

36. English Placement Test As A Predictor of Academic Performance Among ESL Undergraduate Students

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ABSTRACT

In Malaysia, there is requirement for undergraduate students to sit for MUET before they enroll in a degree program, which, is not imposed on students who are pursuing for a diploma program. The study investigated the relationship between English proficiency test and ESL undergraduates' academic performance. This study was conducted in a local private college in Kuala Lumpur. Participants comprised of students who had completed their pre-diploma program. Correlation coefficient analysis, Expectancy Table, and Scatter plot were used to analyze data. The findings of the study indicated there is a correlation between English proficiency and the core subjects of pre-diploma program. This study thus, point out the importance of English proficiency test for pre-diploma students.

Keyword: English Proficiency Test, Academic Performance, ESL undergraduates

Introduction

In Malaysia, there is a requirement for undergraduate students to sit for MUET before their enrolment in a degree programme. For this purpose, MUET as English proficiency test is commonly used as an English placement test. According to Chan and Wong (2004), MUET is a standardized English proficiency test that is similar to IELTS and TOEFL. However, in Malaysia there are no standardized requirements needed for those who are pursuing their certificate, pre-diploma and diploma studies. The standardized requirements in this context refer to a standardized English placement test such as MUET.

In this study, the standardized requirements is not MUET, but a special proficiency test – English placement test (EPT), an initiative of the Baitulmal instructors to measure students' language abilities and level of proficiencies, as the medium instruction is in English.. The English placement test (EPT) in Professional Institute of Baitulmal is one of the instruments used in order to predict students' performance and their English language difficulties. The aim of conducting EPT is for the instructor to plan their lesson, which would improve the overall academic performance of pre-diploma programme. It can be said that EPT is used as a predictor to measure students' academic performance.

Objectives of the Study

The objective of this paper is to determine the relationship between English language proficiency test and ESL undergraduates' academic performance. This study attempts to answer this following question:

- 1) What is the correlation between English Placement test score obtained by the ESL undergraduate students and their academic performance (grade point average)?

Methodology

Research Design

This study is quantitative method as this method attempts to maximize objectivity, generalizability of findings, and is typically interested in prediction (Harwell, 2011). The study focuses on the relationship between English proficiency test and ESL undergraduates' academic

performance. The finding of the effectiveness and the correlation of English placement test (EPT) will give constructive data to support the significance of conducting EPT for undergraduate students (pre-diploma students). Correlation coefficient analysis, Expectancy Table, and Scatter plot were used to analyze data. The data are presented in simple percentages, and the results are compared and contrasted according to the subjects of the programme.

Sources of data

The study setting was at a private college in Kuala Lumpur, Malaysia. Participants comprised SPM leavers with credit in English. Fifty participants were selected from 100 students who took the college's English placement test. There are five classes and the top ten students from each class are selected based on their placement test score. The finding received from these participants is hoped to give useful information. All participants gave their permission for the researcher to access their GPA's.

Data Collection Procedure

The institution allocated one day to conduct the English placement test. Writing rubric and answer keys were given to the respective examiners. Microsoft Excel is used as data entry of the scores. Grade Point Average (GPA) data were taken at the end of the pre-diploma program. The GPA scores for Mathematics and Management subject were obtained from the list of students' result given by Academic Department in Institut Profesional Baitulmal, Kuala Lumpur.

Data Analysis Method

To analyze the data for research question, i.e “What is the correlation between English placement test score and ESL undergraduates’ academic performance?”, the result of the correlation coefficient analysis was used in determining the relationship between English placement test (EPT) and ESL undergraduates’ academic performance. It expresses the degree of relationship between the two sets of scores by numbers ranging from -1 .00 to + 1.00 (Miller, Linn & Gronlund, 2009). The following correlation coefficients indicators are used to indicate the degree of relationship between English placement test and ESL undergraduate students’ academic performance:

- 1.0 = perfect positive relationship
- 0.0 = no relationship
- 1.00 = perfect negative relationship

The score of English placement test and Grade point Average were converted into percentage for easier calculation. Expectancy Table is used in presenting how scores on English placement test and GPA are correlated. In order to set a clearer analysis of students’ academic performance, the grades were then grouped into four categories as in Table 3.

Table 3
The mark range and grade category

Grade	Mark Range	Grade Category
A+	85 -100	Good pass
A	80 – 84	
A-	75 – 79	Average pass
B+	70 – 74	
B	65 – 69	
B-	60 – 64	Weak pass
C+	55 – 59	
C	50 – 54	
C-	45 – 49	
D	40 – 44	Fail
F	0 - 39	

Linear Regression Coefficient and Scatter plot are used in determining the relationship between English language proficiency test and ESL undergraduates' academic performance in Mathematics and Management subjects. They provide an indication of the strength of relationship between the English placement test and ESL undergraduate students' academic performance (David & Ogunsiji, 2009). In order to acquire a clearer analysis of the students' performance in Mathematics and Management, Scatter Plot is used to show the correlation.

In this study, the p value will not be indicated even though most of the studies related to correlation mentioned it. This is because the study does not have null hypothesis and the use of Pearson correlation coefficient is sufficient to indicate the strength of the relationships. According to Carver (1993), there are four reasons for not indicating the p value (significant statistic). The two reasons are adapted in this study where they can insert statistically in front of significance in research report, and the results can be interpreted before p value is reported. Meehl (1990) supports the statements as he strongly condemned the whole tradition of using null hypothesis (p value) to support for the theory.

Results and Discussion

Result

The results of this study are paralleled with the objective in the Introduction. In determining the correlation between English placement test and the students' academic performance Pearson correlation coefficient is used.

There is a moderate relationship between EPT's score and GPA with $r = 0.595$ (as in Table 4.1). The positive relationship implies that the more proficient students are in English, the better the academic performance of the students. The result is supported by the study done by David and Ogunsiji (2009) who found a significant positive relationship between proficiency in English language and the students' academic performance ($r = 0.499$; $P < .05$).

Table 4.1
Summary of Data Analysis between EPT score and GPA

Variable	N	Mean	Std. D	R
EPT score	50	55.25	13.04	
Grade Point Average	50	78.96	13.02	0.595

It is apparent from the Table 4.2; none of the students failed their pre-diploma programme. The result point out that 8% of students who scored in the range of 75 to 89 in their EPT obtained good pass with GPA score over 75. The result supported the earlier statement that there is a moderate correlation between EPT's score and GPA (as in Table 4.1). However, the result shows 8 % of the students who scored in the range of 30 to 44 in their English placement test (EPT) obtained good pass. The result indicates that 28% of students acquired good pass with their EPT score range from 60 to 74. Majority of the students (68%) acquired good pass with various EPT's scores.

Table 4.2 *Expectancy grid of EPT scores and GPA*

GPA Scores	English Placement Test Scores								Totals <i>f</i> %
	30 - 44		45 - 59		60 - 74		75 - 89		
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Good Pass (over 75)	4	8.0	9	18	14	28	4	8	31 62
Average Pass (60 -74)	4	8.0	8	16	1	2	0	0	13 26
Weak Pass (45 - 59)	4	8.0	1	2	1	2	0	0	6 12
Fail (0 - 39)	0	0	0	0	0	0	0	0	0 0

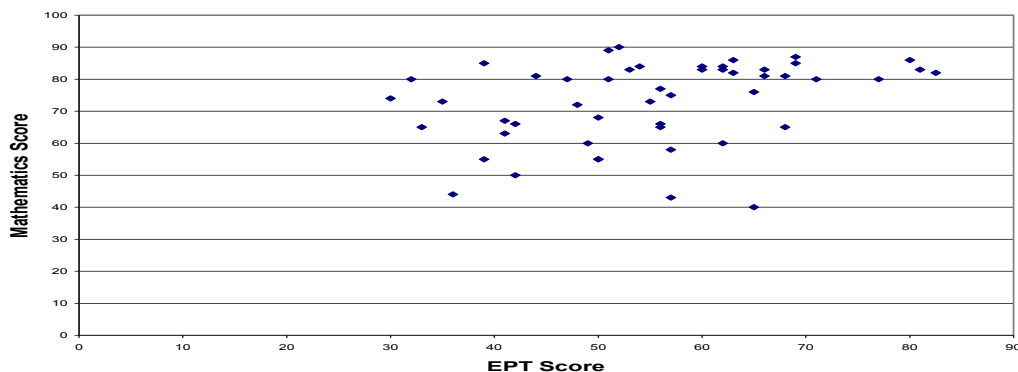
Scatter diagrams and a Person's product moment correlation were used to determine the relationship between English language proficiency and the students' academic performance in Mathematics and Management subjects. There is a correlation between English proficiency and Mathematics with $r = 0.341$ (as stated in Table 4.3). The standard deviation of EPT scores (SD = 13.04) has greater variability than the final scores of Mathematics (SD = 12.94).

Table 4.3
Summary of EPT score and Mathematics

Variable	N	Mean	Std. D	R
EPT score	50	55.25	13.04	0.341
Mathematics	50	72.94	12.94	

Figure 4.1 is the Scatter plots between English placement test (EPT) and Mathematics score. The interpretation of the graph indicates that there is a pattern for EPT's score and Mathematics score. The plots are sided to the right; there is a line which the points tend to lie (as in figure 4.1).

Figure 4.1
Scatter plots of EPT and Mathematics score



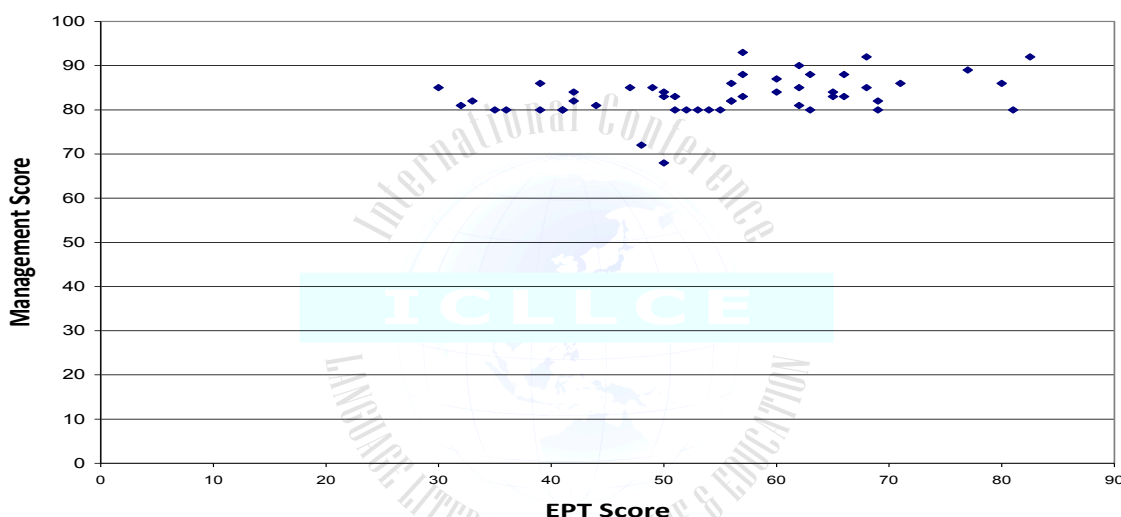
The result indicates that there is a moderate correlation ($r = 0.380$) between English language proficiency and the students' academic performance in Management subject (as in Table 4.4). The result indicates that the final scores of Management subject have less variability than the EPT scores with standard deviation of 4.46.

Table 4.4
Summary of EPT score and Management

Variable	N	Mean	Std. D	R
EPT score	50	55.25	13.04	0.380
Management	50	83.20	4.46	

Figure 4.2 indicates that there are positive patterns for EPT and Management scores. The plots are bit sided to the right, and there is a fine line which the points tend to lie. However, the points are not scattered much as in Mathematics score (as in Figure 4.1). Both of the Scatter graphs showed a pattern of relationship between EPT and the core subjects.

Figure 4.2
Scatter plots of EPT and Management score



Based on the Scatter Plots, English placement test is effective in predicting the students' academic performance of Mathematics and Management subject. In overall students' academic performance is fairly better in the final than predicted. The difference between the actual scores and the predicted scores is known as error of prediction. The errors of prediction getting smaller in comparison to the standard deviation of actual scores as the correlation increases (Efron, 1983).

Discussion

The result of this study indicated that there is a correlation between English placement test (EPT) score and Grade Point Average (GPA). According to Wait and Gressel (2009) the TOEFL score is sometimes looked upon as an indicator of how well a potential student might perform in the university. The increment of TOEFL score leads to the increment of overall GPA. This finding is in an agreement with Fitzcharles (1988) findings, which also showed a positive correlation between the students' English proficiency score and overall grades. This finding supports the ideas of Spaulding and Flack (1976) which suggested that problem in English adversely affects academic performance.

However, in the previous studies, there are indications that English proficiency does not correlate with the students' academic achievement. This is also according with Al-Musawi and Al-Ansari (1999) in which TOEFL sub-section component scores to be highly correlated with GPA in English courses but less closely associated with overall university academic performance. Their finding supports previous research stated that English placement test scores as poor predictor of academic performance. They found no correlation between TOEFL scores and the first-term GPA for 63 Chinese students (Hwang & Dizney, 1970).

Based on the analysis, there is a correlation between English language proficiency and the core subjects (Mathematics and Management) with the correlations of $r = 0.341$ and $r = 0.380$

respectively (as in Table 4.11). The possible explanation regarding the result is the students used English language more in Management's class than in Mathematics class. They spend more time in reading, writing and oral presentation in Management class compared to Mathematics' class, which is more towards numerical methods. The correlation between Mathematics (0.341) and Management (0.380) do not have much difference. The mean score for GPA, Mathematics, and Management are within the range of good pass grade.

Table 4.11
Summary of EPT score, Management and Mathematics

Variable	N	Mean	Std. D	R
EPT score	50	55.25	13.04	
GPA	50	78.96	13.02	0.595
Mathematics	50	72.94	12.94	0.341
Management	50	83.20	4.46	0.380

Predictive validity studies have varied in their findings on the relationship between English proficiency test and Grade Point Average. One of the findings is from the study conducted by Sahragard, Baharloo & Soozandehfar (2011) who pointed out that when learners are more proficient in language use, their academic performance in the course materials are better and consequently they will get higher scores. Number of studies have found that varying levels of relationship between English language proficiency and academic performance such as Feast 2002; Kerstjens & Nery 2000; Bellingham 1993. However, other studies Cotton & Conrow 1998; Dooley 1999 have found little or no significant positive overall correlation between IELTS scores and academic achievement.

Conclusion

This study has provided not only the correlation between English placement test score and students' GPA, but it also pointed out the relation interpersonal factors with the students' academic performance. From this discussion, more justification is given to previous research findings on the significance of English placement test. This indicates the importance of having EPT as a measure English proficiency.

The result indicates that the students acquired good pass with their EPT score ranging 60 to 74. Majority of the students acquired good pass with various EPT scores. There is correlation between English proficiency and Mathematics with $r = 0.341$. The standard deviation of EPT scores (SD = 13.04) has greater variability than the final scores of Mathematics (SD = 12.94). The result indicates that the final scores of Management have less variability than the EPT scores with standard deviation of 4.46. Thus, the correlation between EPT score and the three variables (GPA, Mathematics score, and Management score) is moderate correlation.

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