Modified Learner Enrolment Survey Data and Academic Performance of Students in Printed Modular Distance Learning

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Abstract: This study aimed to determine the association between the academic performance of the Grade 10 students of Palo National High School, Cavite West, Palo, Leyte with respect to their data in the Modified Learner Enrolment Survey Form (MLESF), particularly on Pantawid Pamilyang Pilipino Program membership (4Ps), availability of learning devices, and internet connection status. The study utilized descriptive-correlation research, in which the sole data collection tool was firsthand information from the MLESF and report cards of those students who were exposed to printed modular distance learning, one of the learning modalities implemented by the Department of Education to ensure learning continuity despite the series of lockdowns and health safety measures. Results show that the majority of the students who are members of 4Ps under the said modality have satisfactory performance, which is 33 out of 50. When it comes to the students' internet connectivity, 21 out of 50 also perform satisfactorily, while on the availability of devices, only 10 out of 50 had the same performance, which already attained the highest. No significant association was found between the three variables and students' academic performance, which indicates that these are not considered influential factors in students' learning. Other variables may be included in future research.

1. Introduction

The global health catastrophe brought by coronavirus 2019 has changed all usual actions of human beings. It significantly changed the normal world. The World Health Organization declared COVID-19 a global pandemic. This current situation has a critical impact, particularly on education (Chakraborty et al., 2020; Khan et al., 2020). Children, being situated to understand how social distancing becomes the new normal and following maximum health protocols become a primary goal, education set-up has never been the same (Bozkurt et al., 2020; Bayod, R. & Bayod, 2020). It is a very difficult time for the educational institutes to commence sessions and parents to send their children to schools, college and university to continue the education and complete the courses (Sut & Öznaçar, 2017). As this dreadful virus continues to spread worldwide, the crowd and large gatherings like those in schools are the most vulnerable settings for virus contamination (Horton, 2021). The students must be protected from the contamination of the virus, but education

must not cease. Learning is very important (Bringle & Clayton, 2021).

In the Philippines, the Department of Education had been constantly struggling to find opportunities for educational institutions to commence. However, determined to continue the service, DepEd Order No. 12, series of 2020 stipulated the streamlining of the K to 12 curricula to the most essential learning competencies with multiple learning modalities to be employed. This was further backed up by DM-CI-162, suggesting modular distance learning in either online or printed setup as one of the adopted strategies. In addition, DepEd Order No. 32, series of 2020 presented the new guidelines of adapting modular learning set-up (specifically for Junior High Schools) tagged as Learning Continuity Plan in time of COVID-19 pandemic. The Department of Education ensures that despite of the global pandemic, the learning must not be hampered. And one of the learning approaches is modular learning where lessons will be delivered outside the traditional face-to-face set up.

A learning delivery mode where interaction takes place between the teacher and the students who are geographically remote from each other during instruction. In Modular Distance Learning, the teacher is responsible for monitoring the progress of the learners. The teacher may opt to do it via e-mail, telephone, text messages, Facebook (FB), private message (PM) and other instant messaging. If it is really necessary, the teacher does home visitations for learners' remediation and assistance. More often, the parents, guardians or any member of the family may serve as para-teachers (Duero, 2020).

One of the ways of achieving distance learning is through the use of a modular approach, which was deemed effective in improving academic performance in mathematics based on the study of Aksan (2021). It also revealed that despite being grouped by age or gender, students' perceptions towards using the approach did not affect their performance. Nardo (2017) ascertained that the use of modules leads to better self-study or learning skills among students, therefore advocating self-directed learning. A similar study by Valencia (2020) revealed that student performance was significantly improved on test results and was described as competent when using a modular approach to teaching.

Although several studies have been conducted on the use of a modular approach to education, such as Tupas & Linas-Laguda (2020); Ellis (2019); Bulaeva et al. (2018) few have actually explored the correlates of the academic performance of junior high school students in a modular learning setup. Therefore, it was anticipated in this study that the modular learning structure, particularly as it is now being applied in the Basic Education program, had an impact on students' academic performance.

2. Objectives

This study aimed to determine the association between the academic performance and the utilization of modular distance learning.

Specifically, it aimed to:

2.1 describe the academic achievement of the respondents in connection to relevant factors for printed modular distant learning, such as internet access, Pantawid Pamilyang Pilipino Program (4Ps) enrollment, and device accessibility;

2.2 Explain the statistical association of respondents' academic performance and related variables to printed modular distance learning.

3. Methodology

Research Design

This study was quantitative in nature. It used a correlational research design. Frequency was used in describing the nominal variables, such as 4Ps membership, availability of learning devices, and internet connection status, while the Chi-square test was used to test the association of the variables.

Research Samples

The participants of the study comprised one section, which was composed of fifty (50) students from the 14 sections of grade 10 students who were exposed to printed modular distance modality at a national high school in Palo, Leyte, Philippines.

Data Collection Method

No research instruments were used since the data was gathered solely from the filled-out enrolment forms and from the report cards of the students in the First Quarter of School Year 2021–2022. Research data came from the MLESF (Modified Learner Enrolment Survey Forms). This is a survey-questionnaire form mandated by the Department of Education to be used as part of the enrollment process. Responses were printed individually for better analysis.

For the data collection procedure, first, letters of request for data gathering

were sent to the selected school through the Schools Division Superintendent of the Division of Leyte. Secondly, enrollment data were collected from the enrollment forms that students submitted during the enrollment period of the school year 2021–2022. Lastly, the students' final grades during the first quarter of the same school year were obtained from their report cards.

The collection of data for this study was done using the secondary resource, which is the Modified Learner Enrolment and Survey Forms, a document being used by the Department of Education as one of the requirements before a student will be enrolled in a grade level pursuant to DepEd Order No. 31, Series of 2020. However, due to health restrictions at the time of the study, parents and guardians were asked to answer the MLESF on behalf of the students during the enrollment period.

For the categorical purpose of determining the grades of the students, the researchers applied the Policy Guidelines on Classroom Assessment for the K–12 Basic Education Program from the Department of Education, also known as Order No. 8 of 2015 (New Grading System), as shown in Table 1.

Table 1. Descriptor Baseline for the Academic Performance

Descriptor	Grading Scale	Remarks
Outstanding	90 – 100	Passed
Very Satisfactory	85 – 89	Passed
Satisfactory	80 – 84	Passed
Fairly Satisfactory	75 – 79	Passed
Did Not Meet the Expectations	Below 75	Failed

Data Analysis

The study uses descriptive statistical analysis in the form of frequency counts to

reflect the overall number of students with common variables as to internet connectivity, 4Ps membership, and availability of devices. A non-parametric inferential statistic, chi-square, was also used for the determination of statistical association across the said common variables, with a 5% margin of error.

4. Results and Discussion

4.1 Relevant Factors

4.1.1 Internet Connectivity

Table 2 shows a cross-tabulation of internet connectivity and academic performance, with 25 respondents having internet access and 25 not. Among the respondents with internet connectivity, (1) has fairly satisfactory grades, (21) have satisfactory grades, (1) has very satisfactory grades, and (2) have outstanding grades. On the other hand, among the respondents with no internet connectivity, (2) have fairly satisfactory grades, (18) have satisfactory grades, (4) have very satisfactory grades, and (1) has outstanding grades.

Table 2. Cross-tabulation between internet connectivity and academic performance

Academic Performance	Internet Connectivity		Total
	No	Yes	
Outstanding	1	2	3
Very Satisfactory	4	1	5
Satisfactory	**18**	**21**	**39**
Fairly Satisfactory	2	1	3
Total	25	25	50

Students are using their resources when they are available, as seen by their satisfactory performance when connected to the internet. The availability of an internet connection is becoming a major requirement for using educational resources at home (Omeluzor et al., 2016). The data shows that the availability of an internet connection is deemed necessary in order to at least assist students in achieving adequate performance in a modular distant learning strategy.

4.1.2 Pantawid Pamilyang Pilipino Program (4Ps) Membership

Table 3 shows the cross-tabulation between 4Ps membership and academic performance, where most of the respondents (43) are 4Ps members and only seven are not. From the 4Ps members, 33 of the respondents have satisfactory grades, five have very satisfactory grades, three have fairly satisfactory grades, and two have outstanding grades. On the other hand, of the seven respondents who are not members of the 4 Ps, six have satisfactory grades, and one has an outstanding grade.

Table 3. Cross-tabulation between 4Ps membership and academic performance

Academic Performance	4Ps Beneficiary		Total
	No	Yes	
Outstanding	1	2	3
Very Satisfactory	0	5	5
Satisfactory	**6**	**33**	**39**
Fairly Satisfactory	0	3	3
Total	7	43	50

Having met satisfactory performance in relation to them as 4Ps members indicates that the 4Ps goal of supporting the schooling of students as one of the important components of the program is supported, as claimed by UNICEF in 2015, as cited in the paper by Once et al. (2019). It can be inferred that 4Ps served its purpose of

providing cash transfers to students who prefer to continue their basic education.

4.1.3 Availability of Devices

Table 4 shows the cross-tabulation between availability of devices and academic performance, where most of the respondents (38) do not have available devices and (12) do. Among the respondents who do not have available devices, 29 have satisfactory grades, 4 have very satisfactory grades, 2 have fairly satisfactory grades, and 3 have outstanding grades. On the other hand, of the 12 respondents who have available devices, 10 have satisfactory grades, 1 has a very satisfactory grade, and 1 has a fairly satisfactory grade.

Table 4. Cross-tabulation between availability of devices and academic performance

Academic Performance	Availability of devices		Total
	No	Yes	
Outstanding	3	0	**3**
Very Satisfactory	4	1	**5**
Satisfactory	**29**	**10**	**39**
Fairly Satisfactory	2	1	**3**
Total	38	12	50

The data implied that even when there are not enough learning resources available at home, students can still perform satisfactorily in their academics if they comply with the necessary tasks indicated in their modules. A similar result was also identified by Villegas-Ch (2020). This infers that other extraneous factors have contributed to this academic performance that were not identified by the research at hand, an implication that can be used for further study.

4.2 Statistical Association between the Relevant Factors and Academic Performance

Table 5 showed the significant association between the three variables mentioned and academic performance. Results showed p-values on Internet connectivity (0.441), 4Ps membership (0.513), and the availability of devices (0.755), all greater than the 0.05 level of significance, which indicates a non-significant result. This implied that the three variables were not significantly associated with the respondent's academic performance.

Table 5. Statistical Association between the Relevant Factors and Academic Performance

Variables	χ^2	df	p-value	Remarks
Internet Connectivity	2.697	3	0.441	Not Significant
4Ps Membership	2.296	3	0.513	Not Significant
Availability of Devices	1.192	3	0.755	Not Significant

According to data from Table 5, students can still achieve academic success even with the printed modular learning configuration that has replaced traditional instruction, which is consistent with Nunez's claims (2021). Other enrollment data from students' Modified Learning Enrollment Survey Form and its statistical association with academic performance are therefore suggested for further study.

5. Conclusion and Recommendation

In the new normal, the printed modular learning setup enables students to perform satisfactorily in their academics regardless of their access to the internet,

participation in the 4Ps, or possession of devices at home. Therefore, based on these studies' findings, it is advised that additional research be done to look at the correlation between other enrollment data from students' profiles on the Modified Learning Enrolment Survey Form and the correlation between students' enrollment profiles and their academic performance in other learning modalities like digital distance learning, blended distance learning, hybrid learning, or hyflex learning.

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