INVESTIGATING STUDENTS ATTITUDE IN LEARNING ENGLISH LANGUAGE VOCABULARY: THE CASE OF ENGINEERING STUDENTS IN TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES

Cynic J. Tenedero[1], Alfredo D. Trinidad[2]
[12]Technological University of the Philippines-Manila, Philippines

Corresponding Email: cynic_tenedero@tup.edu.ph

Abstract

This study focused on determining the attitudes and academic performance of engineering students in Technological University of the Philippines-Manila. A total of 139 male engineering and 47 female engineering students were the respondents of the study. This only dwell on the attitude in learning English Language Vocabulary in terms of their behavioral aspects, cognitive aspects, and emotional aspects. This is a quantitative study utilized by descriptive and inferential method as the research design. Based on the findings, academic grades strongly correlate with their attitude in learning English vocabulary which is a negative correlation coefficient in all its components with r value of -0.3695 in behavioral, -0.5261 in Cognitive, and -0.4332 in emotional aspect. Their P values is less than .00001 which is significant at $p < 0.05$. Thus, the null hypothesis where there is no significant relationship between their ALEV and academic performance is rejected. The researcher recommends that teachers should enhance creativity in teaching vocabulary which inculcate the positive attitudes and motivation towards learning process. Teachers and parents should encourage the learners to read and watch educational related materials.

Keywords: *English Language, Vocabulary Behavioral Aspects, Cognitive Aspects, Emotional Aspects*

INTRODUCTION

Language is a vital tool for communication. It fosters interpersonal relationships and cultural links in addition to serving as a tool of thinking and idea communication. A language also highlights the distinctiveness of cultures in a nation, region, or community while highlighting their disparities. People's perceptions of the world are shaped by their language. It also aids in defining a society's culture.

Memorizing a word well requires more than simply memorizing it; it also requires having a thorough understanding of it. Knowledge of vocabulary depends on a variety of factors. It's interesting to note that research has shown that people acquire second languages more quickly when they have a solid command of the first language. The learner's level of engagement also affects vocabulary knowledge. Greater engagement led to more efficient initial vocabulary acquisition and improved word retention.

Moreover, learners' vocabulary development plays an imperative role in language learning. Attitude contributes to the output of students' learning process. However, the time spent on vocabulary in class is often quite little. In this study, attitude is considered as an essential factor in determining the academic performance in learning English vocabulary language. Vocabulary learning is critical to learning a language. Teachers must be knowledgeable in choosing which strategies would greatly improve students' reading performance in class.

The low scores of PISA (Programme for International Student Assessment) 2018 results or any other national assessment about the education system in our country have been the trend for the past years, thus paving the way for the need of an enhanced K-12 education. The results also showed that we have a positive school climate or environment in our country. However, we must focus on what and how our children or students are learning in educational institutions. It was noted that socio-economic status was a strong indicator of performance in Mathematics and Science, wherein socio-economically advantaged students outperformed disadvantaged students in Reading.

Furthermore, the result of PISA (Programme for International Student Assessment) shows a negative impact to Philippine Educational System especially in language, hence this prompt the researcher to conduct the study. This would be an important contribution of related literature to the canon of the university researches. Furthermore, it would help define the richness and distinctiveness of language works—as a very plausible way to put a gem of language in the limelight This study paved way for an enlightened understanding of student's attitude in learning English Vocabulary. The subject of the study focused on the analysis of the attitude and academic performance of engineering students in learning English Language Vocabulary.

Base on the research problem the null hypothesis is formulated: There is no significant difference on the level of student attitude in Learning English vocabulary and academic performance when they are grouped by their profile. There is no significant relationship on the attitudes of students in learning English vocabulary towards academic performance.

Daenos, R., Santillan, J., (2020) they identify and compare the expected vocabulary knowledge, actual vocabulary knowledge, and the VLS of grade 12 students in Angeles City, Philippines, in their qualitative research. The researchers used an expository reading text, a semi-structured interview guide, and a researcher-made vocabulary test as instruments. Descriptive statistics, inductive reasoning, and theme analysis of qualitative data were also used. The study's findings show that participants use eight VLS that have been categorized into themes and that their presumed vocabulary knowledge ranges from 57% to 97% of the self-reported unfamiliar words while their actual vocabulary knowledge ranges from 50% to 91%. These findings suggest that the curriculum should be improved, with a focus on vocabulary, to make it easier for students to understand methods and to provide them more experience.

In Calub et al.'s (2017) study, they determine the level of productive vocabulary knowledge of Tarlac State University students, grouped by type of school and curriculum year level; the performance of the students on the vocabulary test, categorized by frequency levels; the breadth of their productive vocabulary knowledge in relation to type of school attended, curriculum year level, and exposure to information media; and the intervention strategies.

In the quantitative work of Eshghinejad (2016), it was found out that there is positive attitude toward English learning in three aspects of behavioral, cognitive, and emotional. It also showed that female students have higher positive attitudes, especially cognitive and emotional, than males toward English.

Moreover, Odiri (2015) studied the relationship of students' study habits and their math achievement in Delta Central Senatorial District, Delta State, Nigeria. Five hundred students were randomly selected from 25 public secondary schools who participated in the said study. Using regression and ANOVA to analyze the data, findings revealed that there was a significant relationship between the study habits and mathematics achievement of the students and a significant difference was found in math achievement between good and poor study habits.

The descriptive-evaluation study by Carranza et al. (2015) assessed the vocabulary learning and strategies used in conjunction with context clues, word analysis, and dictionary skills of 100 randomly selected second-year education students at Sorsogon State College. The study collected data using a survey-questionnaire, a teacher-made test, and an unstructured interview. Most of the Bachelor of Elementary Education (BEED) and Bachelor of Secondary Education (BSED) students frequently used strategies such as reading books and other materials, looking for clues in sentences, and using the dictionary to decipher unfamiliar words, according to the study. In addition to context clues, word analysis, and dictionary skills, the students' vocabulary performance was virtually competent. This conclude that there is a significant relationship of improving the reading skills with the use of vocabulary learning strategies. Vocabulary learning is critical to learning a language. Teachers must be knowledgeable in choosing which strategies would greatly improve students' reading performance in class.

According to Mapuranga, Maxwel and Zebron (2015), college and university students are already adults whose minds are full of many issues that may enhance or diminish their academic performance and completion of programs at a university. Environmental factors such as the school itself, the programs offered to help the students in learning and student motivation have a large impact on students' academic performances.

Feeling anxious influence, the quality of performance and affects the amount of effort learners invest in the task. Krashen (1988) points out that the "affective filter" (which includes aspects of anxiety/stress and self-confidence) is like a mental barrier that can limit students' ability to learn. It does not affect students' language acquisition directly, but prevents input from reaching the language acquisition part of the brainMoreover, based on Schmitt's (1997) taxonomy, determination strategies are comprised of nine distinct strategies that learners can employ using their own knowledge and concepts. These methods include estimating word meanings based on context and utilizing dictionaries to fathom the meanings of words when learners are unable to obtain assistance from a knowledgeable individual. This indicates that pupils can determine the meaning of unfamiliar or challenging words without assistance from others. According to Schmitt (1997), students can use social strategies, which consist of eight individual strategies, to determine the meaning of a new word. This approach encourages interaction with others to develop language learning, such as asking classmates for the meaning of new or difficult words, asking the teacher to paraphrase the new words, and learning the meaning of words through group work. In this strategy, others, particularly instructors, play a crucial role in helping students discover the meaning of new words

METHODS

Research Design

This is a quantitative study utilized by descriptive and inferential method as the research design. This study focused on determining the attitudes and academic performance of engineering students in Technological University of the Philippines-Manila. A total of 139 male engineering students and 47 female engineering students were the respondents of the research study. This only dwell on attitude in learning English Language Vocabulary in terms of their behavioral aspects, cognitive aspects, and emotional aspects.

A survey questionnaire was used in order to gather the data which was utilized for the basis for understanding the student's attitude in learning English language vocabulary.

RESULTS and DISCUSSION

Table 1. Mean Assessment of the respondents of Behavioral Indicators in terms of Sex

Ind. no.	Behavioral Indicators	SEX			
		MALE		FEMALE	
		MEAN(X)	Verbal Interpretation	MEAN(X)	Verbal Interpretation
1	Having a good and sufficient English vocabulary boost my confidence.	4.93	Strongly Agree	4.85	Strongly Agree
2	Studying English vocabulary helps me to have good relationships with others.	5.0	Strongly Agree	4.87	Strongly Agree
3	When I hear my classmate having a good vocabulary skill, I like to practice speaking with him/her.	4.99	Strongly Agree	4.96	Strongly Agree
4	Learning English vocabulary helps me to improve my personality.	4.98	Strongly Agree	4.98	Strongly Agree
5	Learning new vocabulary is a waste of time.	1.02	Strongly Disagree	1.30	Strongly Disagree
6	I put off my English homework as much as possible because I don't understand the vocabularies.	4.99	Strongly Agree	4.98	Strongly Agree
7	I am not relaxed whenever I must speak in my English class because I have low vocabulary.	4.97	Strongly Agree	4.96	Strongly Agree
8	I feel embarrassed to speak English in front of my classmates.	4.94	Strongly Agree	4.82	Strongly Agree
9	When I miss the class, I never ask my friends or teachers for	4.92	Strongly Agree	4.77	Strongly Agree

	the homework on what has been taught.				
10	I do not feel enthusiastic to come to class when the English is being taught.	4.94	Strongly Agree	4.98	Strongly Agree

In the table 1 for male, states that among the ten (10) indicators for behavioral, nine (9) have means that fall between 4.20-5.00 for Strongly Agree and one (1) have mean that fall between 1.00 to 1.79 for Strongly Disagree. The table also shows that the top three (3) indicators with the highest means are: (1) Studying English vocabulary helps me to have good relationships with others, (2) When I hear my classmate having a good vocabulary skill, I like to practice speaking with him/her, (2) I put off my English homework as much as possible because I don't understand the vocabularies, and (3) Learning English vocabulary helps me to improve my personality. The criteria with the lowest mean for male is: (1) Learning new vocabulary is a waste of time.

Meanwhile, as presented in the table 1 for female, states that among the ten (10) indicators for behavioral, nine (9) have means that fall between 4.20-5.00 for Strongly Agree and one (1) have mean that fall between 1.00 to 1.79 for Strongly Disagree. The table also shows that the top three (3) indicators with the highest means are: (1) Learning English vocabulary helps me to improve my personality, (2) I put off my English homework as much as possible because I don't understand the vocabularies, (3) I do not feel enthusiastic to come to class when the English is being taught. The criteria with the lowest mean for female are: (1) Learning new vocabulary is a waste of time.

It is apparent in the data that both male and female has its lowest mean which they strongly disagree that learning vocabulary is a waste of time. Which is an indicator that learning new vocabulary affects students in terms of behavioral aspect. Meanwhile, both male and female agreed that learning English Vocabulary affects their personality.

Table 2. Mean Assessment of the respondents of Cognitive Indicators in terms of Sex

Ind. no.	Cognitive Indicators	SEX			
		MALE		FEMALE	
		MEAN(X)	Verbal Interpretation	MEAN(X)	Verbal Interpretation
1	Being good at learning English vocabulary will help me study other subjects well.	4.99	Strongly Agree	4.98	Strongly Agree
2	I have more knowledge and more understanding when studying English.	4.95	Strongly Agree	4.96	Strongly Agree
3	In my opinion, people who have sufficient vocabularies are very knowledgeable.	5.0	Strongly Agree	4.98	Strongly Agree
4	Studying English language vocabulary helps me communicate in English effectively.	5.0	Strongly Agree	5.0	Strongly Agree

5	Studying English language vocabulary makes me able to create new thoughts.	4.99	Strongly Agree	4.96	Strongly Agree
6	Learning new vocabularies everyday widen my horizon.	4.94	Strongly Agree	4.82	Strongly Agree
7	Frankly, I study English just to pass the exams.	3.06	Neutral	3.04	Neutral
8	I cannot apply the knowledge from English subject in my real life.	2.01	Disagree	2.02	Disagree
9	I am not satisfied with my performance in the English subject.	4.97	Strongly Agree	4.98	Strongly Agree
10	In my opinion, English language is difficult and complicated to learn.	4.97	Strongly Agree	4.94	Strongly Agree

In the table 2 for male, showed that among the ten (10) indicators for cognitive, eight (8) have means that fall between 4.20-5.00 for Strongly Agree, one (1) have mean that fall between 2.60 to 3.739 for Neutral and one (1) have mean that fall between 1.80-2.59 for Disagree. The table also shows that the top three (3) indicators with the highest means are: (1) In my opinion, people who have sufficient vocabularies are very knowledgeable, (2) Studying English language vocabulary helps me communicate in English effectively, (3) Being good at learning English vocabulary will help me study other subjects well and (3) Studying English language vocabulary makes me able to create new thoughts.

The criteria with the neutral mean for male are: (1) Frankly, I study English just to pass the exams and for disagree (1) I cannot apply the knowledge from English subject in my real life.

Meanwhile, as presented in the table 4 for female, states that among the ten (10) indicators for cognitive, eight (8) have means that fall between 4.20-5.00 for Strongly Agree, one (1) have mean that fall between 2.60 to 3.739 for Neutral and one (1) have mean that fall between 1.80-2.59 for Disagree. The table also shows that the top three (3) indicators with the highest means are: (1) Studying English language vocabulary helps me communicate in English effectively, (2) In my opinion, people who have sufficient vocabularies are very knowledgeable, (3) Being good at learning English vocabulary will help me study other subjects well, and (3) I am not satisfied with my performance in the English subject.

The criteria with the neutral mean for male are: (1) Frankly, I study English just to pass the exams and for disagree (1) I cannot apply the knowledge from English subject in my real life.

It is apparent in the data that learning English vocabulary affect how they communicate effectively as being the highest mean for both male and female. It is also found out that having sufficient language vocabularies can help the students to improve their performance in English subject.

Table 3. Mean Assessment of the respondents of Emotional Indicators in terms of Sex

Ind. no.	Emotional Indicators	SEX			
		MALE		FEMALE	
		MEAN(X)	Verbal Interpretation	MEAN(X)	Verbal Interpretation
1	I appreciate the strategy of teaching English vocabulary.	5.00	Strongly Agree	5.00	Strongly Agree
2	Studying English language vocabulary is enjoyable.	4.99	Strongly Agree	4.98	Strongly Agree
3	I feel proud when studying English language vocabulary.	4.97	Strongly Agree	4.96	Strongly Agree
4	Studying English subject makes me feel more confident	4.98	Strongly Agree	4.98	Strongly Agree
5	I am interested in studying English vocabulary.	5.0	Strongly Agree	5.0	Strongly Agree
6	Knowing English is an important goal in my life	4.81	Strongly Agree	4.70	Strongly Agree
7	I look forward to the time I spend in English class	4.99	Strongly Agree	4.89	Strongly Agree
8	Studying English makes me have a good emotion (feelings)	3.97	Agree	3.99	Agree
9	I have low vocabulary that's why I enjoyed every time there are new vocabulary taught in the class.	4.99	Strongly Agree	4.94	Strongly Agree
10	I really have little interest in my English class.	4.91	Strongly Agree	4.70	Strongly Agree

In the table 3 for male, data showed that among the ten (10) indicators for emotional, nine (9) have means that fall between 4.20-5.00 for Strongly Agree and one (1) have mean that fall between 3.40 to 4.19 for agree. The table also shows that the top three (3) indicators with the highest means are: (1) I am interested in studying English vocabulary, (2) I appreciate the strategy of teaching English vocabulary, (3) Studying English language vocabulary is enjoyable, and (3) I have low vocabulary that's why I enjoyed every time there are new vocabulary taught in the class.

The criteria with the agree mean for male is: (1) Studying English makes me have a good emotion (feelings).

Meanwhile, as in the table 5 for female, states that among the ten (10) indicators for emotional, nine (9) have means that fall between 4.20-5.00 for Strongly Agree and one (1) have mean that fall between 3.40 to 4.19 for agree. The table also shows that the top three (3) indicators with the highest means are: (1) Studying English language vocabulary helps me communicate in English effectively, (2) In my opinion, people who have sufficient vocabularies are very knowledgeable, (3) Studying English subject makes me feel more confident, and (3) Studying English language vocabulary is enjoyable.

The criteria with the agree mean for female is: (1) Studying English makes me have a good emotion (feelings).

The data showed that having a good strategy in teaching language vocabulary makes the learning process more meaningful. This brought the students to be more confident and more enjoyable in terms of their emotional aspect. Carranza et al.'s (2015) concludes that that there is a significant relationship of improving the reading skills with the use of vocabulary learning strategies.

Table. 4 Significant differences in the assessment of the respondents on the attitudes when they are grouped according to Sex

LEV	Sex	N	Mean	df	t-value	p-value	Description	Decision
Behavioral Aspect	Male	139	4.568	184	0.14	0.889	Not significant	Accepted Null hypothesis
	Female	47	4.553					
Cognitive Aspect	Male	139	4.482	184	0.12	0.905		
	Female	47	4.468				Not significant	Accepted Null hypothesis
Emotional Aspect	Male	139	4.842	184	0.19	0.849		Accept Null hypothesis
							Not significant	
	Female	47	4.83					

There is no significant difference in the assessment of respondents on attitudes in learning English vocabulary in terms of their sexual difference since the p values are not significant at p<0.05. Hence, null hypothesis is accepted.

Table 5. Significant difference in the assessment of the respondents on the attitudes when they are grouped according to Age

LEV	A (17-18)	B (19-20)	C (21-22)	D (23-24)	df	F-value	Description	Decision
Behavioral	4.261	4.923	4.557	2.25	3 and 182	38.07***	Significant	Reject Null hypothesis
Cognitive	4.253	4.97	4.513	2.733	3 and 182	35.36***	Significant	Reject Null hypothesis
Emotional	4.186	4.976	4.133	3.25	3 and 182	21.83***	Significant	Reject Null hypothesis

***p value is <.00001

As seen in the table, the P value of the three aspects of learning English vocabulary is less than 0.00001 which is significant at p<.05. The description of Behavioral, Cognitive and Emotional are not significant. Thus, the null hypothesis where there is no significant difference of assessment in attitudes in terms of age is rejected.

Table 6. Pearson Correlation Coefficient r of the T-test of Significant Between Attitude and Academic Performance

Variables	Obtained -r	Verbal Description	Decision
Academic Performance: Behavioral	-0.3695	Low positive	Reject Ho
Academic Performance: Cognitive	-0.5261	Moderate	Reject Ho
Academic Performance: Emotional	-0.4332	Low positive	Reject Ho

Pearson product moment coefficient of correlation **r** was used to determine if there is a significant relationship between the student's attitude and their academic performance in learning English vocabulary.

As presented in the table, their academic grades strongly correlate with their attitude in learning English vocabulary which is a negative correlation coefficient in all its components with r value of -0.3695 in behavioral, -0.5261 in Cognitive, and -0.4332 in emotional aspect. Their P values is less than .00001 which is significant at $p<0.05$. Thus, the null hypothesis where there is no significant relationship between their ALEV and academic performance is rejected.

CONCLUSIONS

There is no significant difference in the assessment of respondents on attitudes in learning English vocabulary in terms of their sexual difference since the p values are not significant at $p<0.05$. Hence, null hypothesis is accepted.

The P value of the three aspects of learning English vocabulary is less than 0.00001 which is significant at $p<.05$. The description of Behavioural, Cognitive and Emotional are not significant. Thus, the null hypothesis where there is no significant difference of assessment in attitudes in terms of age, is rejected.

Based on the finding, there is significant relationship between the students attitude in Learning English Vocabulary and academic performance it correlate with the study of Eshghinejad (2016) that there is positive relationship among attitude and academic performance.Thus, the null hypothesis where there is no significant relationship between Attitude in Learning English Langue Vocabulary and academic performance is rejected.

The researcher recommends that the students should give the importance to learning English Vocabulary. Thus, their interest and motivation toward English vocabulary mastery in leaning can be increased and it impacts to their attitudes toward English vocabulary mastery. The researcher also recommends that the teachers should enhance creativity in teaching vocabulary which inculcate the positive attitudes and motivation towards English. Teachers and parents should encourage the learners to read material written in English such as books, short stories, newspapers, magazines and watching educational materials.

REFERENCES

Calub, C. L., & Calub, F. L. (2017). Breadth of Productive Vocabulary Knowledge of Pre-Service Teachers: Basis for the Proposed Intervention Strategies in Vocabulary Enhancement. IAFOR Journal of Language Learning, 3(1), 34-51. https://files.eric.ed.gov/fulltext/EJ1167247.pdf

Carranza, E. F., Manga, A. A., Dio, R. V., Jamora, M. J. A., & Romero, F. S. (2015). Vocabulary learning and strategies used by teacher education students. Asia Pacific Journal of Multidisciplinary Research, 3(2), 49-55. http://www.apjmr.com/wp-content/uploads/2015/05/APJMR-2015-3-2-007-VLS-for-pub.pdf

Daenos,R., Santilan,J., (2020).Vocabulary Knowledge and Learning Strategies of Senior High School Students, Universal Journal of Educational Research 8(6): 2474-2482, 2020. https://www.hrpub.org/journals/article_info.php?aid=9298

Dolba, S. L., & Dolba, S. L. T. (2023). Correlation of Using Techspeak to the Spelling Proficiency of Grade 9 Junior High School Students Enrolled in Sta. Peregrina High School. GET International Research Journal. 1(1), 1-9. https://doi.org/10.5281/zenodo.7623866.

Eshghinejad,S.(2016). EFL students' attitudes toward learning English language: The case study of Kashan University students. Cogent Education (2016), 3: 1236434 http://dx.doi.org/10.1080/2331186X.2016.1236434

Garcia, A. (2023). Enhancing the Mastery Skills of Pupil – Journalists in Basic News Writing Through (CEB) Contextualized Error – Based Worktext. GET International Research Journal. 1(1), 37-47. https://doi.org/10.5281/zenodo.7623817.

Krashen, S. D. (1988). Second language acquisition and second language learning. Prentice-Hall International. https://www.sdkrashen.com/content/books/sl_acquisition_and_learning.pdf

Mapuranga, B., Musingafi, M. C., & Zebron, S. (2015). Students Perceptions on Factors That Affect Their Academic Performance: The Case of Great Zimbabwe University (GZU). Journal of Education and Practice, 6(18), 1-5. https://files.eric.ed.gov/fulltext/EJ1079724.pdf

OECD (2019), PISA 2018 Results. PISA, OECD Publishing, Paris, http://www.oecd.org/pisa/

Odiri, O. E. (2015). Relationship of Study Habits with Mathematics Achievement. Journal of Education and Practice, 6(10), 168-170. https://files.eric.ed.gov/fulltext/EJ1081665.pdf

Schmitt, N. (1997). Vocabulary Learning Strategies. In: Schmitt, N. and McCarthy, M. (Eds.), Vocabulary: Description, Acquisition, and Pedagogy (pp. 198-227). Cambridge University Press. https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1716581