These findings are consistent with previous studies that have reported no significant relationship between students' perceptions of distance learning and their academic performance (Mao et al., 2019; Zhang et al., 2021).

It is important to note that other factors such as student-related factors, teacher-related factors, and family-related factors can also affect academic performance during the implementation of distance learning. Therefore, it is crucial to consider these factors when examining the relationship between perceptions of distance learning and academic performance.

The results indicate that students' perception of the effectiveness of the modular distance learning approach is not related to their academic performance. Other factors should also be taken into account to better understand the relationship between distance learning and academic performance.

Table 10. Relationship between the Perception of the Student-Respondents on the Effectiveness ofModular Distance Learning Approach and their Academic Performance

Academic Performa	ince	Grade	Decision	Interpretation
Perception of the Student- Respondents on the Effec-	ec- Correlation 0.021	N1' - '1-1 -		
tiveness of Modular Distance Learning Approach	Sig. (2-tailed)	0.86	Accept Ho Not Significant	Negligible Correlation
	Ν	77	_	

Summary of the Findings

- 1. Out of seventy-seven (77) student- respondents there were five (5) or equivalent to 6 % aged 16 years old; fifty (50) or equivalent to 65 % aged 17 years old; seventeen (17) or equivalent 22% aged 18 years old; three (3) or equivalent to 4 % aged 19 years old; and two (2) or equivalent to 3 % aged 20 years old. The computed weighted mean of age of the student-respondent is 17.31. Out of seventy-seven (77)respondents, there were thirty-two (32) or equivalent to 41.56 % male; and forty-five (45) or equivalent to 58.44 % female.
- 2. Out of 77 respondents, 18.18 percent (14 out of 77) received an outstanding mark, 50.65 percent (39 respondents) received a very satisfactory grade, and 31.17 percent (24 respondents) received a rating of satisfactory. The over-all weighted mean of academic performance of HUMSS 12 was 86.89 with a qualitative interpretation of **very satisfactory**.
- 3. Based on the data, the student-respondents showed agreement that they can be guided by their peers and family in modular distance learning, with a mean of **3.23**, while showing disagreement towards preferring modular distance learning over traditional face-to-face instruction, with a mean of **2.36**.

- 4. The indicator "Students require self-motivation in answering activities in modules" had the highest weighted mean of 3.31 and was perceived as "Agree," making it the most challenging aspect of modular distance learning according to the studentrespondents, while "Students can lose their self-confidence" had the lowest weighted mean of 2.65 and was also perceived as "Agree," indicating that it was the least challenging aspect.
- 5. A significant finding was that the indicator "It helps the students express their ideas" was the most effective aspect of modular distance learning, with a weighted mean of 3.21 and a perception of "Agree," while the least effective aspect was indicated in "The students can answer well without pressure," with a weighted mean of 2.60 and a perception of "Agree."
- 6. There was no significant relationship found between the perception of the student-respondents on the Modular Distance Learning Approach and their level of academic performance, as indicated by the negligible correlation of the computer-generated Pearson-r value of r (77) = 0.012 and the obtained significant value of 0.92 which is higher than the 0.05 alpha level of significance, leading to the acceptance of the null hypothesis.

- 7. A negligible correlation was found in the computed Pearson-r correlation value of r (77) = 0.017, with a significant value of 0.88 higher than the 0.05 alpha level of significance, resulting in the acceptance of the null hypothesis, indicating no significant relationship between the perception of student-respondents on the challenges of Modular Distance Learning Approach and their level of academic performance.
- 8. The Pearson-r correlation value of r (77) = 0.021 suggested negligible correlation, and the significant value of 0.86 is greater than the 0.05 alpha level of significance, leading to the acceptance of the null hypothesis, indicating no relationship between student-respondents' perceptions of the effective-ness of the modular distance learning approach and their academic performance.

Conclusion

Based on findings of the study, the researchers have concluded that:

- 1. Majority of the student-respondents were comprised of female aged 17.31 years old.
- 2. The academic grades of HUMSS 12 students treated by modular approach achieved "very satisfactory" during the school year 2020-2021.
- 3. The students' perceptions on the modular distance learning approach was perceived as "Agree".
- 4. Various challenges in adopting a modular distance learning approach during the transition to a new typical set-up in the educational system was perceived as "Agree" by the student-respondents.
- 5. Despite its limitations in the face of the COVID-19 pandemic, the study proved the efficiency of a modular distance learning approach in learning.
- 6. There is no significant relationship between the perception of the student-respondents regarding Modular Distance Learning Approach and the level of their academic performance.
- 7. There is no significant relationship between the perception of the student-respondents on the challenges of Modular

Distance Learning Approach and their level of academic performance.

- 8. There is no significant relationship between student-respondents' perceptions of the effectiveness of the Modular Distance Learning Approach and their academic performance.
- 9. The academic performance of HUMSS 12 students was not affected by students' perceptions toward modular distance learning, challenges they faced, and the effectiveness of modular distance learning.

Recommendations

Based on the findings of the study, several recommendations can be made to improve the modular distance learning approach and enhance the academic performance of HUMSS 12 students:

- Modular distance learning approach can be used as a viable alternative to traditional face-to-face education, and its use should continue even after the Covid-19 pandemic. The modules, self-learning materials, and video clip presentations can be used in various strands and disciplines and can meet the diverse learning demands of students at all levels.
- 2. Academic members who participate in the creation of modules and editors who review them need to be better trained. Teachers should also participate in the development of modules to help them improve and expand their abilities. Collaboration and cooperation among teachers can help create more exciting and engaging modules.
- 3. Teachers should keep track of the students' progress, provide feedback, and assist those who require extra help. They must also be more adaptable and level-headed in all situations. Teachers' response mechanisms should be improved through the use of social media platforms, as well as their leniency in the submission of students' work.
- 4. School administrators should develop new policies and strengthen existing ones to address students' mental health issues. It is crucial to ensure the well-being of students,

particularly during a pandemic, to promote their academic success.

- 5. The study recommends investigating learner variables such as parents' ability to provide instructional support, resources, and technology access to support their studies in using self-learning materials in the Modular Distance Learning delivery. It is important to identify the factors that support students' learning and provide them with the necessary resources to succeed.
- 6. Further studies should investigate teacher readiness, technology competency, and teacher perceptions of various modalities such as blended and online distance learning. These investigations will identify areas where teachers need to be better prepared and trained to provide quality education to their students.
- 7. Finally, the study suggests conducting a similar investigation that incorporates other variables not covered in this study. This can provide more comprehensive data and help improve the modular distance learning approach's effectiveness and impact on students' academic performance.

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