

The Relationship between English Proficiency and Academic Achievement of Indonesian EFL Postgraduate Students

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Abstract: There is still a debate about using English proficiency in determining one's academic success or access to an opportunity. Hence, research on the correlation of language proficiency and academic achievement is urgently needed. This study attempted to investigate the relationship between Indonesian postgraduate students' English language proficiency and their academic achievement. To achieve the objective, 54 male and female postgraduate students majoring in English education at a university in Bandung were involved as the sample. Students' language proficiency was seen from their Test of English as a Foreign Language (TOEFL) scores and their grade point average (GPA) was used to indicate their academic achievement. All data were analyzed through manual computation of Pearson Product-moment correlation. The result revealed that there is a significant positive linear correlation between English language proficiency and academic achievement. This result suggests that as the English proficiency increases, so does academic achievement. The results are expected to provide insight in understanding whether English language proficiency can increase academic success, especially in educational settings where English is the primary medium of instruction.

Keyword: *English language proficiency, academic achievement, Test of English as a Foreign Language*

INTRODUCTION

English as a Foreign Language (EFL) education has become increasingly important in the globalized academic and professional world. Proficiency in the English language is considered a crucial skill for academic success. As the increasing needs of English in educational institution particularly higher education in Indonesia, English proficiency test score (usually Test of English as a Foreign Language or TOEFL) are recently widely used by most universities in Indonesia. It is commonly used as a requirement for university students especially those majoring in English for completion of their education in university.

In this context, language proficiency is regarded as one of many factors that affect academic achievement (Graham, 1987) especially for university students majoring in English. It is supported by Alwasilah (1999) stating that "English skills are part of academic or study skills for college success" (p. 56). In this regard, college students especially those majoring in English (and/or English Education) should need high English proficiency level in order that they can understand the subjects which is dominantly delivered in English. Therefore, when English as foreign language (EFL) students face difficulties in grasping the content of the courses delivered in English, it appears to be one of the most serious problems for them (Maleki and Zangani, 2007).

In this context of the research, language proficiency is not considered as the only aspect which determines the level of academic achievement but as one of the aspects. It is in line with Cummins and Swain (1983) stating that when language proficiency is discussed in its correlation to academic performance, it is always discussed as one of a number of factors which affect academic achievement (cited in Cummins, 2009). It is also claimed that lack of English proficiency is usually considered as the main reason of students' academic failure particularly in English-only programs (Cummins, 1984, p.8).

Moreover, proficiency is defined as the ability in using the language (Bachman, 1990). It is claimed that language proficiency is not a single skill in using the language but it covers all language skills and ability in language use (see Cummins, 1980). However, Cummins (1979) make a distinction between two kinds of language proficiency: first, cognitive/academic language ability (CALP) which strongly related to academic skills. The second is basic interpersonal communication skills (BICS) which are

related to oral and sociolinguistic competence (see Ellis, 1986 and Cummins, 2009). In respect of these two types of proficiency, this study put more emphasis on the former type (CALP). It is important to emphasize that “the CALP-BICS distinction was not a distinction between communicative” and “cognitive” aspects of language proficiency” (Cummins, 1984, p.4; Cummins, 1980, p.177). For that reason, proficiency level of the students is seen from their TOEFL scores. TOEFL is one of the most common examples of a standardized proficiency test and usually consists of listening comprehension, grammatical accuracy, written expression, reading, and vocabulary (Brown, 2001, p.390).

While existing studies have provided valuable insights into the correlation between English language proficiency and academic achievement, several research gaps remain. First, most studies have focused on undergraduate students (e.g., Alrasheed et al., 2021; Dev & Qiqieh, 2016; Rudd & Honkiss, 2020), neglecting the specific needs and challenges faced by postgraduate students in an academic context. Second, the majority of research has focused solely on the correlation between English proficiency and academic achievement among international students who study in English speaking countries (e.g., Geide-Stevenson, 2018; Grain, et al., 2022; Martirosyan et al., 2015). Recent research that explored this issue in a non-English speaking country was conducted by Waluyo & Panmei (2022). They investigated the relationship between English proficiency and academic achievement at universities in Thailand. There is limited research conducted to see the relationship of both aspects at Indonesian university(ies). Additionally, in this case, we need to look at some problems related to research that try to find out the relationship between language proficiency and academic achievement including the definition of language proficiency and academic success themselves especially when the reported GPA may be based on the unequal number of courses. As a result, this study tried to fill the gap by providing students' GPA with an equal number of courses.

Based on the background of the study above, this study attempted to investigate the relationship between English language proficiency and academic achievement of EFL postgraduate students. The hypothesis formulated in this study is:

H₀: “There is no significant correlation between students’ English language proficiency and their academic achievement”.

METHOD

Research Design

This quantitative research employed correlation research design since the main purpose of this study is to analyze the extent of relationship between two variables (Hatch and Farhady, 1982, p.193; Coolidge, 2000, p. 110) which are English language proficiency (as measured by the students’ TOEFL score) and academic achievement (as measured by students’ GPA). For that reason, correlational study considered to suit this study.

Population and Sample

The population of this study is postgraduate students majoring in English education in a university in Bandung. From this population, the researcher chose 54 participants as the sample of this study. Of the 54 participants, 33% were male and 67% were female. The sample was randomly selected from the population.

Research Instrument

To obtain the data, the research instrument in form of a survey form was used. The form consisted demographic information such as age, gender, GPA and TOEFL score. The students’ identities were kept confidential without mentioning their name in the form.

Research Procedure

There were several steps taken in order to achieve the objective of this study. The first step is collecting the data. A standardized TOEFL paper test was used to see the students' English proficiency. The TOEFL test consists of several sections: listening, grammar and written expressions, reading comprehension and vocabulary. Data on academic achievement was obtained from students' grade point of average (GPA) in their study. In obtaining the data, a survey form was used. The samples need to fill in the form by providing their age, gender, their latest TOEFL score and their GPA. The students' GPA consisted of equal number of courses taken.

To ensure the data were normally distributed, the number of samples more than 30 (N=54) were used and selected randomly. It can be assumed that the data were normally distributed if the number of respondents is 30 or more (Hatch and Farhady, 1982, p. 64).

After all the data were collected, they were computed in order to find the correlation coefficient between students' English language proficiency and academic achievement. The Pearson correlation coefficient (r) was used to identify the correlation between the two variables. After the value of (r) was obtained, the significance of the correlation coefficient was tested to determine whether the coefficient significantly differs from zero (Coolidge, 2000, p.118).

Data Analysis

In order to test the hypotheses generated before, the coefficient of correlation between the two sets of scores of TOEFL scores and GPAs was calculated manually using Pearson Product Moment correlation at 0.05 level of significant to examine the degree of relationship between the two sets of scores.

The formula of Pearson product-moment:

$$r_{xy} = \frac{N (\sum XY) - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}}$$

Where:

N : number of pairs of scores

X : language proficiency variable

Y : academic achievement variable

$\sum XY$: the sum of the cross products

(Hatch and Farhady, 1982, p. 198; Coolidge, 2000, p. 116)

After the value of r was obtained, the significance of the correlation coefficient was tested to determine whether the coefficient significantly differs from zero (Coolidge, 2000, p.118). The formula of significance of correlation coefficient:

$$t = \frac{r}{\sqrt{\frac{1-r^2}{N-2}}}$$

Where:

N : number of pairs of scores

r : correlation coefficient

After the value is calculated, the score is compared to t value t in level of significant 0.05 ($\alpha = 0.05$) (See Hatch and Farhady, 1982, p. 272 and Coolidge, 2000, p. 276) with the degree of freedom N-2 (N=54). If the correlation coefficient significance value (t) is more than the critical value in the level of sig. $\alpha = .05$, we can conclude that there is significant correlation between students' language proficiency and academic achievement (see Coolidge, 2000, pp.119-120).

RESULTS AND DISCUSSION

This part discusses the results of computation in this study. After all the data were collected, some manual computations were employed in order to find out the correlation coefficient between the two variables. Before doing that, it is essential to ensure that the data were normally distributed. In this case, this study employed the number of samples more than 30 (N=54) which were selected through random sampling technique. Thus, it can be claimed that the data of students' TOEFL scores and GPAs fitted the normal distribution.

Subsequently, the manual computation of Pearson product-moment correlation was conducted to find out the correlation between students' TOEFL scores and GPAs. The result is presented below.

$$\begin{aligned}
 r_{xy} &= \frac{N(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{54(96355.12) - (28935)(179.27)}{\sqrt{[(54)(15620435) - (28935)^2][(54)(598,1) - (179.27)^2]}} \\
 &= 0,506
 \end{aligned}$$

The result above shows the correlation coefficient of the two sets of scores was .506 ($-1 < .506 < +1$). It indicates that there is a positive correlation between students' TOEFL scores and GPAs. This positive relationship suggests that as English language proficiency (TOEFL) increases, so does academic achievement (GPA).

Furthermore, correlation coefficient ($r=.506$) was then tested to determine whether the coefficient significantly differs from zero by using t test formula.

$$\begin{aligned}
 t &= \frac{r}{\sqrt{\frac{1-r^2}{N-2}}} \\
 t &= \frac{0.506}{\sqrt{\frac{1-0.256}{54-2}}} \\
 t &= \frac{0.506}{0.118} \\
 t &= 4.29
 \end{aligned}$$

The t value is, then, compared to the level of significance 0.05 with degree of freedom (df) N-2 (N=54). For a two-tailed test of significance at level sig. $\alpha = 0.05$ with $df = 52$, the critical value of t is 2.000. The derived t in this study is greater than the critical value ($0.506 > 2.000$). It means that the null hypothesis is rejected. It can be concluded that $r = 0.506$ indicates a significant relationship. In other words, there was a strong positive correlation found between students' language proficiency and academic achievement and the correlation was statistically significant, $r(54) = 0.506, p > 0.05$.

Based on the result of the statistical computation above, the null hypothesis of this study which affirms, "there is no significant correlation between students' English language proficiency and their academic achievement", can be rejected at 0.05 level of significance. It means that there is a significant positive correlation between these two variables.

Discussions

From the findings of this study, it is safe to say that students' English language proficiency (seen from TOEFL scores) likely to give influence to students' academic achievement (seen from GPAs) especially for students majoring in English. It indicates that the higher the students' English proficiency, the higher their academic achievement. On the contrary, the lower students' English proficiency, the lower their academic achievement. This study result is in line with those of Alrasheed et al. (2021), Dev & Qiqieh (2016), Maleki and Zangani (2007), Geide-Stevenson (2018), Grain, et al., (2022); Martirosyan et al., (2015), and Waluyo & Panmei (2022) that found a positive significant relationship between students' English proficiency and academic achievement.

This result indicates that the students who major in English should master English in order to understand the course subjects in their study. Even though English proficiency alone could not be a determining factor in the students' academic success, it is understandable since English is a medium of instruction. However, in this case, there are two points that should be noted. First, English test results frequently employed to determine students' English proficiency levels do not always accurately represent students' English language proficiency in all aspects of English skills (Yung and Cai, 2020). Second, language proficiency in this context is regarded as one of influential aspects that affect academic achievement, not an 'autonomous causal variable' (Cummins, 2009).

CONCLUSIONS

The analysis of the data proves a strong relationship between students' language proficiency and academic achievement which indicates that those who are more proficient in English can achieve better academic level. Therefore, it is suggested that more courses to improve students' language proficiency be included in the curriculum in all field of study in the university in order to promote students' academic achievement. However, it needs to be pointed out that language proficiency in this context is not considered a standalone variable influencing academic achievement. It is suggested to further researchers to conduct a

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