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Investigation on TOEIC score trends in Korea and its pedagogical implications

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Abstract: Many universities in Korea have implemented teaching TOEIC based courses in their core curriculums as a result of the increased popularity of the TOEIC test. With the assumption that reading and listening scores are inter-related with each other, a focus of this study is to find the distribution patterns of the reading comprehension (RC) and the listening comprehension (LC) scores with respect to the different levels of the students. More specifically, the present study examines the relationships at the different levels between the RC and the LC scores, the LC scores and the total scores, and the RC scores and the total scores. In order to assist the students with improving their current levels and their TOEIC test scores, determining the particular areas that need to be focused on within each score band was the purpose of the comparison. In this study, 11328 TOEIC test scores were analyzed, and four results are presented. First, during their initial stages of language acquisition, students who are having more difficulty with the RC would benefit from having this area supplemented. The next finding revealed the necessity to implement tailored instruction for the higher levels. After that, it was determined that focusing

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PUBLIC INTEREST STATEMENT

The students TOEIC test scores were analyzed in order to determine the relationships between two language skills (listening and reading). Several interesting facets were revealed. First, the LC scores were higher than the RC scores for every score range, but the amount decreased in the higher score ranges. This could possibly be indicative of English language learners having more difficulty with the RC in their initial stages of language acquisition. The study also indicated that students in the lower score ranges should be given the LC and the RC instruction simultaneously. It was also revealed that tailored instruction is needed for the higher levels. Also, the results generally showed that there is no relationship between the LC and the RC, which implies that the students should be given instruction with both the LC and the RC. In general, the study revealed various measures to improve English language learning.
on the RC would be a worthwhile measure in order to assist the lower level students to increase their overall TOEIC scores. The final result revealed that when the students were grouped in larger score bands, both the RC and the LC should be taught.

Subjects: English Education; Education; Higher Education; University General English Teaching

Keywords: TOEIC teaching; university general english program; TOEIC listening; TOEIC reading; teaching method; english language teaching; teacher guideline

1. Introduction

The Test of English for International Communication, which is commonly referred to as TOEIC, has gained predominance with the hiring process of companies in South Korea regarding the English proficiency of potential hires. The number of TOEIC test takers has skyrocketed within the past twelve years. In fact, the number of people that took the TOEIC speaking drastically increased from 15,000 in 2007 to 260,000 in 2012 (Korea TOEIC Council, 2013), which clearly illustrates how the proficiency test has become more essential in a mere 5 year span.

Several universities in Korea have also responded to this phenomenon. TOEIC based courses and mock TOEIC tests have not only been introduced to several universities core English curriculum, but they have also become part of the requirement for graduation in some cases. Kim et al. (2012) stated that this occurrence is a reflection of the social change regarding TOEIC testing. Several other researchers verified that TOEIC has been adopted by some universities as part of their general English curriculum (Ha, 2012; K. I. Shin & Oh, 2012; Lim, 2006; Nam, 2016).

Some academics argue that while this trend towards implementing TOEIC based courses is on the rise, there should still be attention paid to the effectiveness of these courses from all perspectives (Choo, 2009). Therefore, in the educational environment where TOEIC occupies a large part of the English language curriculum of a university, improvements of the learners’ TOEIC scores, the teaching methods, and the environment of the TOEIC courses should be continuously studied and researched.

While large amount of research has been conducted regarding the teaching methods in the TOEIC classroom, few studies have been conducted regarding the trend of the TOEIC scores at the different score levels. The aim of the current research is to investigate the TOEIC score trend of university students with a sample set that is very large (n = 11,328). In other words, with unprecedented large samples, the current study tries to find distribution patterns of the LC (Listening Comprehension) and the RC (Reading Comprehension) scores depending on the students’ overall TOEIC scores. Thus, this study attempts to provide classroom guidelines for the students of different levels by examining the scores with a range of 100 score bands. This study especially tries to uncover the relationship between the LC and the RC scores at different levels in addition to the relationship between the LC and total and the RC and total. This investigation is based on previous research that argues listening and reading, which are receptive skills, are more tightly connected to each other among the four language skills, which include listening, reading, speaking and writing, and the better understanding of the interrelationship between listening and reading is helpful to develop linguistic comprehension (Cain et al., 2000; Diakidoy et al., 2005; Protopapas et al., 2012; Royer et al., 1990; Tilstra et al., 2009).

The purpose of this comparison was to derive skill sets that need to be emphasized for each score band that could assist the students to not only improve their current level but also show an increased TOEIC test score. The organization of this paper is as follows. Section 2 introduces two types of literature reviews. The first type involves (1) the interrelationship between the RC and the LC with
respect to overall English competence, and the second type of literature review illustrates (2) the TOEIC classes in Korea. In Section 3, the research methodology is discussed. Section 4 presents the results and the pedagogical implications of the results, and Section 5 concludes this study.

2. Literature review

In this section, research on the relationship between the RC and the LC within the framework of the comprehension theory is introduced as the basis for pedagogical implications for TOEIC based curriculum. After that, the studies about TOEIC testing are discussed, which are aligned with this theoretical framework.

It is well-documented that theoretically the four language skills, which include listening, speaking, reading, and writing, are interrelated and interactive, and the improvement of an individual’s overall language performance is not achieved by a simple combination of the four skills. An individual's overall language performance is achieved through the interaction and the coordination of the four skills. Despite this argument, it is proposed that listening and reading, which are the receptive skills, are more tightly connected to each other than the speaking and writing skills, which are the productive skills (Cain et al., 2000; Diakidoy et al., 2005; Protopapas et al., 2012; Royer et al., 1990; Tilstra et al., 2009). Bozorgian (2012) also discussed the significance of the listening skills in learning a language and revealed that the correlation between listening and reading was stronger than the listening and speaking skill performance. Moreover, Nan (2018) proposed that listening can facilitate the students' competence regarding the response to a language, which leads to faster reading. Simultaneously, the students can enlarge their knowledge through reading, which is useful for the improvement of listening comprehension skills. Even though the relation between the RC and the LC may vary based on different task formats and text types, the comprehension theory still asserts that the better the understanding of the interrelationship between listening and reading must be helpful to develop linguistic comprehension (Diakidoy et al., 2005). As a result, listening and reading skills are developed concurrently rather than independently given this (Royer et al., 1990).

Furthermore, several Korean researchers mentioned in their studies that there is a strong relationship between listening, reading, and the overall English ability among English language learning students (Jee & Lee, 2009; H. Jung, 2010; B. Jung, 2011; Y. Jung, 2012; S. A. Kim, 2006). Jee and Lee (2009) also affirmed that listening comprehension was closely related to reading comprehension, and an individual’s grammar and vocabulary level also has a strong correlation to reading comprehension.

Park (2008) conducted a study that analyzed the relationships between students' English language ability, listening comprehension, and reading comprehension. The results confirmed that there were relationships among the English language ability, listening comprehension, and reading comprehension, which showed similar correlations that were relevant between the listening comprehension and the reading comprehension for both the lower English language ability group and the upper English language ability group. In fact, the results for each of the two groups were nearly identical.

Second, previous research about the TOEIC classes is presented. The focus has been centered on the TOEIC teaching methodologies, since the TOEIC teaching has been introduced into the university classrooms. Many academics asserted that teaching TOEIC as part of the university curriculum is of vital importance (K. I. Shin & Oh, 2012). K. I. Shin and Oh (2012) stressed the effectiveness of TOEIC teaching by examining the results of the TOEIC test scores. Also, they further emphasized that listening comprehension skills will assist students to obtain a higher score on the TOEIC test in a relatively short period of time. They believe that the effectiveness of TOEIC teaching was not only beneficial for the students to develop their skills, but it also produced almost instantaneous results.
This phenomenon was also confirmed by S. A. Kim (2006) who investigated the results of TOEIC scores and determined that vocabulary and grammar are indispensable to the RC, and they should be focused on in the classroom.

Other scholars have conducted studies regarding teaching methodologies that help to improve TOEIC test scores (Cha & Choo, 2012; Ho, 2012; M. K. Lee, 2011). Ho (2012) investigated various teaching methods in order to determine the methods that were the most useful to improve TOEIC scores for college English learners. They determined in their study that the students from the reading-focused class achieved higher scores than those from the listening-focused class. They noted in their study that the scores from the reading-focused class improved more than the scores from the listening-focused class. Also, the students in the reading focus class had a higher level English ability, which statistically showed more improvement with their TOEIC scores than the students from lower levels, but the students from the listening focused classes showed no statistical differences between the different levels.

To sum up, we first reviewed the LC and the RC relationship in terms of comprehensive language development, which followed the theoretical framework of the compensation theory. Second, a range of studies regarding TOEIC testing and teaching methodologies are referred to in the current section. The common consensus amongst educators and researchers in general with respect to the TOEIC classes is that there is a relationship between English language ability (ELA), listening comprehension, and reading comprehension, which was suggested in the comprehension theory. In addition to the ongoing classroom research, it would be meaningful to investigate the phenomenon of the test scores. Thus, in order to assist and supplement the classroom teaching methodology research, the current research aims to analyze the TOEIC score distributions of the LC and the RC and the correlations between them. By presenting the score patterns and the correlations between the LC and the RC, the classroom instructors will be able to implement different teaching strategies according to the students’ needs and their teaching backgrounds.

3. Data collection & analysis
The TOEIC scores that are used in the current study were collected from 7727 freshmen and sophomore students at a university in Seoul for the 2017 and 2018 school years. Overall, 11,328 scores were collected. The students were required to take mock TOEIC tests in order to pass their core module at the university, and their scores were used in the current study. From the scores, the descriptive statistics were first calculated, which included the means and the standards deviations for the LC and the RC sample sets in order to analyze the relationships between the LC and the RC scores and the total TOEIC scores. After that, an SPSS tool was employed to calculate the Pearson’s correlations in order to measure the relationships between the scores. The Pearson’s correlation is a value between −1 and 1, and it depicts to what extent that two variables are related. In other words, it is a measure of the strength of the linear relationship between the two variables. The Pearson’s correlation has been used in several studies to examine the relationships between two variables regarding language teaching (S. A. Kim, 2006; I. C. Kim, 2005; Ha, 2012; Jee & Lee, 2009), and it was used in this study to investigate the relationships between the LC and the total, the RC and the total, and the LC and the RC. The first step involved was constructing a scatter plot of the variables to check for linearity in order to examine the relationship between the sets of two variables that were previously mentioned. It is followed by the calculation of the correlation coefficient. The strength of the relationship between the two variables is greater when the scatter plot becomes closer to a straight line. The categorization of the types of correlations is considered by analyzing the effect on one variable with the increase of the other variable. A positive correlation between two variables exists when one variable is increased, and the other variable also increases. This is also known as a positive linear correlation. A negative linear correlation, which is depicted as a negative correlation for simplicity, occurs when one variable decreases when another variable is increased. The third scenario that could exist is when the other variable doesn’t increase or decrease when one variable is increased, which illustrates that there is no correlation between the two variables. The linear correlation is stronger when the correlation coefficient gets closer to 1 or −1.
4. Results & discussion

4.1. Overview of overall TOEIC Scores
A total of 11,328 TOEIC scores (n = 11,328) were analyzed in the current study. Table 1 gives a summary of the descriptive statistics calculated from the data set that was used in this study.

From Table 1, the mean score for the total is 616.71. The table also illustrates the mean scores for the Listening Comprehension (LC) and the Reading Comprehension (RC). The mean score for the LC, which is 324.52, is noticeably higher than the mean score for the RC, which is 292.19. This occurrence uncovered a general pattern, which illustrates that the students have more difficulty with the RC component than the LC component on the TOEIC test. Table 2 displays the correlation between the score components between the LC and the RC, the LC and total, and the RC and total.

In order to investigate the relationships between the score components, the Pearson's Correlations were calculated using SPSS. As one might expect, the Pearson's correlation values show a strong relationship between the LC and the total (r = 0.933), the RC and the total (r = 0.941), and the RC and the LC (r = 0.756). The Pearson's correlation coefficients prove that there is a strong relationship between the RC and the LC scores with the total scores. In addition, it is interesting to note that the correlation value between the RC and the LC scores is lower than that of the LC and the total and the RC and the total. One of the most noticeable phenomena from the overall analysis is the large gap between the RC and the LC scores, which returned a difference of 32.33. This result corresponds with the result from the 2017 Test Takers Worldwide Report that was published by ETS, which is the TOEIC administration organization. Figure 1 illustrates the mean TOEIC scores for each region, which include Asia, South America, North America, Africa, and Europe.

Despite the detailed information regarding the total scores for the test takers' or the levels for them not being included in the ETS report, it can be clearly seen in Figure 1 that there is a general pattern of higher LC scores than RC scores worldwide. The gap between the RC and the LC TOEIC test scores ranged from 35 to 57 for each region. The largest difference occurred in Asia, which was 57, Africa was next at 47, North America was 42, and then Europe and South America returned the same result, which was 35. These results confirm that the descriptive analysis of

| Table 1. Descriptive statistics of the TOEIC scores |
|-----------------------------------------------|
|                          | Mean       | SD         | N   |
|-----------------------------------------------|
| **LC**                                      |
| 324.5242                                    |
| 69.02404                                    |
| 11,328                                      |
| **RC**                                      |
| 292.1941                                    |
| 72.97826                                    |
| 11,328                                      |
| **Total**                                   |
| 616.7183                                    |
| 133.06549                                   |
| 11,328                                      |

| Table 2. Pearson's correlations for the overall TOEIC scores |
|-------------------------------------------------------------|
|                | LC               | RC               | Total             |
| LC              | Pearson Correlation | 1            | .756**            | .933**            |
|                  | Sig. (2-tailed)   | .000          | .000              |                   |
|                  | N                | 11,328       | 11,328            | 11,328            |
| RC              | Pearson Correlation | .756**    | 1            | .941**            |
|                  | Sig. (2-tailed)   | .000          | .000              |                   |
|                  | N                | 11,328       | 11,328            | 11,328            |
| **Total**       | Pearson Correlation | .933**    | .941**         | 1                 |
the current data was not just a random divergence with the test scores analyzed from the university in Seoul. The average test taker scores were better with the LC than with the RC. The general pattern that was observed with the test takers scoring better with the LC than with the RC, which can raise questions regarding the distribution of the LC and the RC scores with respect to the different levels that include the low, the intermediate, and the high levels. The pedagogical implications could be derived and implemented in the TOEIC classroom if the score gap between the RC and the LC components to their total score reveals a certain pattern after an analysis. To accomplish this task, the student’s score patterns between the LC and the RC were compared by level. The levels consisted of grouped scores involving increments of 100, which also consisted of 7 score bands. Table 3 summarizesthe mean scores for the LC, the RC, total, and the score gaps of each band between the LC and the RC.

Table 3 illustrates the 7 score bands that were grouped by ranges of 100. It is clearly evident that the RC scores are lower than the LC scores in every band. This means that the students not only performed better overall, but they also performed better with respect to each individual level. It is also interesting to note that the lower score bands tended to show larger differences between the LC and the RC scores. This phenomenon can be interpreted as the students who are in their initial stages of language acquisition have more room for improvement with the RC score. Thus, the overall results seem to suggest that students in the lower score bands should focus more on improving their reading comprehension proficiency. Pinpointing the actual components is a key objective here, because it would reveal the areas that the students are struggling with the most and need to be concentrated on more.

4.2. Score relation between LC & Total and RC & total
The investigations of the score relationships between the LC & total and the RC & total are discussed in this section. By examining the relationships between the LC& Total and the RC& Total in the different categories, we aimed to reveal the score patterns and the relationships between the different proficiency levels. In order to examine the correlation between the scores, the Pearson’s correlation coefficient, $r$, was calculated for each set. Table 4 below shows the Pearson’s correlation coefficient between the LC and total as well as between the RC and total.
|       | 900 (n = 144) | 800 (n = 902) | 700 (n = 1978) | 600 (n = 2990) | 500 (n = 3027) | 400 (n = 1672) | 300 (n = 615) |
|-------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|
| LC    | 467.11       | 432.16       | 388.98        | 342.64        | 293.47        | 247.45        | 200.60        |
| RC    | 460.41       | 410.50       | 358.86        | 308.67        | 260.78        | 210.53        | 161.39        |
| Total | 927.53       | 842.67       | 747.84        | 651.31        | 554.25        | 457.98        | 362.00        |
| GAP between LC & RC | 6.70       | 21.66        | 30.11         | 33.96         | 32.69         | 36.91         | 39.21         |
### Table 4. R values between the LC & total and the RC & total

| Correlation       | Over 900 | Over 800 | Over 700 | Over 600 | Over 500 | Over 400 | Over 300 |
|-------------------|----------|----------|----------|----------|----------|----------|----------|
| LC& Total         | .642**   | .580**   | .509**   | .505**   | .441**   | .450**   | .572**   |
| Sig (2-tailed)    | .000     | .000     | .000     | .000     | .000     | .000     | .000     |
| RC& Total         | .636**   | .684**   | .565**   | .476**   | .490**   | .482**   | .510**   |
| Sig (2-tailed)    | .000     | .000     | .000     | .000     | .000     | .000     | .000     |

**Correlation is significant at the 0.01 level (2-tailed)**
According to the analysis shown in Table 4, which excludes the band that includes the scores over 900 and the RC & Total with the band over 800, it appeared that the r values between the LC & Total and the RC & Total showed a moderate relationship for every score band by showing r values of 0.4 and 0.59, respectively. In the highest scoring band, which is over 900, strong relationships were found between the LC and the total, which returned an r value of 0.642. The result for the RC and the total was also similar to that of the LC and the total with r values of 0.643. Strong r values in both the LC & Total and the RC & Total in the category over 900 could imply that students whose total score fall in this category reached a balanced competency with respect to their listening and reading skills. Meanwhile, in the category over 800, a stronger relationship was shown in the RC & Total than in the LC & Total, even though the mean score of the LC was higher than the RC, which is shown in Table 3. This means that the students’ RC scores are more tied to their total score than to their LC scores in this category. The results could suggest a wider fluctuation in students’ LC scores in the band over 800, which suggests a relatively larger competency gap between the students within this category. It can also imply that the students whose overall scores fall between 800 and 900 should improve their LC scores in order to reach the highest score bands, which are over 900.

In addition, the r values tended to decrease as the total scores decreased except for the band between 301 and 400. Generally, the r values were strong in the higher score bands over 800 and 900, and the other bands were moderate. If we compare the r values of the LC & the total to the values for the RC & the total, the values are generally similar to each other. An interesting fact that was discovered from the results was the stronger relationships between the score components in the higher scoring bands. This occurrence corresponds to natural logic, which depicts that the advanced test takers will have better relations on each score type with their total scores. This means that the students’ listening and reading skills in the lower score bands are less tied to their total score, and the similar r values can suggest that the students’ abilities with respect to the LC and the RC either increase or decrease in conjunction with their total score.

4.3. Score relationship between LC and RC

This section provides the examinations of the relationships between the LC and the RC scores, which will provide how the test takers’ LC and RC scores are related in different score bands. In order to investigate the relationships between the LC and the RC, the r values between the LC and RC scores were calculated. Table 5 shows the r values between the RC and the LC in different score bands.

Table 5 illustrates the negative r values between the RC and the LC, which means that as one variable increases, the other variable has a tendency to decrease. Also, the closer the r value is to 1 in a positive relation, the stronger relation is between the values. Also, the closer it is to—1 in a negative relation, the stronger the linear correlation. Thus, following Evans’s (1996) description of the strength of correlations, the r values can be interpreted as very weak for an absolute value of r that falls in the range of 0.00-0.19, weak when r is between −0.20 and −0.39, moderate when r returns values in the range of −0.40 and −0.59, strong if r is in the range of −0.60 to −0.79, and very strong is from-0.80 to −1.0. For higher scoring bands that were over 800 and 900, it appeared that the relationship between the RC and the LC was very weak. For the rest of the score bands that were over 700, 600, 500, 400, and 300, the RC and the LC relationships were found to be moderate. Considering the r values in each of the score bands, it is obvious that the values become

| Table 5. R values between the RC & the LC |
|-----------------------------------------|
| Over 900 | Over 800 | Over 700 | Over 600 | Over 500 | Over 400 | Over 300 |
| Correlation | −.184** | −.198** | −.423** | −.519** | −.566** | −.566** | −.414** |
| Sig(2tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

**The correlation is significant at the 0.01 level (2-tailed)
noticably lower from the bands over 700. To interpret the values, for the score bands of over 800 and over 900, very weak negative relationships can be interpreted, because the LC and the RC scores are very similar. Also, for the relatively higher level students, the RC and the LC should be tailored to the students’ needs, because their RC and LC scores have a very weak relationship. On the other hand, students in the rest of the score bands tended to have a stronger relationship compared to the students in the score bands of 800 and 900. The relatively stronger relationship between the RC and the LC in the lower score bands, which were below 799, can be interpreted as the scores of the RC and the LC increased in conjunction. In other words, if the RC scores increase in the lower score bands, the LC scores tend to increase in conjunction with the RC scores. Considering the descriptive results of the score bands below 799, the RC scores were found to be much lower than the LC scores, and the \( r \) value showed stronger relations in these bands. As a result, one can suggest that focusing more on teaching RC than LC could be beneficial for students’ in these levels. In fact, some studies have shown that teaching RC could enhance students’ LC scores. According to Ha (2012), students in the reading-focused classes showed more improvement than the students in the listening focused classes on their TOEIC exams with both the LC and the RC scores. One of the most interesting findings was that the LC scores from the students in the reading-focused classes improved more than the scores from the students in the listening classes for the lower level students. The score band was not specifically presented in their study, but the average score for the participants was 343.63 for the listening focused classes, and it was 377.75 for the reading focused classes. In regards to the similar score bands, the \( r \) values, which are \(-0.566\) and \(-0.414\), are basically moderate. Further research should be conducted in order to consider whether teaching reading is advantageous for listening competence especially with the higher level students. However, similar \( r \) values in the categories over 500, over 600, and over 700 can suggest that students whose scores fall in these categories can benefit from studying reading in order to enhance their RC and LC proficiency, which would increase their overall TOEIC scores as a result.

In fact, the results of the current study differ from a previous study by Jee and Lee (2009). Jee and Lee (2009) reported that learners whose scores ranged between 600 and 900 had a stronger relationship between the LC and the RC, but the lower level learners showed a weak relationship. In their study, the score gap between each band was more than 300, which is much wider than the bands from the current research. This suggests the importance of grouping the students with respect to levels in the classroom. Various teaching methodologies can be employed by grouping the students, such as peer tutoring. The next section presents the score relationships with the larger score bands.

4.4. Score relationships with different bands categorization

In order to provide a prospective grouping guideline for a TOEIC classroom, the students’ scores were grouped with larger bands, which were grouped in the ranges of 200 and 300. It is not always possible to provide finely tuned classroom lessons that specifically address the needs of every student in the classroom, so this phenomenon was investigated. In order to accomplish this, the scores were grouped in larger ranges, and the relationship between the LC and the RC was investigated further. The scores were first divided groups of 3 and groups of 2, which had ranges of 200 and 300 with respect to the total score in each band. Table 6 shows the correlation values between the LC and the RC when they were grouped by scores in ranges of 200.

The figures in Table 6 reveal that the correlations between the LC and the RC are very weak in all the score bands when the scores were grouped in ranges of 200. This means that the LC scores and the RC scores are not related each other. Next, the relationships between the LC scores and the RC scores are considered when they are grouped in the ranges of 300.

The figures in Table 7 clearly depicts that the correlation between the LC and the RC is weak when the scores were grouped by 300 in both bands. As one might have expected, the different band ranges clearly illustrate the differences in the LC and the RC relations. One noticeable result
Table 6. The correlation between the LC & the RC in ranges of 200

|                | 801–990 | 601–799 | 401–599 |
|----------------|---------|---------|---------|
| Correlation LC & RC | .197**  | .126**  | .002    |
| Sig. (2-tailed)    | .000    | .000    | .894    |
| Mean              | 854.35  | 689.75  | 519.94  |
| SD (N)            | 39.18 (1046) | 55.27(4968) | 54.24 (4699) |

**Correlation is significant at the 0.01 level (2-tailed)**

Table 7. The correlation between the LC & the RC in the ranges of 300

|                | 701–990 | 401–699 |
|----------------|---------|---------|
| Correlation LC & RC | .367**  | .378**  |
| Sig. (2-tailed)    | .000    | .000    |
| Mean              | 784.68  | 571.03  |
| SD (N)            | 60.25 (3024) | 78.87 (7689) |

**Correlation is significant at the 0.01 level (2-tailed)**

From the analysis is that the r values appeared to be very weak and weak when they were grouped with the larger bands of 200 and 300 in all the score bands. This means that the relationship between the LC and the RC is very weak, and the two scores are not related to each other. Therefore, this can imply that both the LC and the RC teaching methodologies should be given, and the students’ needs should be taken into consideration.

However, the 100 score band groupings, which are smaller score bands, revealed that teaching RC is a better strategy to improve the students' test scores in the lower level, because there is a moderate relationship between the LC and the RC scores in the lower levels. As a result, one proposition of the current study is to adopt a variety of teaching strategies and implement the most effective ones depending on the grouping when designing classroom lessons.

5. Major findings & conclusion

There were four notable findings that this study revealed. The first finding involved the results from the TOEIC test score themselves, which revealed that the LC scores were higher than the RC scores for every band range, but the gap between the LC scores and the RC scores decreased in the higher band ranges. This could be indicative of English language learners having more difficulty with the reading components during their initial stages of language acquisition and focusing on supplementing this area may be beneficial for the students.

The second reason pertained to the r values for the LC & the total and the RC & the total. A similar relationship did emerge with the r values for the LC & the total and the RC & the total, but a strong relationship was uncovered with the higher scoring bands that were over a score of 800. The r values generally decreased when the overall score decreased. This phenomenon can be interpreted as a result of the conspicuous relationship that the advanced learners have with the various score types than the learners in the lower score bands have. This illustrates that the students in the lower score bands should be given the LC and the RC instruction simultaneously in order to improve their overall TOEIC scores, whereas this is not necessarily the case with the higher scoring students.

The third finding that was uncovered in the present study involved the relationship between the LC and the RC. The r value returned a very weak value with the highest score bands, but it tended to increase slightly or remained the same with the lower scoring bands. This definitely reveals the pedagogical implications with respect to the need for tailored instruction for the higher levels. The
r value for the students that scored lower than 799 was relatively higher, which illustrates that there was a more even balanced improvement with the scores for this group despite their scores being in the lower ranges. In addition, the descriptive statistics revealed that the score gaps between the LC and the RC were all over 30, which were 30.11, 33.96, 32.69, 36.91, and 39.21. These figures are all quite large in magnitude, and this finding suggests that a good possibility to assist the lower level students to increase their overall TOEIC score would be to focus on the RC.

The final result that will be mentioned involves the different band ranges that were observed with the LC and the RC scores that are illustrated in this paper. An interesting result that was revealed is that the r values for the 200 score band and the 300 score band returned results that were very weak and weak, respectively. The very weak and weak results generally indicate that there is no relationship between the LC and the RC, which implies that the students should be given instruction with both the LC and the RC.

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Summary of notations
LC Listening Comprehension
RC Reading Comprehension
SPSS Statistical Package for the Social Sciences
M⊆ Mean for English Listening Comprehension Test Scores
Mrc Mean for English Reading Comprehension Test Scores
M5 Mean for the Total Test Score
SD Standard Deviation
r Pearson’s Correlation Coefficient
n Sample Size

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