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Alternative Learning System (ALS) Students' Demographic Characteristics on their Academic Performance

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Abstract

Aim: This study aimed to assess the significant difference between demographic characteristics and academic performance in the Alternative Learning System (ALS), a flexible educational program designed for individuals unable to attend formal schooling.

Methodology: The study, conducted in Maramag II District, Region 10, Philippines, utilized a descriptive-correlational approach, examining the portfolios of 118 ALS participants during the school year 2022-2023. The demographic analysis includes age, gender, civil status, educational attainment, employment status, and monthly household income. Moreover, this study analyzed the level of academic performance of ALS students in a portfolio-based assessment, the significant relationship between the demographic characteristics of ALS students and the level of their academic performance, and the demographic characteristics that affect ALS students' academic performance.

Results: Results indicate a concentration of ALS participants among young adults, a balanced gender distribution, and a majority with high school-level education. Most ALS learners are unemployed and come from low-income backgrounds. Portfolio assessment indicated consistent performance across demographic groups which demonstrate no significant relationship observed, however, there was a potential trend suggesting a link between educational attainment and academic achievement, but this relationship did not reach statistical significance. Moreover, no demographic characteristics were found to significantly affect the academic performance of ALS students.

Conclusion: Statistical analysis reveals no significant influence of age, gender, civil status, employment status, or monthly household income on ALS performance. These findings contribute valuable insights for policymakers, educators, and stakeholders aiming to enhance the inclusivity and effectiveness of ALS in addressing diverse educational needs.

Keywords: *Academic Performance, Alternative Learning System (ALS), Demographic Characteristics, Effectiveness, Inclusivity*

INTRODUCTION

The Alternative Learning System (ALS) is an educational program designed to provide learning opportunities and access to education for individuals unable to attend or complete formal schooling (DepEd, n.d.). Additionally, this program was implemented by the Department of Education (DepEd), and it operates through various ALS centers and community learning centers across the country. It is a flexible and non-traditional approach to learning that aims to reach out to marginalized sectors of society, such as out-of-school youth, adults, working individuals, indigenous peoples, and individuals with disabilities (Alternative Learning System, n.d.).

However, ALS students face challenges in terms of academic performance, one of which is often associated with socioeconomic factors (David et al., 2018). In the country, the ALS provides educational opportunities for individuals from different socioeconomic statuses and acknowledges the financial constraints that hinder access to formal education. In Region 10, ALS is actively promoted to provide educational opportunities for individuals unable

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to access or complete formal schooling. The regional office of DepEd collaborates with various ALS centers and community learning centers to deliver ALS programs and services (Tenazas, 2023). Specifically, in Bukidnon, including Maramag, ALS is available to cater to the educational needs of students. ALS and community learning centers offer learning modalities, including face-to-face classes and modular learning.

Assessing the Alternative Learning System's effect on students' achievement is crucial because it provides insight into the efficiency of this alternative educational approach and its contribution to students' achievement and personal growth. This research aims to go into the specifics of the ALS program and assess its influence on students' academic achievement through correlational research. Brown (2019) found that alternative education students with higher self-efficacy were more likely to complete the program successfully. Another study by Schwab et al. (2016) reveals that students in alternative education settings who were considered at risk may struggle with academic content and require a different educational approach.

To ensure that no one is left behind in the pursuit of knowledge and personal growth, the researchers aimed to provide insightful information that can be used by the participants, educators, parents, and stakeholders to create an inclusive and effective educational environment. By producing empirical evidence, this research can guide educational policies and help the Department of Education (DepEd) make informed decisions about integrating and improving ALS within the broader educational framework. Additionally, this study can identify strengths, challenges, and tailored curriculum development strategies to enhance inclusivity in science education.

Objectives

This study generally assessed the significant relationship between the demographic characteristics of Alternative Learning System (ALS) students and their academic performance.

Specifically, it aimed to:

1. determine the percentage distribution of the demographic characteristics of ALS students in terms of:
   1.1. age;
   1.2. sex;
   1.3. highest educational attainment;
   1.4. employment status; and
   1.5. monthly household income.
2. determine the level of academic performance of ALS students in a portfolio-based assessment;
3. assess the significant relationship between the demographic characteristics of ALS students and the level of their academic performance; and
4. identify the demographic characteristics that affect ALS students' academic performance.

Hypothesis

Given the stated research objective, the hypothesis was tested on 0.05 level of significance:
Hypothesis: There is a significant relationship between the demographic characteristics of ALS students and the level of their academic performance.

METHODS

Research Design

This study used descriptive-correlational methodology involving secondary data from the students' document portfolios. The data includes their demographic characteristics and their scores in portfolio assessment. This study employed a descriptive correlational research design to examine the relationship between the demographic characteristics of Alternative Learning System (ALS) students and their academic performance.

Population and Sampling

A census or a complete enumeration was employed in the study in which the researchers selected the whole population of the 118 junior high school completers in the Alternative Learning System (ALS) in Maramag II District, Bukidnon during the school year 2022-2023.

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Instrument

The secondary data from the students' portfolio which contains demographic characteristics and their scores in portfolio assessment was used to collect the necessary data in this study.

Data Collection

Prior to data collection, a formal permit letter was sent to the school principal and the head of the Alternative Learning System (ALS) to secure approval for conducting the study. Data collection was carried out following ethical research guidelines and institutional protocols to ensure validity and confidentiality.

The primary data sources included students' portfolios and their scores in portfolio assessment. The portfolios contained demographic information such as age, gender, civil status, educational attainment, employment status, and monthly household income, allowing for a deeper understanding of the student population in the ALS program. The students' scores in portfolio assessments served as quantitative data, providing measurable indicators of their academic performance.

The gathered data were carefully reviewed and analyzed in alignment with the study's objectives. The analysis examined the relationship between demographic factors, portfolio content, and students' performance in the Alternative Learning System.

Treatment of Data

Descriptive statistics, encompassing percentages, were employed to examine the distribution of demographic characteristics among ALS students, including age, gender, civil status, educational attainment, employment status, and monthly household income. The data pertaining to academic performance in the portfolio-based assessment underwent analysis utilizing measures of central tendency specifically mean and standard deviation and dispersion to ascertain the level of performance.

Moreover, pearson correlation coefficients are utilized in aspects of regression analysis, to evaluate the significant relationships between demographic characteristics and academic performance. The objective of this analysis was to unveil any patterns or trends that might have existed among the variables. Additionally, pearson correlation coefficients were utilized to identify the demographic characteristics that significantly influenced the academic performance of ALS students

Ethical Considarations

To safeguard the data and information collected from students portfolios, the researcher strictly adhered to all relevant research ethics protocols, including giving informed consent to them. This ensured the anonymity, confidentiality, integrity, and availability of all data, protecting the rights and privacy of the participants.

RESULTS and DISCUSSION

The results have provided insights into the nuanced relationships between demographic factors and academic achievement among ALS students, thereby contributing valuable information for educational policy and practice.

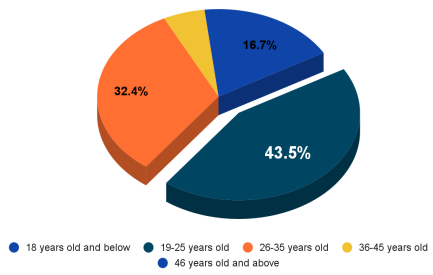

Figure 1. Percentage distribution of ALS students in terms of age

Figure 1 presents the percentage distribution of ALS students in terms of age. The largest percentage falls within the 19-25 years old, comprising 39.80% of ALS students. The age groups of 26-35 years old and 18 years old and below also demonstrate significant proportions, accounting for 29.70% and 15.30%, respectively. This distribution implies that the ALS program caters to a broad demographic, including those who may have had challenges in traditional schooling or are pursuing education at different stages of their lives. The relatively smaller percentages in the 36-45 years old and 46 years old and above categories indicate a lesser but still present engagement of older individuals in ALS, reflecting a commitment to lifelong learning and the accessibility of ALS across various age groups. According to the Department of Education (2019), the ALS program accommodates individuals across different age groups, including young adults seeking to complete their basic education or acquire additional skills.

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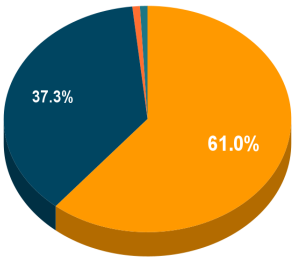

Figure 2. Percentage distribution of ALS students in terms of gender

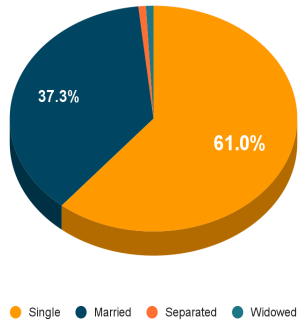

Figure 3. Percentage distribution of ALS students in terms of civil status

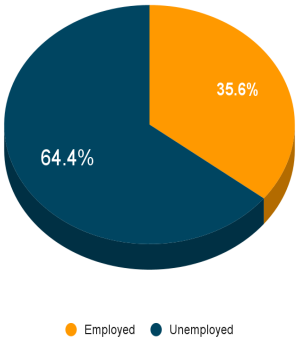

Figure 4. Percentage distribution of ALS students in terms of educational attainment

Figure 2 presents the percentage gender distribution among participants in the Alternative Learning System (ALS), with 61 individuals identified as female, constituting 51.10% of the total, and 57 individuals classified as male, representing 48.30%. This gender breakdown sheds light on the diversity within the ALS program, indicating relatively balanced participation between females and males. The nearly equal distribution suggests that both genders actively engage with and benefit from the Alternative Learning System, emphasizing its inclusivity and accessibility to a broad spectrum of learners. The percentages provide insights into the program's demographic composition, facilitating a nuanced understanding of the reach and impact of ALS initiatives across different gender groups.

Figure 3 presents the percentage distribution of ALS students in terms of civil status. The result shows most ALS students that are single, accounting for 61.00% of the sample, followed by married individuals (37.30%). Interestingly, just 0.80% of ALS students reported being separated or widowed. This demographic profile provides insight into the different backgrounds of ALS participants, demonstrating that a considerable proportion of them are single, evidently indicating that the program attracts younger individuals who may have trouble in pursuing traditional school educational programs.

Understanding the civil status distribution among ALS students provides insights into the diverse backgrounds and life experiences that shape their engagement with alternative learning opportunities. The alternative education systems frequently emphasize their inclusivity, attracting learners from diverse life situations, including those who may not fit the conventional student profile (UNESCO, 2017).

Figure 4 presents the percentage distribution of ALS students in terms of educational attainment. The data shows that most ALS students, accounting for a substantial 96.60%, have attained education up to the High School Level. On the other hand, a smaller proportion of 3.40% comprises individuals who have graduated from elementary school, highlighting the diversity in educational backgrounds within the ALS student population. The concentration of students with a high school education indicates the program's effectiveness in catering to those seeking to complete their basic education and possibly further their academic pursuits.

The Alternative Learning System in the Philippines is designed to provide flexible and accessible education to those who may have dropped out of school or could not pursue formal education. This aligns with the inclusive nature of ALS, offering an opportunity for individuals with diverse educational backgrounds to acquire essential skills and knowledge. Notably, the percentages are derived from specific data; however, more comprehensive analysis and contextual information would be necessary for a thorough understanding of the ALS student demographic. This interpretation is consistent with the goals of ALS to address the educational needs of a broad range of learners (DepEd, n.d.).

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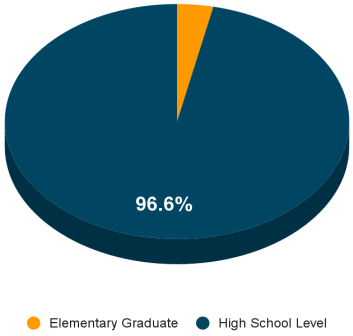

Figure 5. Percentage distribution of ALS students in terms of Employment Status

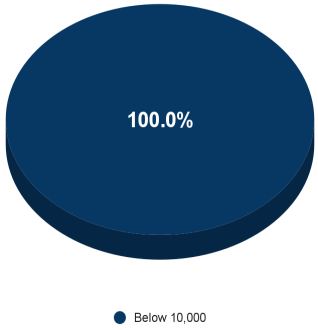

Figure 6. Percentage distribution of ALS students in terms of monthly household income

Figure 5 presents the percentage distribution of ALS students in terms of employment status, with 35.60% being employed and 64.40% classified as unemployed. When considering the context of the Alternative Learning System (ALS), these figures may have significant implications. The ALS is often designed to cater to individuals who face barriers to formal education, and the higher percentage of unemployed individuals might indicate that a considerable portion of the ALS participants are currently not engaged in regular employment. This could suggest that the program attracts individuals seeking educational opportunities to enhance their skills and employability, potentially addressing the needs of those facing challenges in the traditional job market. A study by the Organization for Economic Co-operation and Development (OECD, 2023) found that "adults with low levels of education and skills face a greater risk of unemployment, poverty, and social exclusion". The study also found that "adult learning can help to improve the employability and earnings of low-skilled individuals".

Figure 6 presents the percentage distribution of Alternative Learning System (ALS) students in terms of monthly household income. The result shows that 100% of the ALS students fall into the category of "Below 10,000."

According to the Department of Education in the Philippines (DepEd, n.d.), ALS programs often cater to marginalized and economically disadvantaged individuals who may face financial constraints in accessing formal education. The concentration of ALS students below the 10,000-income threshold underscores the program's role in serving those with limited financial resources. The ALS aims to provide an alternative avenue for education, enabling individuals from economically challenged backgrounds to pursue learning and skills development. This aligns with the inclusive and equitable education goals the United Nations sets, emphasizing the importance of reaching marginalized groups to ensure universal access to education (UNESCO, 2017). Therefore, the data reflects ALS students' socioeconomic diversity and highlights the program's contribution to addressing educational disparities among economically disadvantaged populations.

Table 1. Level of Academic Performance of ALS Students

	N	Minimum	Maximum	Mean	SD
Score	118	41.00	46.00	43.08	0.98

Table 1 presents the level of academic performance of Alternative Learning System (ALS) students, with a sample size (N) of 118. The scores range from a minimum of 41.00 to a maximum of 46.00, reflecting a relatively narrow distribution. The mean score, calculated at 43.08, serves as a central measure indicating the average academic performance of the ALS students in the sample. The standard deviation (SD) is reported as 0.98, suggesting a low level of variability around the mean. This implies that most ALS students in the sample cluster around the average score, with little deviation from the mean.

The data provides valuable insights into the overall academic achievement of ALS students, allowing educators and policymakers to better understand the distribution and central tendencies of their performance (Mirasol, et al., 2021). Additionally, the narrow range may indicate a degree of consistency in the academic abilities of the ALS student population.

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Table 2 presents the p-values of the demographic characteristics of the students in ALS. The p-values provided offer insights into the potential significance of various demographic characteristics concerning the performance of Alternative Learning System (ALS) learners. A p-value less than 0.05 is typically considered statistically significant, suggesting that the observed result is unlikely to have occurred by chance (McLeod, 2023).

Table 2. ALS Learner's Performance on the following demographic characteristics

Demographic Characteristic	p-values
Age	0.8240
Gender	0.8277
Civil status	0.7283
Educational attainment	0.1670
Employment status	0.6618
Monthly household income	0.6480

Note: **significant at the 0.05 level*

In this context, the demographic characteristics of age, gender, civil status, educational attainment, employment status, and monthly household income were examined. The p-value for age is 0.8240, indicating no statistically significant difference in performance among ALS learners based on age. This finding is contrary to the study of Navarro et al. (2015) that older students generally performed better in academic settings. It was cited in the same study that inconsistency in the results happened due to the use of small sample sizes in some studies and large, population-based samples in others which contributed to varying results.

Similarly, the p-value for gender is 0.8277, suggesting that gender does not appear to be a significant factor influencing ALS performance. The result of this was supported by the study of Goni et al. (2015), which showed no significant difference between gender and academic performance.

However, civil status shows a p-value of 0.7283, implying no substantial difference in performance based on civil status. Similar to the study by Beard and Langlais (2018), civil status has no significant effect on academic performance among undergraduate students from a university in the Midwestern United States.

Educational attainment, with a p-value of 0.1670, suggests a potential trend but does not reach the conventional threshold for significance. It may be worthwhile to investigate further to determine if there are nuanced effects within educational levels.

Employment status has a p-value of 0.6618, indicating no statistically significant difference in performance based on employment status among ALS learners. Similarly, monthly household income, with a p-value of 0.6480, suggests no significant impact on ALS performance. The findings obtained on their employment statuses and their monthly household income were supported by the study of Baert et al. (2018), which found that student employment and income were negatively associated with their academic performance.

Moreover, based on the provided p-values, it appears that age, gender, civil status, employment status, and monthly household income do not significantly influence the performance of ALS learners. While there is a potential trend in educational attainment, further analysis may be needed to draw conclusive findings. It is crucial to consider these results within the context of the study and explore additional factors that may contribute to the performance of ALS learners.

Table 3. Demographic characteristics that affect ALS students' academic performance.

	Std. Error	Z value	Pr(>|z|)
Age	0.3696	-0.332	0.7396
Gender	0.4344	-0.464	0.6429
Civil status	0.5216	-0.599	0.5495
Educational attainment	0.4410	-0.457	0.6214
Employment status	0.5160	0.650	0.5160
Monthly household income	0.5361	0.768	0.5363

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Table 3 provides information on the demographic characteristics that may impact the academic performance of ALS (Alternative Learning System) students. Using Logistic Regression, it shows that none of the independent variables (age, gender, civil status, educational attainment, employment status, and monthly household income) resulted in p-values less than the 0.05 level of significance. None of the independent variables significantly affect the student's grades.

The standard error (Std. Error) for each variable is provided, offering an indication of the precision of the estimate. The Z value represents the number of standard deviations a data point is from the mean, with negative values indicating below-average performance. The Pr(>|z|) column indicates the probability of observing a Z value as extreme as the one calculated, providing insights into the statistical significance of each variable. In this context, none of the demographic factors appear to have a statistically significant impact on ALS students' academic performance, as indicated by the relatively high p-values across all variables. It suggests that based on this analysis, age, gender, civil status, educational attainment, employment status, and monthly household income may not be significant predictors of academic performance among ALS students.

Based on the provided data, it can be inferred that the lack of a significant relationship of demographic characteristics on ALS students' academic performance may be attributed to two possible factors: sample size and the homogeneity of academic performance among ALS students. This result was supported by Andrade (2020) of which he cited that a larger sample size allows hypothesis tests to detect smaller effects, so as the sample size increases, the hypothesis test gains a greater ability to detect small effects. Furthermore, the homogeneity of academic performance among ALS students, as presented in Table 1, may also contribute to the lack of significant effects. Deeks et al. (2023) have pointed out that when the groups being compared are very similar in terms of performance, it becomes more challenging to identify significant differences. If the majority of the ALS students exhibit similar academic performance levels, it reduces the variability in the data and makes it more difficult to detect significant effects of demographic characteristics.

Conclusions

The study shows key insights into the percentage distribution of the demographic characteristics of ALS students. The majority of ALS students were in the 19-25 age group, showcasing the program's appeal to a diverse demographic. Gender distribution was relatively balanced, indicating inclusivity. Most participants were single, emphasizing the program's accessibility to younger individuals facing challenges in traditional schooling. While educational attainment was concentrated at the high school level, ALS effectively accommodated individuals with varied educational attainment. Employment status and monthly household income reflected the program's role in addressing the needs of economically disadvantaged learners.

The results of the study revealed that age, gender, civil status, employment status, and monthly household income does not have a significant relationship with student's performance, as indicated by p-values above 0.05. However, there was a potential trend suggesting a link between educational attainment and academic achievement, but this relationship did not reach statistical significance. Consequently, no demographic characteristics were found to significantly affect the academic performance of ALS students. This finding underscores the program's strength in providing effective learning opportunities regardless of the learner's background, highlighting its ability to foster success through its delivery.

Recommendations

To the educational institutions and policymakers continue to support and promote the Alternative Learning System (ALS), given its effectiveness in catering to diverse demographic profiles, particularly those facing challenges in traditional schooling. The inclusive nature of ALS, as evidenced by the balanced gender distribution and accessibility to individuals with varying educational backgrounds, highlights its potential to address the needs of a broad spectrum of learners.

Furthermore, even if the demographic characteristics including age, gender, civil status, employment status, and monthly household income do not have a significant influence on ALS students' academic performance. However, it is important to acknowledge the limitations of this study and call for future studies to explore other potential factors that may affect academic performance within the ALS context. Additionally, with a larger sample size, the study would have a better chance of capturing the true relationships between demographic characteristics and academic performance among ALS students, potentially revealing significant effects that might not have been detected in this research study.

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Moreover, longitudinal studies could provide insights into the long-term outcomes and success rates of ALS graduates, contributing to a more comprehensive understanding of the program's efficacy and potential areas for improvement.

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