Gender and Language Course Participation Differences in the University Students’ Self-Efficacy of TOEFL

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Abstract. This study focuses on reporting the differences in gender and TOEFL course participation in the university students’ self-efficacy of answering TOEFL questions. The design of this study is descriptive design with the total sample of 200 university students, both English and Non-English major from two big universities in Aceh, Syiah Kuala University and Serambi Mekkah University. In collecting the data, a specially designed self-efficacy questionnaire was used to find out the university students’ personal data, including gender and TOEFL course participation as well as their level of self-efficacy. Furthermore, to analyze the data, t-test was used to find out the differences in gender (female and male) and TOEFL course participation (yes/no). The result revealed that in terms of gender, there was no statistical difference as the as p= .58 (p > .05). However, there was a statistically significant different in language course participation, in which p=.039 (p < .05).

1. Introduction

TOEFL (Test of English as a Foreign Language) is one of the English test that have been generally used in Indonesia for many purposes, including to be able to graduate from the university, to work in the national and international standard company, or to continue study in the higher degree level. However, in terms of TOEFL capability in Indonesia, particularly in Aceh, the university students TOEFL score has been categorized into low as most of them have the score below the targeted/standard score of 450 [1].

Self-efficacy, which is defined as people’s self-belief that influences the way they do the work and overcome the challenge in their work [2], has been claimed as one of the influencing factors in the students’ English capability [3]–[5]. Those previous studies show a positive correlation between self-efficacy and English capability, including the TOEFL score. It illustrates that by having a high level of self-efficacy or self-believed of capability in doing the TOEFL test, simultaneously, the students will have the high score in TOEFL. This is because self-efficacy influences how people feel, think, and motivate themselves when performing certain act, which in this case is the test [6]. By having high self-efficacy, the students will believe that they could be successful in reaching the targeted standard of the TOEFL score and they will automatically use the effective strategy to answer the TOEFL questions in the test. Therefore, it is important to find the way in terms of how to increase the students’ self-efficacy of doing the TOEFL.

There must be a number of factors that differ every students’ self-efficacy in doing actions and overcoming problems, such as gender and participation in the relevant course. In terms of gender, some studies showed that there is a significant difference in self-efficacy between male and female students’ [7]. Furthermore, they figure out that male students have significantly higher self-efficacy
compared to female students. Meanwhile, there are also some studies which did not find any significant difference between male and female students in self-efficacy. For instance, [8] have examined the effects of self-efficacy on academic success of first year college students and did not find the significant difference of self-efficacy between male and female students. Similarly, a study conducted in higher education institutions by [9] indicated non-significant male and female students’ differences in academic self-efficacy. In terms of course participation, a study by [10] revealed that self-efficacy was strongly related to class participation and exam performance. This indicates that the course participation determines the level of students’ self-efficacy.

However, the similar study of self-efficacy in terms of gender and course participation is still limited, particularly in Aceh, Indonesia. Therefore, this study aims to find out the self-efficacy of TOEFL differences in terms of gender and language course participation.

2. Methodology

The design of this study is survey design. This design is conducted by administering a set of questionnaires to a group of people with the same characteristics (sample) in order to be able to identify and describe trend in certain factors, such as attitudes, opinions, behaviours, or characteristics of the large group (population) [11]. In this study, the researcher describes differences in self-efficacy in terms of gender and language course participation through distributing a specially designed questionnaire of self-efficacy.

The questionnaire was personally designed by the researchers using the guide of self-efficacy questionnaire [12]. Several statements about self-belief of the ability in completing tasks in TOEFL were created with the start of “I can...”. In addition, to measure the self-efficacy level, the number of 0-100 was placed beside each statement. Each statement was analysed and discussed with colleague (expert judgement), especially in terms the language use and meaning to avoid misunderstanding and in terms of the component coverage. This procedure was done following the guide of designing a research instrument as suggested by [13]. This questionnaire has two parts, in which the first part contains questions related to personal data of participants, including gender and language course participation; and the second part contain 30 statements about self-belief of capability in performing TOEFL.

In this study, the population was the university students in Banda Aceh (Government, Syiah Kuala university and non-government, Serambi Mekkah university), meanwhile the sample were 200 university students who are selected by using the stratified sampling method, where a group of university students should have the following criteria to be selected [11], including (1) is a second-year students in Syiah Kuala or Serambi Mekkah University (both English and Non-English major) and (2) has taken a TOEFL class in campus, such as TOEFL Preparation class.

The data from the questionnaire was then analysed and calculated by using descriptive statistics to describe the trend of self-efficacy for both variable (gender and language course participation) and using t-test to find the differences within the group of gender and language course participation [14].

3. Results and Discussion

3.1 Gender Differences of the University Students’ TOEFL Self-Efficacy

The following figure displays the number of male and female respondents in this study.
From the figure, it is obvious that females are more dominated compared to male students, the total of female students in this study were 122 or about 60% of the sample, while the rest 40% was the male students from both Syiah Kuala and Serambi Mekkah University. In terms of TOEFL Self-Efficacy of both gender could be seen clearly in the following graph.

This graph illustrates that both male and female students were mostly in the medium level of self-efficacy, 30% and 47% of the respondents respectively. In addition, both gender also have more students with high level of self-efficacy (8% for male and 10% for female) compared to low level of self-efficacy (15% for male and 35% for female).

3.2 t-test for Gender and TOEFL Self-Efficacy
For the first step of analysing the data, it is important to test the data distribution of the self-efficacy variable for both gender (male and female), as shown in the following table.
Table 1. Normality Test of Gender and Self-Efficacy

| Gender | Kolmogorov-Smirnov<sup>a</sup> | Shapiro-Wilk |
|--------|--------------------------------|--------------|
|        | Statistic | df | Sig. | Statistic | df | Sig. |
| Self-Efficacy |          |    |      |           |    |      |
| Male   | .076      | 78 | .200<sup>x</sup> | .983      | 78 | .395 |
| Female | .079      | 122 | .061 | .981      | 122 | .086 |

<sup>a</sup> Lilliefors Significance Correction
<sup>x</sup>. This is a lower bound of the true significance.

From Table 1, it is clear that the significant value of both male self-efficacy and female self-efficacy was .200 and .061 respectively. This means that the data was normally distributed, particularly because the values are higher than p value of 0.05. Furthermore, the independent sample test was conducted to find out gender differences in TOEFL Self-Efficacy as displayed in the following table.

Table 2. Independent Sample Test for Gender Differences

| Gender | n    | Mean | SD   | t    | df  | 95% CI for Mean | 95% CI for Mean |
|--------|------|------|------|------|-----|----------------|----------------|
|        |      |      |      |      |     | Lower Bound    | Upper Bound    |
| Male   | 78   | 61.06| 12.54| -    | -   | -              | -              |
| Female | 122  | 58.79| 12.91| -    | -   | -              | -              |
| Total  | 200  | 59.93| 12.79| 1.23 | 198 | -1.37          | 5.93          |

From the statistical calculation as shown in Table 2, it was found that the mean difference between the two groups (male and female) is found to be 2.28, 95% CI [-1.37, 5.93] score units ($t_{198}=1.23$, $p > .05$). It means that there was no statistically significant difference of TOEFL self-efficacy between male and female students, as $p=.58$ ($p > .05$).

This result was contradicted to the studies by [7] who claimed that there is a significant difference in self-efficacy between male and female students. However, the result of this study has supported the other studies by [8] and [9] which also claim that there was no significant self-efficacy differences in terms of gender.

3.3 Language Course Participation Differences of the University students’ TOEFL Self-Efficacy

The following diagram shows the percentage of university students’ participation in the English language course.

Figure 3. The Percentages of Language Course Participation
This figure depicts that more university students did not take English language course to support their English performance, which is about 69%. Meanwhile the rest 31% has claimed that they have participated in the English language course, particularly TOEFL course. In terms of their self-efficacy difference, look at the following chart.

![Chart showing Language Course Participation and Level of TOEFL Self-Efficacy](chart.jpg)

**Figure 4. Language Course Participation and Level of TOEFL Self-Efficacy**

From the above chart, it is obvious that whether or not the students have taken language course, the highest proportion of TOEFL self-efficacy is in the medium level, 21% and 56% respectively. The second proportion of both groups is in the high self-efficacy level. Besides, it was clear that the number of students who have taken the language course with high level of self-efficacy (0.1%) is slightly higher compared to those who have not taken the language course, 0.09%. Finally, the least proportion for both groups is the low level self-efficacy in which the number of students who have not taken the language course with low level of self-efficacy is higher than those who have taken the language course, 0.04% and 0.01% respectively.

### 3.4 t-test for Language Course Participation and TOEFL Self-Efficacy

It is considered important to calculate the data distribution of the self-efficacy variable for both group (the students who have taken the language course and those have not taken the language course), as displayed in the following table.

| Course        | Kolmogorov-Smirnova | Shapiro-Wilk |
|---------------|---------------------|--------------|
|               | Statistic | df | Sig. | Statistic | df | Sig. |
| Self-Efficacy | Yes       | 0.095 | 63  | .200*    | 0.971 | 63  | 0.143 |
|               | No        | 0.043 | 137 | .200*    | 0.986 | 137 | 0.19  |

a. Lilliefors Significance Correction

* This is a lower bound of the true significance.

From Table 3, the significant value of both variable is .200 for both groups (whether or not they have taken the language course). This value is higher than p value of .05, which means the data was distributed normally. Therefore, t-test could be calculated to find out the significant differences between the two groups. The result of t-test was tabulated in the following table.
Table 4. Independent Sample Test for Language Course Participation Differences

| Course Participation | n  | Mean | SD  | t   | df | 95% CI for Mean | Lower Bound | Upper Bound |
|----------------------|----|------|-----|-----|----|-----------------|-------------|-------------|
| Yes                  | 63 | 64.25| 12.41| -   | -  | -               | -           | -           |
| No                   | 137| 57.57| 12.44| -   | -  | -               | -           | -           |
| Total                | 200| 60.91| 12.79| 3.53| 198| 2.95           | 10.42       |             |

The statistical calculation as displayed in Table 4 shows that the mean difference between the two groups (the students who have taken the language course and those who have not taken the language course) is found to be 6.68, 95% CI [2.95, 10.42] score units \((t_{198} = 3.53, p < .05)\). It means that there was a statistically significant difference of TOEFL self-efficacy between the students who have taken the language course and those who have not taken the language course, as \(p = .039\) (\(p < .05\)). Therefore, the students who have taken the language course, particularly TOEFL course have higher level of self-efficacy compared to those who have not taken the language course. This result has supported the previous study by [10] who also claim a significant self-efficacy difference in course participation.

4. Conclusion

From the result of this study, it can be concluded that there was no statistical difference of TOEFL self-efficacy between male and female students as the \(p\) value is lower than .05, \(p = .58\) (\(p > .05\)). Nevertheless, in terms of language course participation, there was a statistically significant different of TOEFL self-efficacy between the university students who have taken the language course and those who have not taken, in which as the \(p\) value is higher than .05 \(p = .039\) (\(p < .05\)). Therefore, it is suggested to take the language course to improve the students’ level of self-efficacy, which will further affect the students’ capability in the TOEFL test.

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