English Proficiency of Tourism and Engineering Students in Two Asian Universities: A Comparative Study

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Abstract

Background/Objectives: This study evaluated and compared the level of English proficiency of Tourism and Engineering students in two Asian universities and examined how certain factors affect their proficiency in the language.

Methods/Statistical analysis: The technique applied in this study was the descriptive survey research. A total of 399 students from two universities in Asia served as respondents. Statistical analyses were done using mean and to determine the significance difference in the English proficiency of the respondents, one-way analysis of variance (ANOVA) and Turkey's HSD were used. Correlation coefficient was used to determine significant relationships among the variables.

Findings: Among Engineering students of both universities, the number of years studying English was found to be significantly correlated to English proficiency. Age was negatively correlated to English proficiency of Tourism students in both universities. With university B Tourism students, attitude towards learning English and motivation for learning English were found to be positively correlated to English proficiency. Mean scores in the proficiency test indicated that Engineering students in both universities have better English skills. The multiple comparisons revealed that the mean score in English proficiency of university A Engineering students is significantly different or higher than all the other groups of respondents. Also, the mean scores in English proficiency of Tourism students from university A was significantly different or higher than that of both groups of respondents from university B. Between the mean scores of university B Tourism and Engineering students, there existed no significant difference. These findings negate the perception that in countries where English is not a native language, Tourism students have better English skills than Engineering students.

Improvements/Applications: Results of this study can be used to improve English programs for both Engineering and Tourism students. Findings show the specific areas in English proficiency where improvements are needed.

Keywords**:** English proficiency, Attitude towards learning English, Motivation for learning English, Number of year studying English, Age of English learners

1. Introduction

With the world becoming increasingly globalized, it is necessary that people from different parts of the world speak a common language – a lingua-franca. English has gradually taken that position. There may be more native speakers of Mandarin and Spanish than English but people living in Europe, Asia, Africa, and South America have English as their second language. What contributed to this were the facts that the United Kingdom, where the modern English language originated, used to be a colonial power that ruled many parts of the continents aforementioned and the rise of English speaking countries, particularly the United States, to political and economic prominence when the colonial period ended.

Given the current trends in both the marketplace and academia, the need to be proficient in the language has grown more apparent. The 8th edition of EF English Proficiency Index revealed that more scientific journals are published in English and cited a report that close to sixty percent of all multinational organizations already operate in

English [1]. This serves as a confirmation that English is indeed the leading language not only in education but also in business. Proficiency in the language then is required not only to gain access to information, particularly important research findings, but also to catch up to the competition. Therefore, in order to become (and remain competitive) in the business world it is important to gain proficiency in what has become the academic and corporate language – English.

Several studies that were conducted established the clear correlation between English proficiency and employability and income [2, 3, 4]. In addition, recruiters and HR managers around the world disclosed in a survey that preference is accorded to candidates with English skills above the local average and receive salaries 30-50% higher than similarly-qualified candidates without English skills [5].

Even in countries where English is only a second language, or one of the many languages spoken, there are certain kinds of jobs that require English proficiency. These are jobs in industries, like tourism, where communicating with people with different native languages is an integral part of the business. Graduates of tourism are expected to develop a high level of proficiency in English because success in the industry hinged upon good communication in the chosen lingua-franca. The tourism industry requires effective communication in order to ensure quality and needed performance standards [6]. This makes mastering English a prerequisite for getting a job in the said field [7].

Conversely, there are line of works in non-English speaking regions of the world where becoming conversant in the language is perceived as not necessary. There exists in countries where English is not the first language a pervading belief that to work as an engineer, for example, one need not be good at English. Although there are universities in the said countries where Engineering courses are offered in English (to cater to foreign students), local students would prefer to enroll in the programs delivered in their respective mother tongues. But among the generic skills that Engineers must develop is effective communication which is an essential employability skill in the competitive global work arena [8]. An English needs analysis for Engineers in Taiwan reveals that practitioners in the field face numerous English communicative events similar to other Asia-Pacific nations including highly frequent writing and reading events such as email, reports, and memos, while common oral events include meetings, teleconferences, and presentations [9].

Therefore, English proficiency is as important in the field of Engineering as it is in the field of Tourism. However, between the fields of Tourism and Engineering, there seem to be more pressure on the students and practitioners in the former to take English training more seriously than in the latter. It is even a common perception that people in the Tourism industry, because of the nature of their job and business, are more proficient in English than their counterparts in the field of Engineering. Thus, in universities, students enrolled in Tourism are perceived to have better English communication skills than those pursuing Engineering courses.

This study was conducted to evaluate and compare the level of English proficiency of Tourism and Engineering students in two Asian universities not only to determine if there exists a significant difference in their skills in English but also to find out how certain factors affect their proficiency in the language.

Specifically, answers to the following questions were sought.

1. What is the profile of the Tourism and Engineering students in terms of age and number of years studying English?

2. How may each group of students be described in terms of the following:
   2.1 Attitude towards leaning English; and
   2.2 Motivation for learning English?

3. What is the level of English proficiency of each group of students?

4. Do age, number of years studying English, attitude towards learning English, and motivation for learning English significantly affect the English proficiency of Tourism and Engineering students?

5. Is there significant difference in the English proficiency of Tourism and Engineering students?

The following null hypotheses were formulated for this study:

Hypothesis 1: Age, number of years studying English, attitude towards learning English, and motivation for learning English do not significantly affect the English proficiency of Tourism and Engineering students.

Hypothesis 2: There is no significant difference between the English proficiency of Tourism and Engineering students.

2. Materials and Methods

The technique applied in this study was the descriptive survey research. A total of 399 students from two universities in Asia served as respondents. Table 1 shows the distribution of respondents.

Table 1. Distribution of Respondents

	Tourism	Engineering
University A	97	99
University B	104	99
Total	201	198

The questionnaire used for data gathering was adapted from an instrument used in a similar study [10]. The said questionnaire is subdivided into three parts, namely, Part I (Students' Profile); Part II (Attitude and Motivation Towards the English Subject); and Part III (English Proficiency Test)

The English proficiency test is subdivided into the following areas: vocabulary grammar, getting the correct grammatical form, answering question, combining sentences, and word sequencing.

The respondents from the participating universities are divided into 4 groups namely University A-Tourism, University A-Engineering, University B-Tourism, and University B-Engineering. The English proficiency of each group of respondents were measured and compared with one another.

Data processing was done using the Statistical Package for the Social Sciences (SPSS).

The respondents attitude towards learning English, motivation for learning English and level of English proficiency were analyzed using mean. The scales below were used for the interpretation.

Table 2. Mean Scale and Verbal Interpretation

	Verbal Interpretation		
Scale	A. Attitude	B. Motivation	C. English Proficiency
3.6 - 4.0	Highly Positive	Highly Motivated	Highly Proficient
2.6 - 3.5	Positive	Motivated	Proficient
1.6 - 2.5	Moderately Positive	Moderately Motivated	Moderately Proficient
1.0 - 1.5	Negative	Low	Less Proficient

The comparative analysis of their level of proficiency was performed using their mean scores. The mean scores of Tourism and Engineering students in both respondent-universities were computed separately resulting to 4 sets of unrelated mean scores. For the purpose of determining whether differences between the computed mean scores are statistically significant, the one-way analysis of variance (ANOVA) was used.

After performing the one-way analysis of variance, it was discovered that there existed significant differences in the mean scores. When results of ANOVA indicate significant differences in the mean scores, a post hoc test should be performed in order to determine where the differences lie [11]. In this study, such was done using Turkey's HSD (Honestly Significant Difference).

The relationship between age, number of years, attitude towards learning English, motivation for learning English, and English proficiency were estimated using correlation coefficient to help explain the findings.

3. Results and Discussion

3.1 Respondents' Age and Number of Years Studying English

Table 3. Average Age and Number of Years Studying English

	Average Age	Average Number of Years Studying English
University A-Tourism	18.86	13.38
University A-Engineering	20.98	13.51
University B-Tourism	20.26	9.82
University B-Engineering	21.81	9.97

Table 3 shows the average age of the student-respondents as well as the average number of years they have been studying English. The Engineering students of university B have the highest average age (21.81) and the Tourism students in University A have the lowest (18.86). The ones who have been studying English the longest are the Engineering students of university A (13.51) followed by the Tourism students from the same university. Tourism and Engineering students from university A, in general, have been studying the language longer than their

counterparts from university B.

3.2 Attitude Towards Learning English

As reflected in Table 4, Tourism students of universities A and B and the Engineering students of university A have shown positive attitude towards learning English while the Engineering students of university B, with a mean score of 1.727, are moderately positive only. At 2.929, the Engineering students from university A have the highest mean score.

Table 4. Descriptive Measure of Respondents' Attitude Towards Learning English

	Average Mean	Verbal Interpretation
University A-Tourism	2.748	Positive
University A-Engineering	2.929	Positive
University B-Tourism	2.628	Positive
University B-Engineering	1.727	Moderately Positive

Table 4 shows contrasting results. While in university A, Engineering students were found to view leaning English a more positively than Tourism students, in university B, it is the Tourism students who have a more positive attitude towards learning the language than Engineering students.

3.3 Motivation for Learning English

As shown in Table 5, all Tourism and Engineering students from both respondent-universities are moderately motivated towards learning English. The group with highest mean score is University A-Tourism (2.328) and the one with the lowest mean score is University A-Engineering (2.132)

Table 5. Descriptive Measure of Respondents' Motivation Towards Learning English

	Average Mean	Verbal Interpretation
University A-Tourism	2.328	Moderately Motivated
University A-Engineering	2.132	Moderately Motivated
University B-Tourism	2.211	Moderately Motivated
University B-Engineering	2.292	Moderately Motivated

Contrasting results could be gleaned also in Table 5. In university A, Tourism students are more motivated to learn English than Engineering students but in university B, the Engineering students' motivation for English learning is stronger than that of Tourism students.

3.4 English Proficiency

Tables 6 and 7 reveal that Tourism and Engineering students of university A are "proficient in English while their counterparts from university B are considered moderately proficient. The Engineering students of university A tallied the highest computed mean at 3.376, followed by the Tourism students from university A with 3.08. Tourism students of university B has the lowest mean score of 2.186.

Table 6. Descriptive Measure of Respondents' English Proficiency
University A – Tourism & Engineering

	Mean	Verbal Interpretation	Mean	Verbal Interpretation
	Tourism		Engineering	
A. Vocabulary of Grammar	3.56	Proficient	3.91	Highly Proficient
B. Getting the Correct Grammatical Form	2.98	Proficient	3.09	Proficient
C. Answering Questions	3.36	Proficient	3.80	Highly Proficient
D. Combining Sentences	2.56	Moderately Proficient	3.05	Proficient
E. Word Sequencing	2.29	Moderately Proficient	3.03	Proficient
Average	3.08	Proficient	3.376	Proficient

Table 7. Descriptive Measure of Respondents' English Proficiency
University B – Tourism & Engineering

	Mean	Verbal Interpretation	Mean	Verbal Interpretation
	Tourism		Engineering	
A. Vocabulary of Grammar	2.63	Proficient	2.51	Moderately Proficient
B. Getting the Correct Grammatical Form	2.05	Moderately Proficient	2.31	Moderately Proficient
C. Answering Questions	3.40	Proficient	3.36	Proficient
D. Combining Sentences	1.44	Less Proficient	1.57	Less Proficient
E. Word Sequencing	1.42	Less Proficient	1.41	Less Proficient
Average	2.186	Moderately Proficient	2.232	Moderately Proficient

As can be gleaned from the tables, the Engineering students from university A topped the English proficiency test (3.376) in all the 5 different areas tested (*vocabulary of grammar*, *getting correct grammatical form*, *answering questions*, *combining sentences*, and *word sequencing*). They are highly proficient in the areas *vocabulary of grammar* and *answering questions*.

The areas where Tourism students from university A preformed best are in *vocabulary of grammar* (3.56) and *answering questions* (3.36) which were both interpreted as proficient.

In the areas *combining sentences* and *word sequencing*, Tourism students of university B got mean scores of 1.44 and 1.42, respectively and Engineering students, also of university B, 1.57 and 1.41, respectively. All scores were interpreted as less proficient. However, the said groups turned out to be proficient in *answering questions* with Tourism students scoring 3.40 and the Engineering students 3.36.

Table 6 and 7 reveal that in both universities (A and B), Engineering students have better English proficiency skills than Tourism students.

3.5 Analysis of the Relationship Between, Age, Number of Years Studying English, Motivation for Learning English, and English Proficiency

Table 8. Correlation Analysis

	University A Engineering	University A Tourism	University B Engineering	University B Tourism
A. Vocabulary of Grammar		-.215* (Age)		
B. Getting the Correct Grammatical Form	.374** (NYSE)			
C. Answering Questions			.202** (NYSE)	-.284** (Age) .222* (Attitude) .216* (Motivation)
D. Combining Sentences	.296** (NYSE)			
E. Word Sequencing	.278** (NYSE)	-.205* (Age)		-.215* (Age)

**. Correlation is significant at the 0.01 level (2-tailed) NYSE – Number of Years Studying English
*. Correlation is significant at the 0.05 level (2-tailed)

Table 8 indicates that among Engineering students of universities A and B, the number of years they studied English was found to be significantly correlated to certain areas of English proficiency. Negatively correlated to certain areas of English proficiency of Tourism students in both universities is their age.

Only with Tourism students from university B that attitude towards learning English and motivation for learning English were found to be positively correlated to English proficiency.

The Engineering students from university A have the highest average mean for attitude towards learning English which means that they possess the most positive attitude toward studying the language. But it can be argued that the group University A-Tourism are the most motivated among the student-respondents having scored the highest average mean in the area "Motivation Towards Leaning English." What could then serve as the more plausible explanation for the Engineering students from university A having the best proficiency score is the number of years they have been studying English. Table 3 shows that students taking up Engineering in University A have the highest mean average in terms of number of years spent studying English. The correlation analysis in Table 8 indicates a positive correlation between number of years studying English and English proficiency which means that the more time students study

English the more proficient in the language they become. The same table shows a negative correlation between age and English proficiency. Such inverse relationship indicates that the younger the students are, the lesser proficient are they in the language. It is not the age per se that affects proficiency but being younger means the lesser time they had to learn the language as compared to those who are older than they are. It should be noted that the Engineering students in both respondent universities who came out to be more proficient in English than their Tourism counterparts have not only studied English longer, as indicated by their higher average years studying English, but they are also, on the average, older.

A study on the relationship between time spent on learning English and proficiency in the language verified that the number of years studying English significantly predict English ability [12]. On the other hand, the lack of time to study the language is considered a barrier in attaining proficiency in the language [13].

3.6 Analysis of the Means

Table 9. Total Mean Scores

	N	Mean	SD	Std Error	95% Confidence Interval for Mean		Mini-mum	Maxi-mum
					Lower Bound	Upper Bound		
University A Engineering	99	16.88	3.879	.390	16.11	17.65	7	24
University A Tourism	97	15.04	3.755	.381	14.28	15.80	5	24
University B Engineering	100	11.16	3.302	.330	10.50	11.82	5	21
University B Tourism	104	11.04	3.726	.365	10.31	11.76	5	22
Total	400	13.48	4.443	.222	13.05	13.92	5	24

As can be gleaned from table 9, the mean scores of University A-Engineering (16.88) and University B - Tourism (11.04) are the highest and lowest, respectively. University A-Engineering has higher mean score (16.88) than University B-Engineering (11.16) and University A-Tourism has a higher mean score (15.04) than University B-Tourism (11.04).

Also note that University A-Engineering has higher mean score (11.04) than University A-Tourism (15.04) and University B-Engineering (11.16) has higher mean score than University A-Tourism (11.04). Collectively, Engineering and Tourism students of University A have higher mean scores than their counterparts from University B.

Table 10. Analysis of Variance (ANOVA)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2538.243	3	846.081	62.771	.000
Within Groups	5337.667	396	13.479		
Total	7875.910	399			

The above results of analysis of variance (ANOVA) shows that there exist significant differences in the mean scores in grammatical proficiency of Tourism and Engineering students of the respondent-universities. This is shown by the significance of F (sig. = .000) which is way above the set level of .05.

Post hoc analysis was performed to find out where among the compared mean scores the differences noted in the ANOVA analysis exists at .05 level of significance. The mean difference score with superscript asterisk (*) indicate that significant difference exist between the pairs of scores.

Table 11 shows that the mean score in English proficiency of university A Engineering students is significantly different or higher than that of those enrolled in the Tourism course of the same university and the Engineering and Tourism students of university B. Also, the mean scores in English proficiency of Tourism students from university A is significantly different or higher than that of both the Engineering and Tourism students of university B. There was no significant difference between the mean scores in grammatical proficiency of Engineering and Tourism students of university B.

Table 11. Multiple Comparisons

(I) Course	(J) Course	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
University A Engineering	University A Tourism	1.838*	.525	.003	.48	3.19
	University B Engineering	5.719*	.521	.000	4.38	7.06
	University B Tourism	5.840*	.516	.000	4.51	7.17
University A Tourism	University A Engineering	-1.838*	.525	.003	-3.19	-.48
	University B Engineering	3.881*	.523	.000	2.53	5.23
	University B Tourism	4.003*	.518	.000	2.67	5.34
University B Engineering	University A Engineering	-5.719*	.521	.000	-7.06	-4.38
	University A Tourism	-3.881*	.523	.000	-5.23	-2.53
	University B Tourism	.122	.514	.995	-1.21	1.45
University B Tourism	University A Engineering	-5.840*	.516	.000	-7.17	-4.51
	University A Tourism	-4.003*	.518	.000	-5.34	-2.67
	University B Engineering	-.122	.514	.995	-1.45	1.21

4. Conclusion

Correlation performed between English proficiency of the respondents and the other variables yielded different results prompting different decisions on hypothesis 1.

Number of years studying English contributed significantly to English proficiency of Engineering students in universities A and B. Therefore, for this group, hypothesis 1 is rejected in terms of the said variable. However, for the same group of respondents, hypothesis 1 is accepted for *age*, *attitude towards English*, and *motivation for learning English*. These variables do not affect their performance in the language.

There exists an inverse relationship between English proficiency of Tourism students of universities A and B and the variable *age*. Therefore, for this group, hypothesis 1 is rejected in terms of the said variable. For the same group of respondents, hypothesis 1 is accepted for *number of years studying English* since the said variable has no effects on their proficiency in English.

While the variables *attitude towards English* and *motivation for learning English* have effects on the performance of Tourism students of university B in English they have none on that of Tourism students of University A, therefore, hypothesis 1 is rejected on the latter and accepted on the former.

Hypothesis 2 is rejected. There exists a significant difference between the English proficiency of Tourism and Engineering students. Engineering students of university A have mean scores in English proficiency significantly different or higher than Tourism students of university A and the Engineering and Tourism students of university B.

The computed mean score of Engineering students of university B is higher that that of the Tourism students of the same university although it is not considered significantly different when the multiple comparison was made.

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