

Comparing TOEFL PBT Scores to IELTS Scores

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Introduction

Institutions of higher education in the United States generally require evidence of English proficiency from nonnative speaking students before admission to graduate or undergraduate programs is offered. Historically, the evidence most often requested has been a score on the Test of English as a Foreign Language (TOEFL). The TOEFL is a test developed by the Educational Testing Service (ETS) that measures students' abilities to "use and understand English in a classroom setting at the college or university level" (About the TOEFL PBT Test). ETS is in the process of phasing out the paper-based version of the TOEFL (TOEFL PBT), replacing it with the internet-based test (TOEFL iBT). However, intensive English language programs continue to use the TOEFL PBT as institutional exams, the scores from which are recognized by the institutions administering the examinations. Minimum TOEFL PBT scores for admission vary slightly by institution, but a score of 550 is a common standard. In recent years, an increasing number of students have begun taking an alternative test, the International English Language Testing System (IELTS) as a means of proving English language proficiency. The IELTS is a similar English language examination, developed and owned by British Council, IDP: IELTS Australia and the University of Cambridge ESOL Examinations (Cambridge ESOL). Minimum IELTS scores for admission vary considerably between institutions ranging from 5.0 to 8.0. This study was done in order to compare the TOEFL PBT scores with IELTS scores in order to explore and establish a reliable relationship between the scores on the two tests. For the purpose of this study, only total test scores were considered. Individual section scores from both tests were not analyzed as admissions criteria generally focus on total scores. (About the TOEFL PBT Test; Welcome to IELTS)

Statement of the Problem

Intensive English language programs have anecdotally noticed a considerable number of students gaining admission to graduate and/or undergraduate programs of study based on "passing" IELTS scores while achieving substandard TOEFL PBT scores, far below the

institutional requirement for admission. Students are thereby arguably circumventing established English language proficiency standards. This apparent discrepancy has led to the following study comparing TOEFL PBT scores to IELTS scores with the hopes of discovering and establishing a reliable and common standard for English language proficiency.

Related Literature

In a study published in TESOL Quarterly in 1987, Richard L. Light, Ming Xu and Jonathan Mossop studied the relationship between students' TOEFL scores and their academic success at the State University of New York at Albany (English Proficiency and Academic Performance of International Students). The study was inconclusive in determining TOEFL scores as predictors for academic success as measured by GPA; however, an additional finding did indicate that increased language proficiency, as demonstrated in TOEFL scores, increased the student's ability to earn graduate credits. As with most standardized tests, TOEFL scores did not prove to be the only factor in students' academic success. However, the inherent importance of English proficiency in order to achieve academic success at the college or university level in the United States cannot be overlooked.

In 2010, Educational Testing Service released a report linking TOEFL iBT scores and IELTS scores for purposes of comparing both specific sections and total scores of both tests (Linking TOEFL iBT Scores to IELTS Scores – A Research Report). The study examined the test results of 1,153 students who reported TOEFL iBT and IELTS scores to ETS. A moderately high total test score correlation was found (0.73), and section score correlations were in the moderate range from 0.44 to 0.68. The final comparison of scores was found to pass a similar percentage of TOEFL iBT and IELTS test takers.

Hypotheses

This study seeks to reject the null hypothesis that there is no significant correlation between TOEFL PBT scores and IELTS scores. The alternative hypothesis states that there is a significant correlation between TOEFL PBT scores and IELTS scores.

Variables

For the purposes of this study, the independent variable is international students currently or previously enrolled in intensive English language programs at colleges or universities in the United States who have taken both the TOEFL PBT and IELTS exams during the same semester of study. The dependent variables are the scores received on the Institutional TOEFL PBT and the IELTS exams. Only total test scores were considered in this study. Individual section scores from both tests were not analyzed.

Method

Subjects

The subjects for this study are thirty-six international students currently or previously enrolled in intensive English language programs at universities in the United States. Only students who had taken both the Institutional TOEFL PBT and IELTS exams during the same semester of study were selected and included in the study in order to accurately compare the scores assessing English language proficiency.

Instruments

Two instruments were used in this study, the TOEFL PBT and the IELTS, both of which are recognized as valid and reliable indicators of English language proficiency. The TOEFL PBT is developed by Educational Testing Service (ETS). The test is comprised of three sections (Listening Comprehension, Structure/Written Expression, and Reading Comprehension); total scores range from 310 to 677 and are derived by statistically converting the raw scores from each section to a number on the TOEFL scale. According to the ETS website, TOEFL scores are accepted by more than 8,500 universities and colleges in over 130 countries, and additionally used for purposes of immigration, professional certification, and

measuring English language progress. IELTS is owned by both the British Council, IDP: IELTS Australia and the University of Cambridge ESOL Examinations (Cambridge ESOL). The IELTS has four sections (Listening, Speaking, Reading and Writing) and scores are reported on a 9-band scale in one-half (0.5) band increments; total scores are the average of the four sections. The IELTS website states that more than 1.7 million tests are taken each year, and declares itself “recognised as a secure, valid and reliable indicator of true-to-life ability to communicate in English for education, immigration and professional accreditation” (Welcome to IELTS). (About the TOEFL PBT Test; Welcome to IELTS)

Experimental Design

In order to address the previously defined research question, basic research was conducted for the purpose of exploring the relationship between TOEFL PBT scores and IELTS scores. The research method employed in this basic research was correlational research, attempting to establish a relationship between TOEFL PBT and IELTS scores in order to establish common, reliable admissions standards with regard to English language proficiency at the college or university level in the United States.

Procedure

Initially, total TOEFL PBT and IELTS scores were manually obtained from the folders of international students currently or previously enrolled in an intensive English language program at a university in New England. Scores were only included from students who had taken both exams during the same semester of study in order to relate similar levels of proficiency in the study. This manual data collection yielded results from thirteen students.

In order to increase the sample size for the study, approximately thirty other university intensive English language programs were contacted via email and asked if any data was available to contribute to the study. The data was requested from anonymous students who took both Institutional TOEFL PBT and IELTS exams during the same semester of study. Individuals from two of these contacted programs responded with corresponding total test scores from twenty-three additional students.

The IBM SPSS Statistics program was then used to analyze the obtained data for the study. The findings from these analyses are presented in the Results section. Descriptive statistics were computed to evaluate average (mean) scores and observed variation (standard deviation) in the scores. The correlation between the scores was also computed to observe the extent to which the two tests related to each other. Finally, a regression analysis was completed to relate specific scores between the TOEFL PBT and IELTS tests.

Results

Descriptive Statistics

As previously explained in discussing the TOEFL PBT and IELTS instruments, the reported score ranges differ substantially. The TOEFL PBT total scores range from 310 to 677 in whole number increments, and the IELTS total scores range from 0 to 9 in 0.5 increments. Consequently, IELTS scales show much smaller score variations than TOEFL PBT scales, and the score comparisons show IELTS scores with corresponding TOEFL PBT score ranges due to the larger TOEFL scale.

Table 1 gives the sample size, the mean scores and the score variations (standard deviation) of the two tests. The average (mean) score for the sample on the TOEFL PBT was 446 with a standard deviation of 40.36. The IELTS average (mean) score for the sample was 5.1 with a standard deviation of 0.56. The sample median and mode scores, as well as the range and variance, for each test were calculated manually. The median TOEFL PBT score was 433; there were two modes of 450 and 433. The TOEFL PBT range was 146, and the variance was 1628.93. The median and mode IELTS scores were both 5.0. The IELTS range was 2 and the variance was 0.31.

Table 1:

Descriptive Statistics			
	Mean	Std. Deviation	N
TOEFL	446.0278	40.36228	36
IELTS	5.1806	.56256	36

Table 2 shows the Pearson correlation value for the two tests. The correlation indicates the extent to which the scores on the two tests are related to each other. Correlation values range from 0, indicating no relation at all, to 1, indicating a perfect correlation. The correlation value for this study is 0.787, indicating a fairly strong positive correlation. As TOEFL PBT scores increase, IELTS scores increase, and vice versa.

Table 2:

		TOEFL	IELTS
Pearson Correlation	TOEFL	1.000	.787
	IELTS	.787	1.000
Sig. (1-tailed)	TOEFL	.	.000
	IELTS	.000	.
N	TOEFL	36	36
	IELTS	36	36

Regression Analysis

Table 3 shows the linear regression analysis conducted with the TOEFL PBT and IELTS test scores. The regression coefficient was 56.46 and the regression constant was 153.56.

Table 3:

Variables Entered/Removed^a			
Model	Variables Entered	Variables Removed	Method
1	IELTS ^b	.	Enter

a. Dependent Variable: TOEFL

b. All requested variables entered.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	153.559	39.565		3.881	.000
	IELTS	56.455	7.594	.787	7.434	.000

a. Dependent Variable: TOEFL

The attached TOEFL vs. IELTS graph illustrates the regression line developed using the raw data.

Based on the regression analysis of the data, the following equation was used to compare and predict total TOEFL PBT scores based on total IELTS scores. Predicted TOEFL PBT Score(Y) = regression coefficient(IELTS score(X)) + regression constant (Y = 56.46(X) + 153.46). The standard error of estimate for the regression line is 24.9, indicating a 50-point range in predicting total TOEFL PBT scores from total IELTS band scores. For example, an total IELTS score of 6.0 would correspond with a total TOEFL PBT score of 467-517, 68% of the time. Table 4 presents the comparison results for the total scores on the two tests generated using these formulas.

Table 4 - Total Score Comparisons

IELTS Score	TOEFL PBT Score
9.0	637-677
8.5	608-658
8.0	580-630
7.5	552-602
7.0	524-574
6.5	496-546
6.0	467-517
5.5	439-489
5.0	411-460
4.5	383-433
4.0	354-404
<4.0	310-345

Discussion

The results of the study reject the null hypothesis that there is no significant correlation between TOEFL PBT scores and IELTS scores. A correlation between the scores of the two tests is in fact evident. It is therefore possible to relate IELTS test scores with TOEFL PBT scores and the previously established admission standards for English language proficiency.

Conclusion

Based on the results of this study comparing TOEFL PBT scores and IELTS scores, it is possible to accurately compare scores from the two tests and establish common and reliable standards for admission based on English language proficiency. While the findings and score comparisons from this study would benefit from future research involving a larger sample in order to enhance score comparison results and decrease TOEFL PBT score ranges, the anecdotal observations of students bypassing established English language proficiency standards by submitting IELTS scores ranging from 5.0 to 6.0 in lieu of acceptable TOEFL PBT scores ranging from 500 to 550 now appear grounded in statistical data. Based on this study, an IELTS score of 6.0 corresponds to a TOEFL PBT score of 517 at the highest end of the possible range, significantly below the common standard of 550. Citing the results of this study, institutions with a previously established minimum TOEFL PBT score of 550 for admission, should require a minimum IELTS score of 7.0.

References

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