Do Female And Male Students Perform Differently In A Listening Test?

1Emi Nurul Wahyuni, 1Ahmad Zamzam, 1*Khusnul Khotimah

English Education Department, Faculty of Teacher Training and Education, Universitas Mataram, Indonesia
1khusnul_pena@unram.ac.id

Abstract. As one of the English- proficiency testing methods for non-native speakers, TOEFL is also used as a graduation requirement in almost every university in Indonesia. However, empirical studies report that a considerable number of students performed unsatisfactorily. Therefore, many studies have been geared to investigate various aspects of TOEFL related things with the utmost purpose of helping students to meet the expected requirement. This includes scrutinizing gender factors in TOEFL like tests. Basing on quantitative ex-post facto, this research is aimed to see whether gender plays as a contributing factor to students’ ability to answer overview and detailed questions in the TOEFL listening. In this study, 42 out of 94 students’ scores were randomly selected. The data were collected from a TOEFL-like test’s result and were then analyzed using an Independent t-test on SPSS. Based on the t-test analysis, the result showed a different performance of students based on gender, between male and female students which can be seen from the different mean scores between them (male=10.19 and female =10.19). Nevertheless, the difference was not significant since the t table > t value (2.021 > .871).

Keywords: detailed and overview question; gender; students’ listening ability; TOEFL-like listening.

A. INTRODUCTION

There are more than 11,000 universities in over 150 countries that rely on TOEFL scores to measure their students’ abilities in using and understanding English (ETS, 20). This includes a state university in West Nusa Tenggara, which requires its students to sit TOEFL to constitute a pass. The required score is between 400 to 500 and varies by department. Students of the English Education Program are required to have a higher minimum score of 500 since they use English as the medium for their teaching and learning process. However,
According to Arifuddin and Sujana (2003), the average of students’ TOEFL scores in the English Education Program of a state university in West Nusa Tenggara has a lower score than the minimum standards set (Hasan & Susanto, 2012).

Listening to TOEFL was reported as the most challenging because it is the first section, and candidates are likely more nervous during this part of the test. The difficulty of listening is also proved by the data summary's mean scores provided by ETS; Structure and written expression (69.7), reading comprehension (69.1), and listening (63.7) (Arifuddin, 2014). To achieve a high ability in listening, students have to know the factors that influenced their listening, as being analyzed by several researchers (e.g., Boyle, 2015; Gilakjani & Ahmadi 2011; Goh, 1999; Rasskazova & Glukhanyuk, 2018; Tarigan, 2015; Yuliandani et al., 2014).

According to Tarigan (2015), listening was influenced by many factors such as; physical factors, psychological factors, the experience factor, attitude factor, motivation factor, gender factors, environmental factors, and the factor of one's role in society. The reason for stating that gender was influenced listening was because of the listening style, in which men were more objective, active, hard-hearted, analytic, rational, stubborn, dominant, neutral, instructive, independent, easier to recognize their needs, emotionally well-controlled than women who tend to be more subjective, passive, sympathetic, diffusive, sensitive, easy to influence, easy to succumb, receptive, dependent, and emotional (Tarigan, 2015: 112).

Gender is becoming one of the most influential variables in learning a language. It shows the physical differences of students, which can be a significant source of variation among language learners. For this reason, gender must be considered seriously by the teacher since it has an impact on language learning (Yazdani & Ghafar Samar, 2010). ETS, as the largest organization on testing
English, is often providing TOEFL scores on its website and classifies the scores based on several factors, including gender. In 2017, ETS published data on the TOEFL score that shows the mean scores of females are slightly higher than males.

Study on gender performance among students and ability differences carried by male and female has been becoming the main focus of several previous studies in recent (e.g., Alavinia and Sameei, 2012; Arifuddin, 2014; Dang, 2010; Hasan & Susanto, 2012; Owolewa, 2017; Roebuck et al., 2015). Arifuddin (2014) claims that there were differences in male and female students’ ranks of failure based on the gender on answering part A listening. As cited before, many types of research were lying on part A as their subject measurement (e.g., Arifuddin, 2014; Hasan & Susanto, 2012). This is the gap of this study, neither every section on listening in TOEFL impacted by gender differences nor not, Part B and Part C were taken as a comparison and future study of the previous research since it was known that those parts were slightly different from part A due to the length of its dialogues. Therefore, there was an interest in researching the impact of gender in students’ ability to answer overview questions and detailed questions in the TOEFL listening test to fill the previous research gap, which only focused on implicature questions on part A.

Considering to numbers of previous studies findings, students’ listening ability is affected by several factors, such; the capacity of students’ working memory and the number of ideas in a passage (Bloomfield et al., 2010), the content, the length of the listening texts, the strategy to use, and pronunciation (Chao, 2013), number of books at home and time spent to reading books and listening to radio (Kutlu & Aslanbayli, 2009), phonological, linguistic, cognitive, socio psychological factor (Rasskazova & Glukhanyuk, 2018), gender factor (e.g., Arifuddin, 2014; Hasan & Susanto, 2012; Boroomand, 2013; Hamid et al., 2013;
Koc, 2016; Namaziandost et al., 2018; Lynn & Mikk, 2009; Owolewa, O. O., 2017; Reilly & Andrews, 2019; Roebuck et al., 2015; Tarigan, 2015).

In recent years, the interest in gender differences among the students has been increasing in research circles. Several kinds of research have been conducted focusing on gender to know whether males and females use language differently. There were several speculations about how males and females have different performances in using language and the differences were examined (e.g. Boroomand, 2013; Hamid et al., 2013; Jakobsdottir & Hooper, 1995; Koc, 2016; Namaziandost et al., 2018; Lynn & Mikk, 2009; Owolewa, O. O., 2017; Reilly & Andrews, 2019; Roebuck et al., 2015). The previous research not only laid on listening in general but also in specific terms, such as TOEFL. A myriad of studies has been conducted with a central investigation on gender role in students’ ability in answering the TOEFL test (e.g., Arifuddin, 2014; Hasan & Susanto, 2012).

To identify the exploring types of implicature question of short aural conversations in Pre-TOEFL failed to be answered correctly and their causes experienced by a) males b) female, Hasan & Susanto (2012) has researched by using students’ score in Part A Pre-TOEFL listening test as the data sources. Inline to Hasan and Susanto (2012), Arifuddin (2014) had also researched implicature questions on TOEFL-like listening tests to know the types of implicature questions that male and female test-takers failed to answer and causes of the failure and their rankings. The sample of this study was six students, and the data were collected by using tests, retrospective reports, inventory of causes of failure, interview, recording, and analysis with Mixed Methods. Based on the result findings, there are some differences in factors that affect the failure and type of implicature questions that male and female test-takers’ failed to answer.
Another related study was conducted by Owolewa (2017) was about the impact of attitude and gender toward listening behavior. The sample of this research was randomly selected, and there are one hundred and twenty participants who were assigned to an attitudinal group. The questionnaires that contained attitude and Listening Comprehension tests were used to collect data, which were tested at a 0.05 level of significance. This research determined that attitude to listening and gender significantly predicted listening comprehension as males performed better than female participants.

Furthermore, Namaziandost et al. (2018) examined the impact of cultural materials on listening comprehension among male and female Iranian EFL learners. The samples of this research were chosen by administering 96 upper intermediate male (n = 48) and female (n = 48) EFL learners out of 130 on an Oxford Quick Placement Test (OQPT), and the participants of each gender were randomly assessed into four equal groups; group A (Target Culture = TC), group B (International Target Culture = ITC), group C (Source Culture = SC) and group D (Culture-Free = CF). The data were collected by conducting three tests; pre-test, treatment-test, and post-test. During the treatment, Group A is given the audio files related to American and English culture, Group B is given the audio related to Japanese, Australian, and French culture, group C is given the audio related to Persian culture, and group D is given culture-free materials. At the end of the sections, Two-way ANOVA was run to analyze the data among all groups’ pre, and post-tests regarding the male and female participants and the researchers found the differences performed by the participants on pre-test and post-test, which proved that culturally oriented language materials enhance the Iranian EFL learners’ listening comprehension. Another result showed in this research was that the male learners did better than female learners on the post-test.
Overall, the study, which focused on students’ verbal ability as the comparison to their achievement, seems to establish females’ superiority, which makes teachers tend to spend more time with female students than male students because they think females are better than males in language. The female students will probably live up to their expectations (Boyle, 1987). But this explanation is still debatable among the researchers seeing that it seems inadequate to explain the weight of evidence in favor of females’ superiority over males in verbal ability. It also supported by Pease and Pease (2001:92), who stated that compared to men, women can learn foreign languages faster and easier because the location of females’ language is primarily in the front left hemisphere, a smaller specific area in the right hemisphere which make them better at using and understanding grammar, punctuation and spelling (Hamid et al., 2013). As it is known, understanding spelling is one of the requirements to be a good listener. There are several assumptions about who is better suited for learning language and each research finding has its own statement whether men or women are better. Surprisingly, Alavinia & Sameei (2012) and Koc (2016) found no difference between male and female students’ listening ability and stated that gender does not affect listening ability.

The findings of the previous researchers were varied in determining the significance of gender in listening. Therefore further research is needed to enrich the body of knowledge toward investigating gender impacts on listening in specific contexts such as TOEFL, which created some gaps in the present study conducted. Another gap is the focus of the study. As shown above, two previous studies were only focused on implicature questions in TOEFL; meanwhile, the present study was focusing on determining the gender impact overview question and detailed questions in the TOEFL-like listening test.
The present study raised a question “Is there any significant difference in the students’ ability in answering overview questions and detailed questions TOEFL-like listening comprehension in test conditions between males and females?” and two hypotheses; null hypothesis stated “There is no significant difference in the students’ ability in answering overview questions and detail questions TOEFL-like listening comprehension in test conditions between males and females.” And alternative hypothesis stated “There is a significant difference in the students’ ability in answering overview questions and detail questions TOEFL-like listening comprehension in test conditions between males and females”.

B. RESEARCH METHOD

In this study, Quantitative ex post facto (from what is done afterward) was employed (Giuffre, 1997). Simon and Goes (2013), stated that this type of study commonly uses data that are already collected. In this research, an ex-post-facto study was conducted to determine the correlations between students' listening ability and gender.

Participants

The population of this study was 94 students in the 6th semester of English Department at a state university in West Nusa Tenggara, and 42 students’ (21 males and 21 females) scores were chosen as the sample data of this research by using simple random purposive sampling. The population has been given lectures about listening in several previous semesters, such as general listening, academic listening, intensive listening, and extensive listening.

Instruments

The data were collected by using a TOEFL-like test. The TOEFL-like test consists of three sections; listening, structure and written expression, and reading. The listening section consists of 50 items, which are given in three different parts. In this study, the researcher only used part B and part C, which consisted of 20 questions (overview and detailed questions).
Data Analysis

As known, quantitative data analysis is close to statistical analysis based on the result of the data served up in the numerical form. In this study, an Independent Sample t-test was used to test whether the mean difference between the two groups is due to independent variables or simply by chance (Tay, 2011:76).

C. FINDINGS AND DISCUSSION

Findings

There were 94 students, the 6th-semester students of a state university in West Nusa Tenggara were involved in this study, and 42 data sets of them were chosen as the sample, 21 from males and 21 females. Before the test was held, the students were given a tutorial and lecture about dealing with the TOEFL test. After following the tutorial and lecture section, the students were given the TOEFL-like test, and the results were provided below.

Table 1. Male and Female scores in part B and C TOEFL-like listening tests

<table>
<thead>
<tr>
<th>NO</th>
<th>FEMALE ID</th>
<th>FEMALE SCORE</th>
<th>MALE ID</th>
<th>MALE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D117xx</td>
<td>12</td>
<td>D017xx</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>D017xx</td>
<td>10</td>
<td>D117xx</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>D017xx</td>
<td>8</td>
<td>D117xx</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>D117xx</td>
<td>11</td>
<td>D117xx</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>D117xx</td>
<td>12</td>
<td>D017xx</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>D017xx</td>
<td>6</td>
<td>D019xx</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>D018xx</td>
<td>14</td>
<td>D017xx</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>D117xx</td>
<td>13</td>
<td>D017xx</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>D017xx</td>
<td>9</td>
<td>D017xx</td>
<td>8</td>
</tr>
<tr>
<td>10</td>
<td>D118xx</td>
<td>12</td>
<td>D017xx</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>D017xx</td>
<td>16</td>
<td>D117xx</td>
<td>4</td>
</tr>
</tbody>
</table>
Based on the data provided in Table 4.1, it can be seen that the mean scores of both genders are slightly different. The total score of females is higher than male and so the mean. To answer the research questions of this research and get more valid results, further analysis is needed; it is hypothesis testing by using statistical tools.

Before calculating the data with specific methods such as t-test, the distribution of data samples must be categorized as a normal distribution.

Table 2. Tests of Normality

<table>
<thead>
<tr>
<th>Gender</th>
<th>Kolmogorov-Smirnov(\ast)</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statisti</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Df</td>
<td>Sig.</td>
</tr>
<tr>
<td>Score</td>
<td>Male</td>
<td>.135</td>
</tr>
<tr>
<td>Femal</td>
<td>.107</td>
<td>21</td>
</tr>
</tbody>
</table>

According to the result in Table 2, the significant value of male (.689) and female (.736) in Shapiro-Wilk column is more significant than the standard error (.05) which can be concluded that the distribution of the data is normal.

After considered as normal-distribution, the data were analyzed by using independent t-test to know whether the research hypothesis is accepted or rejected. T-test was used because the distribution of the data is normal and homogeny.
Table 3. Independent Samples Test

<table>
<thead>
<tr>
<th>Score</th>
<th>Equal variances assumed</th>
<th>F</th>
<th>Sig.</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3.68</td>
<td>.062</td>
<td>.16</td>
<td>40</td>
<td>.871</td>
<td>.190</td>
<td>1.163</td>
<td>-2.54122</td>
<td>2.16027</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.16</td>
<td></td>
<td></td>
<td>34.8</td>
<td>.871</td>
<td>.190</td>
<td>1.163</td>
<td>-2.55207</td>
<td>2.17112</td>
</tr>
</tbody>
</table>

For hypothesis testing, the t value must be compared to the t-table with a significance of error in 5%. In conducting t table, the degree of freedom of the data must be stated by using formula N-2 (N= the whole sample). In this study, the t-table was 2.021 in the degree of freedom = 40 with t value = .871. As stated before, if t table > t value (2.021>.871), the null hypothesis (Ho) is accepted, and the alternative hypothesis (Ha) is rejected. It can be implied that there is no significant difference in performance in students’ ability in answering TOEFL-like listening tests based on gender.

**Discussion**

This research was aimed to examine the significance of the difference between males and females in answering overview and detail questions in the TOEFL-like listening test, which was responded to in the findings section. The statistical analysis was held to answer the research question and it implied that there is a different performance between male and female which is in line with several findings in previous researches (e.g Gruber & Gaebelien, 1979; Boyle,
1987; Hasan & Susanto, 2012; Arifuddin, 2014; Owolewa, 2017). The mean score of female students (10.3810) was slightly higher than male (10.1905), and it was supporting the idea stated by Pease and Pease (2001) in learning language, compared to male, the female can learn faster and more comfortable due to the location of their hemisphere.

Nevertheless, this research's finding was not totally similar to several studies mentioned before, because the differences between male and female scores were not significant which was proven by the result of hypothesis testing. In hypothesis testing, several statistical analyses have been done, such as a test of normality, a test of homogeneity, and an independent t-test. The first step was normality testing in which the data must be categorized as the normal-distributing data (table 4.2) and the data of this research is stated as normal distribution, because of the sig. value of both genders was bigger than .05. After categorized as normal-distributing data, the next step was a test of data homogeneity (table 4.3). The homogeneity testing is used to recognize whether the sample was taken from the population in the same variant or not. The data can be stated as homogeny if its significance level is higher than .05. As shown in table 4 the significance level of the data was .0685 which is more significant than .05, and assumed as homogeny. According to the finding of this research, the null hypothesis, which stated “There is no significant difference in the students’ ability in answering overview questions and detail questions TOEFL-like listening comprehension in test conditions between males and females is accepted”.

Barron (2006) and Koc (2016) also stated that there is no significant difference between male and female listeners and stated that the speakers were more influential than the listeners' gender. Similar to Owolewa (2017), who implied that there is a difference between man and female performance, he also proved that females do better and male.
Furthermore, this research contrasted to Alvinia and Sameei (2012), who studied the potential bonds in Iranian EFL learners’ listening comprehension ability; they found that interaction between male and female does not affect the listening ability. This research finding was contradictory to Arrifudin (2014) and Susanto (2012), who stated that there was a significant difference between male and female performance in answering TOEFL-like listening test (part A). Due to the main focus of the present study, part B and C, it cannot be assumed as totally contrary to the previous which focused on part A only. As known, every part of the listening section has a different question type, and it affects the students’ ability.

Considering several previous studies that served some pros and contrast to the present study, such 1) Gender is significantly affecting listeners’ ability 2) Gender has no significant impact on listening. This study recognized the gender role in students’ listening ability and found no significant impact.

However, the researchers realize the limitation of this study. It only focused on a small number of participants using only a single set of data scores and data sources. The specific identification and deep analysis into students’ background knowledge, study behavior, attitude, study behavior/environment is needed because it can affect gender performance (Roebuck, 2012).

D. CONCLUSION AND SUGGESTION

This research raised a question as stated earlier, “Is there any significant difference in the students’ ability in answering overview questions and detailed questions TOEFL-like listening comprehension in test conditions between males and females?” and the statistical analysis was used to recognize the answer. The result showed that there is a difference in the students’ ability to answer overview questions and detailed questions TOEFL-like listening comprehension in test conditions between males and females, but the difference is not significant.
Despite the empirical finding of this study, this study is not without limitation. The researchers realize that this study's design involved a limited number of participants and took data that were not based on multiple scores and data sources. This makes the finding of this study is not for generalization. The study recruiting more participants with various data sources might result differently. Therefore, it is suggested for future researchers to do a similar investigation using a more sophisticated and comprehensible method picturing multilayers of data to understand better the impact of gender on language, especially listening ability.

E. REFERENCES


