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VOCABULARY LEARNING STRATEGIES AS PREDICTORS OF ACADEMIC PERFORMANCE AMONG SECONDARY SCHOOL STUDENTS

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Abstract

This study examined the relationship between vocabulary learning strategies and academic performance in secondary school students. A survey was conducted to a sample of 267 Grade 10 students from five public secondary schools in the District of New Corella, Division of Davao del Norte. It employed stratified random sampling to select respondents from the chosen schools so that each has an appropriate percentage of distribution of student respondents based on ratio and proportion. Adapted questionnaires were used to determine the level of vocabulary learning strategies and the researcher utilized the third quarter grades of the five schools in the district. The ethnicity shows that the total respondents are overwhelmingly Bisaya. The respondents are in the lowest income category, which suggests a clear bias toward constrained financials. Among the five indicators, determination strategies turned out to be the most often used, and social strategies were the least effective. However, the English grades of the students demonstrate a clustering of their scores around the average. There is no strong evidence to support the claim that there are differences in average English grades among the ethnic groups being compared, while there is no significant difference in the mean English grades among the four income categories. It is recommended that students should actively use effective vocabulary learning strategies to enhance their academic performance across subjects and that teachers design customized vocabulary acquisition. Thus, the administrators and school principals may monitor the implementation of vocabulary learning strategies to improve academic performance.

Keywords: english language teaching, vocabulary learning strategies, determination strategies, social strategies, memory strategies, cognitive strategies, metacognitive strategies, academic performance, grade, ethnicity, income, descriptive-correlational research

INTRODUCTION

Students often face difficulties when learning new words, making vocabulary acquisition a significant challenge in their academic journey. Many struggle to distinguish correct spelling from pronunciation, develop effective vocabulary learning strategies, use new words appropriately, and fully grasp their meanings. These challenges can make it harder for students to succeed in school and improve their language skills (Afzal, 2019). In Nepal, a study conducted by Aja (2022) at Far Western University found that students struggled with academic performance due to challenges in vocabulary learning strategies facilitated by their teachers. These difficulties included acquiring new words, understanding unfamiliar terms, excessive reliance on memorization, lack of reinforcement in vocabulary knowledge, ineffective teaching pedagogy, and limited use of learning resources at the university level (Hafsari, Syarifuddin and Sartika, 2025). Additionally, the study highlighted issues such as discrepancies between pronunciation and spelling, as well as difficulties in selecting appropriate word meanings due to the inherent complexity of vocabulary learning.

In Cotabato City, a study conducted by Salamat (2019) reported that students at Cotabato City National High School performed poorly on English assessments and struggled with academic tasks. These difficulties were linked to weak reading comprehension skills and an inability to effectively apply vocabulary learning strategies taught by their teachers. Similarly, Meliton, Braga, and Intis (2024) found that students at Lorenzo S. Sarmiento Sr. National High School in Mawab, Davao de Oro experienced challenges in using vocabulary appropriately. They had difficulty understanding English words, which negatively affected their reading comprehension, writing, and speaking skills. The study further revealed a lack of effective vocabulary learning strategies among the students, contributing to their low academic performance in everyday classroom interactions.

Likewise, students in New Corella, Davao del Norte, particularly at Mangguangan Integrated School, face significant challenges in attaining good grades in English due to limited use and awareness of vocabulary learning strategies. Many students rely on rote memorization instead of adopting more dynamic methods such as

contextual learning, word mapping, or developing consistent reading habits. This lack of strategic learning hampers their ability to retain and apply new vocabulary, which is essential for understanding reading materials, composing written work, and performing well in oral communication. Additionally, socio-economic factors and limited access to enriched English learning environments further contribute to their struggles, making it more difficult for them to close critical vocabulary gaps necessary for academic success (Sajili, 2025).

This study on vocabulary learning strategies is significant because it would help assess the current condition of academic performance in the English subject at New Corella District. By identifying effective vocabulary learning strategies, educators can tailor their teaching methods to better support students' learning needs and improve the academic performance in the district.

Theoretical Background

This study is anchored on the Schema Theory proposed by Bartlett (1932, 1958). This explains how prior knowledge and mental frameworks influence the acquisition, retention, and application of new information. Bartlett suggested that memory takes the form of schemas—mental representations that help individuals understand, process, and recall information based on past experiences. This theory emphasizes that learning is an active process in which new information is integrated into existing cognitive structures, shaping comprehension and meaning making.

In the context of vocabulary learning strategies, Schema Theory underscores the importance of prior knowledge in acquiring and retaining new words. When students connect unfamiliar vocabulary to their existing schemas, they can better understand, memorize, and apply these words in various contexts. This theory is particularly relevant to the study as it highlights how background knowledge, cultural experiences, and cognitive structures contribute to vocabulary development (Ren, 2023). By applying Schema Theory, the study can explore effective vocabulary learning strategies that enhance students' comprehension, predictive reasoning, and overall academic performance.

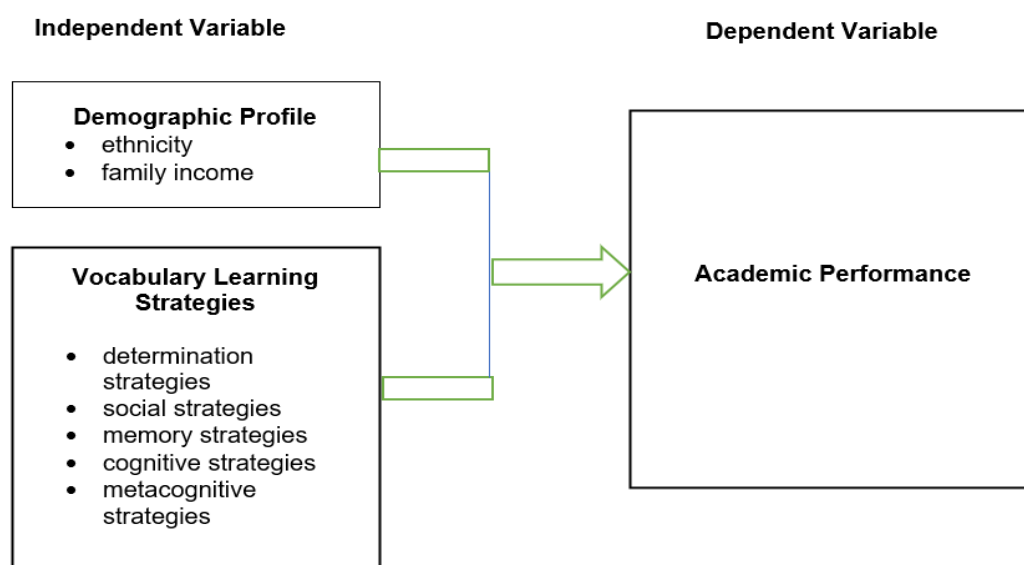


Figure 1. Conceptual Framework of the Study

Research Objectives

The purpose of this study to examining the relationship between vocabulary strategies learning and academic performance in secondary school students. Specifically, this study sought answers to the following questions:

1. What is the demographic profile of the respondents in terms of :
 - 1.1. Ethnicity; and
 - 1.2. family income
2. What is the level of the vocabulary learning strategies in terms of:
 - 2.1. determination strategies.
 - 2.2. social strategies.
 - 2.3. memory strategies.
 - 2.4. cognitive strategies and
 - 2.5. metacognitive strategies?
3. What is the level of academic performance of the respondents?

Null Hypotheses

The following hypotheses were formulated and were tested at 0.05 level of significance.

1. There is no significant relationship between ethnicity and academic performance.
2. There is no significant relationship between monthly income and academic performance.
3. There is no significant relationship between vocabulary learning strategy and academic performance.
4. There is a significant relationship between ethnicity and academic performance.?
5. There is a significant relationship between monthly income and academic performance.
6. Is there a significant relationship between vocabulary learning strategy and academic performance?

METHODS

This chapter outlines the methodology of the study, detailing how the research was conducted and how the data were collected and analyzed. It is organized into several sections: the research design, research locale, role of the researcher, research participants, data collection procedure, data analysis, trustworthiness and credibility, and ethical consideration.

Research Design

This study used a causal-comparative descriptive-correlational research design to examine the relationship between vocabulary learning strategies and academic performance. A causal-comparative descriptive-correlational research design was used to look at the link between tenth-grade students' demographics, how they learned vocabulary, and how well they performed in school. According to Akinlua (2019) causal-comparative aspect explored differences in academic performance based on students' use of vocabulary learning strategies, grouping them based on whether they employed these strategies effectively or not. Since the independent variable was not manipulated, careful analysis was needed to interpret the results accurately (Saro, Apat and Pareja,2022).

Descriptive and correlational design was implemented through survey questionnaires to focus on the variables and gather large

volumes of data that could be analyzed for frequencies, averages, and patterns, and to find the degree to which the variables were correlated or related without being controlled or manipulated (Sharma,2019).

These research designs worked well for this study because the researcher was not just looking into what happened in terms of demographics, learning vocabulary strategies, and academic performance; she also tried to find out if demographics and learning vocabulary strategies could significantly predict academic performance among high school students in the New Corella District of Davao del Norte Division.

Location of Study

This study was conducted in five public schools in New Corilla District, Davao del Norte, such as Limbaan National High School, Macgum Integrated School, Mangguangan Integrated School, New Corella Comprehensive National High School, and Sta. Fe National High School. Conducting the research within the district school made it easier for the researcher to administer and receive questionnaires based on the participants' responses.

Research Instruments

To achieve the objectives of this study, the researcher adapted one questionnaire. Since the development of this adapted questionnaire, Schmitt (1997), with the title of Vocabulary Learning Strategies, had made changes to make it more localized and easier to understand. The aim was to determine the level of vocabulary learning strategies.

Parameter Limit	Descriptive	Interpretation
3.5-4.00	Very High	This means that the of vocabulary learning strategies of the students is very much evident.
2.5-3.49	High	This means that the of vocabulary learning strategies of the students is much evident.
1.5-2.49	Moderate	This means that the of vocabulary learning strategies of the students is evident.
1.00-0.49	Low	This means that the of vocabulary learning strategies of the students is less evident.

Furthermore, the questionnaire consisted of 40 items, each containing a variable number of questions, resulting in five indicators. The first variable was the level of vocabulary learning strategies, which had five indicators such as determination strategies, social strategies, memory strategies, cognitive strategies, and metacognitive strategies. The response options structure was a Likert scale of 1–4, with a rating of 4 as strongly agree, 3 as agree, 2 as moderately agree, and 1 as disagree. The dependent variable, which was academic performance, had one indicator based on the grades of the student. Each student's grade was the basis for achieving academic performance in vocabulary strategy learning.

Research Respondents

The respondents of this study were the 267 Grade 10 students from the five public secondary schools in the District of New Corella, Division of Davao del Norte in the S.Y. 2024–2025. Stratified random sampling was used to select respondents from the chosen schools, with each school having an appropriate percentage distribution of student respondents based on ratio and proportion. Rahman and Rahaman (2022) highlighted that stratified random

sampling was employed when the respondents' population was divided into subgroups called strata, and a uniform random sampling was conducted within each stratum. Each of these strata's sample sizes was combined to create a stratified random sample. This was a suitable sampling technique for the study since the researcher had a varied population from the five different public schools in the New Corella District. Through this technique, there was a balanced representation of respondents. Additionally, they voluntarily agreed to participate in the research. Since the participants were not yet eighteen (18) years old, an orientation was conducted and informed consent was given.

Research Procedure

The data collection steps included setting the boundaries of the study, conducting an information survey, and obtaining the academic grades of English students from five public schools. The research protocol underwent an ethics review at Assumption College of Nabunturan (ACN), where the researcher received clearance to ensure the study's ethical compliance. Afterward, the researcher obtained an endorsement letter from the dean of the graduate school of ACN and submitted it along with a formal request to the Schools Division Superintendent (SDS) of Davao del Norte, seeking approval to conduct the study in five high schools located in the New Corella district. Upon receiving permission, the researcher then sent similar letters of request to the respective school principals. Given that the participants were minors, informed assent and parental informed consent forms were secured. These forms were discussed during face-to-face orientation and sent via Messenger for further review. The respondents submitted their electronic signatures individually through private messages, confirming their voluntary participation.

The researcher personally administered the questionnaires online using Google Forms on an agreed-upon schedule to ensure proper implementation. Direct involvement enabled the researcher to promptly address any questions or clarifications. The assent form indicated that the respondents answered the survey in a private setting to protect confidentiality. After completing the responses, the researcher promptly retrieved and reviewed the questionnaires to ensure completeness before submitting them. Once all responses were collected, the data were checked and summarized, maintaining confidentiality throughout the process. The results were organized into tables and forwarded to the official statistician for analysis and interpretation based on the research objectives. The collected data will be securely stored for three (3) years following the study's completion and will be destroyed thereafter to prevent unauthorized access or disclosure, in accordance with legal and ethical standards.

RESULTS AND DISCUSSION

In this chapter, the researcher discusses the findings and results from the data gathered. The researcher also tested the null hypothesis formulated in the study

Ethnicity is the shared cultural, linguistic, or ancestral background that makes one group of people different from another. It has a big impact on people's and groups' identities, customs, values, and social ties.

Table 2
Ethnicity

	Frequency	Percent
Bisaya	247	92.5
Lumad	17	6.4
Muslim	3	1.1
Total	267	100.0

The table above shows the demographic profile of the respondents in terms of ethnicity. Out from 267 respondents, 247 or 92.5% of the respondents are Bisaya, composing most of the respondents, 17 or 6.4% of the students are Lumad, and the remaining 3 or 1.1% of the students belong to Muslim group which is the least among the three groups.

Family income is the entire amount of money that everyone in a household makes, including wages, salaries, investments, and other sources. It is crucial for a family's standard of living, access to education and healthcare, and overall quality of life.

Table 3
Family Income

	Frequency	Percent
4999 AND BELOW	124	46.4
5000 TO 9999	53	19.9
10000 TO 14999	57	21.3
15000 AND ABOVE	33	12.4
Total	267	100.0

The table above shows the demographic profile of the respondents in terms of income. 46.4 or 124 out of 267 respondents, have an income of 4,999 and below. 19.9 or 53 respondents, have an income of 5,000 to 9,999; 21.3 or 57 respondents, have an income of 10,000 to 14,999; while the remaining 12.4 or 33 respondents have an income of 15,000 and above. On the other hand, the income distribution is skewed towards the lower income brackets. A significant portion of the sample (46.4) earns 4999 or less, and over two-thirds (66.3) earn 9999 or less.

Table 4
Level of Vocabulary Learning Strategy

Vocabulary Learning Strategies	N	Minimum	Maximum	Mean	Level	Std.Deviation
1. Détermination Strategies	267	2.00	4.00	3.2243	HIGH	.46706
2. Social Strategies	267	2.00	4.00	3.0950	HIGH	.52458
3. Memory Strategies	267	2.00	4.00	3.1039	HIGH	.50243
4. Cognitive Strategies	267	2.00	4.00	3.1358	HIGH	.50158
5. Métacognitive Strategies	267	2.00	4.00	3.1297	HIGH	.52305

Valid N (listwise)	267				
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The table above shows the summary of the level of vocabulary learning strategies. It has an average mean of 3.13 and a standard deviation of .503 with a verbal description of high. This means that the level of vocabulary learning strategies of the respondents is very evident. Among the five indicators, determination strategies got the highest mean of 3.22 and a standard deviation of .467 with a verbal

description of high. This means that although the five indicators are very evident, determination strategies are more evident compared to other indicators. In another hand, social strategies got the lowest mean of 3.09 and a standard deviation of .524 and a verbal description of high. This means that social strategies are very evident but is observed least compared to other indicators.

Table 5

LEVEL OF ACADEMIC PERFORMANCE					
	N	Minimum	Maximum	Mean	Std. Deviation
ENGLISH GRADE	267	82.00	95.00	87.4607	2.99143
Valid N (listwise)	267				

The table presents descriptive statistics for English grades of 267 students. The scores range from a minimum of 82 to a maximum of 95, with an average (mean) grade of 87.4607 and a standard deviation of approximately 2.99. This indicates that most students'

grades are closely clustered around the mean, showing relatively low variability in performance. A mean score of 87 suggests that, on average, students performed at a proficient level in English, demonstrating a solid understanding and application of language skills.

Table 6

Relationship between Demographic Profile and Academic Performance

Ethnicity

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.312	2	4.656	.518	.596
Within Groups	2371.025	264	8.981		
Total	2380.337	266			

The table shows that the p-value (.596) is much greater than the conventional significance level of .05 (or even .10); we fail to reject the null hypothesis. This indicates that there is not enough statistical

evidence to conclude that there is a significant difference in the average English grades among the ethnic groups being compared. Therefore, the average English grades of the three ethnic groups are not significantly different from each other.

Table 7

Relationship between Demographic Profile and Academic Performance

Family Income

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	20.324	3	6.775	.753	.522
Within Groups	2357.635	262	8.999		
Total	2377.959	265			

The table shows that the p-value (.522) is considerably larger than the typical significance level of .05 (or even .10); we fail to reject the null hypothesis. The statistical analysis does not provide

sufficient evidence to conclude that there is a significant difference in the average English grades among the four income groups being examined. Likewise, the relatively small F-statistic (0.753) also

supports this conclusion, suggesting that the variance between the average grades of the groups is not large enough compared to the individual variations within each group to indicate a significant

difference. Therefore, the average English grades of the four income groups are not statistically significantly different from one another.

**Table 8
Model**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1574.578	5	314.916	102.007	.000 ^b
	Residual	805.759	261	3.087		
	Total	2380.337	266			

The table shows that the significant model's p-value (.000) is significantly lower than the typical significance level of 0.05. Therefore, the regression model is statistically significant in predicting the outcome variable, including all five learning strategies, and it is also statistically significant in predicting English grades. The model explains a significant portion of the variance in

English grades. In summary, as a group, metacognitive, determination, social, cognitive, and memory strategies are significantly excellent predictors of English grades. The differences in these learning strategies are associated with significant differences in English grades. The result is a much stronger and more meaningful finding than the previous analysis with ethnicity.

**Table 9
Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	72.373	.805		89.896	.000	70.788	73.958
	DETERMINATION STRATEGIES	-.016	.340	-.002	-.046	.963	-.686	.654
	SOCIAL STRATEGIES	.271	.379	.048	.716	.475	-.475	1.017
	MEMORY STRATEGIES	.888	.413	.149	2.151	.032	.075	1.701
	COGNITIVE STRATEGIES	-.279	.394	-.047	-.706	.481	-1.055	.498
	METACOGNITIVE STRATEGIES	3.967	.385	.694	10.305	.000	3.209	4.725

The table shows that it encompasses all the listed predictor variables, along with its unstandardized coefficients (B). These are the raw regression coefficients. They represent the amount of change in the dependent variable (English grade) for a one-unit increase in the predictor variable, holding all other predictors constant. The constant value is 72.373. This value is the intercept. It's the predicted English grade when all the learning strategy scores are zero.

The determination strategies have a negative impact; for every one-unit increase in these strategies, the English grade is predicted to decrease by 0.016, assuming all other strategies remain constant. The social strategies will increase the English grade by 0.271,

assuming all other strategies remain constant. They predict an increase of 0.888 in the English grade's memory strategies, provided that all other strategies remain constant. Furthermore, with cognitive strategies, the English grade is predicted to decrease by 0.279, assuming all other strategies remain constant. Additionally, with the metacognitive strategies, the English grade is predicted to increase by 3.967, assuming all other strategies remain constant. That is the standard error of the unstandardized coefficient.

The multiple linear regression analysis shows that out of all the learning strategies studied, metacognitive strategies are the most important and have a strong positive effect on performance (B =

3.967, $p < .001$). Memory strategies also help positively and significantly, but not as much ($B = 0.888$, $p = .032$). On the other hand, determination, social, and cognitive strategies do not have significant effects on the results, as their high p -values ($p > .05$) indicate they are not useful for predicting outcomes in this model. Memory strategies also contribute positively and significantly to performance, although their impact is lesser ($B = 0.888$, $p = .032$). In contrast, determination, social, and cognitive strategies do not show statistically significant effects on the outcome, as indicated by their high p -values ($p > .05$), suggesting they have little to no predictive value in this model. The constant value of 72.373, significant at $p < .001$, represents the expected outcome when all strategy variables are set to zero. Overall, the findings point to the importance of metacognitive and memory strategies in enhancing performance.

CONCLUSION

Based on the summary provided, among the three groups, the Bisaya group of students has the highest response rate, and most of these students come from families with incomes below the poverty line. This finding indicates a significant correlation between socioeconomic status and student engagement within the Bisaya group. So, the vocabulary learning strategies used by the students are clearly shown, as determination strategies had the highest average score among the five indicators, which is considered high, and most students' grades are like each other, indicating that their performance doesn't vary much.

English grades among students from the three ethnic groupings are not notably different from one another, so there is no relationship between a student's ethnicity and their academic ability or grades. The statistical study also fails to offer enough proof to say that the four income categories under consideration have notably different average English grades. On the other hand, it indicates that, as a group, metacognitive, determination, social, cognitive, and memory methods are excellent predictors of English grades in your sample. These learning methodologies' variations are linked to notable variations in English grades. The outcome is a far more significant and stronger finding than the earlier study using ethnicity.

RECOMMENDATION

After a careful review of the findings and conclusions of the study, the following recommendations are given:

Students are encouraged to use effective vocabulary and active learning strategies to enhance their academic performance across subjects. Teachers incorporate various techniques such as word mapping, contextual usage, and regular review to significantly improve students' language skills and overall academic success. Customized vocabulary acquisition interventions are also designed, particularly for Bisaya students, focusing on strengthening determination techniques that have shown high efficacy among this group. In addition, students are provided with accessible learning materials and strategy-based instruction to further support vocabulary development and academic achievement, despite facing socioeconomic constraints.

To ensure the success of these strategies, administrators and school principals play a crucial role by monitoring their implementation, especially in the English subject. They may also initiate programs and seminars to help teachers improve their instructional methods and provide additional academic opportunities for students. Encouraging teachers to attend virtual seminars, training, and workshops can further enhance their ability to support diverse

learners. Moreover, future researchers are encouraged to build upon the findings of this study to explore other relevant factors influencing academic performance. Expanding the scope of research beyond a single district can lead to more comprehensive insights while continuing to uphold the core objectives of education.

CONSENT

As per international standards or universities standard, respondents' signed consent was the author(s) collected and preserved the materials.

ETHICAL APPROVAL

The researcher followed all the rules for doing the study, such as the technique of assessment and the use of standardized criteria. Participation is voluntary, and privacy, secrecy, and permission are all important. The rules of the Assumption College of Nabunturan Ethics Review Committee regarding technology and organizational/location issues were strictly followed. The researchers got permission to do the study.

REFERENCES

1. Afzal, Naeem (2019). A Study on Vocabulary-Learning Problems Encountered by BA English Majors at the University Level of Education. *Arab World English Journal (AWEJ)* Volume 10. Number 3 September 2019. Pp.81-98. DOI: <https://dx.doi.org/10.24093/awej/vol10no3.6>
2. Akinlua, Solomon (2019). Comparing and Contrasting Descriptive Designs: Observational Studies, Correlational Research Developmental Design and Survey Research.
3. Ajaj, Israa Eibead (2022). Investigating the Difficulties of Learning English Grammar and Suggested Methods to Overcome Them. *Journal of Tikrit University for Humanities* 29(6):45-58. DOI:10.25130/jtuh.29.6.2022.24
4. Bartlett, F. C. (1995). *Remembering: A study in experimental and social psychology*. Cambridge University Press.
5. Hafari, Ria, Syarifuddin, Syarifuddin, & Sartika, Dewi (2025). Effectiveness of Using Memorisation Technique to Expand Students' English Vocabulary. DOI:10.33558/paradigma.v22i1.10131
6. Meliton, Sherly D, Braga, Nicole P. Culob, Shekina & . Intise, Angelica B (2024). A Quantitative Study between Reading Habits and Reading Comprehension of Grade 11 Students. *International Journal of Research and Innovation in Social Science VIII(IV):3048-3056*. DOI:10.47772/IJRIS.2024.804284
7. Ren, Shiqin (2023). The Application of Schema Theory to the Teaching of Reading Comprehension. *Journal of Education and Educational Research* 2(3):86-88 DOI:10.54097/jeer.v2i3.7578
8. Salamat, Mohamiddiyn (2019). Technical Writing Competence of Senior High School Students of Cotabato City National High School- Main Campus: Basis for Academic Redirection.
9. Sajili, Amina Y. (2025). Effect of Socio-Economic Status on the Academic Performance of Pupils at Port Area Elementary School. *Ignatian International for Multidisciplinary Research*. <https://doi.org/10.5281/zenodo.15074779>

10. Saro, Jeffry M., Apat, Jeffrey Q & Pareja, Michael S (2022). A Descriptive-Correlational Study of the Teachers' Motivation, Competences, and Perceptions in Writing Action Research. Journal of Advances in Education and Philosophy. https://saudijournals.com/media/articles/JAEP_71_14-24_FT.pdf
11. Sharma, Sohil (2019). Descriptive Research Designs. https://www.researchgate.net/publication/333220662_Descriptive_Research_Designs