



Examining Students' Test Anxiety at Yogyakarta State University

Dwiki Rahardian
Yogyakarta State University
dwiki.rahardian@student.uny.ac.id

Abstract

The current research has general aims to examine the anxiety level of students based on their gender and proficiency concerning English proficiency test at Yogyakarta State University. More specifically, this research tries to discover whether or not there is a significant difference in test anxiety levels between students' gender and proficiency score and to seek the interaction between these two variables on test anxiety. This study employed quantitative method by using survey research design. A sample of 229 students (64 males and 165 females) was subjected to Test Anxiety Inventory questionnaire from Spielberger (1984). Then, the data were analysed by using descriptive and inferential statistical analysis. As a way to find out the significant differences and interaction in students' gender and proficiency on test anxiety, Two Way Anova was applied as hypothesis testing tools. Prior to hypothesis testing, normality and homogeneity test were administered to meet statistical procedure.

Keywords: *test anxiety, gender, English-proficiency, accent, language attitude, varieties of English accent*

INTRODUCTION

The trends among higher education and companies in most universities and companies in Indonesia require a certain amount of language test scores to pass the qualification or selection. This internalization of English language testing or English benchmarking among higher education and companies requires the students to demonstrate their English ability through taking the available standardized English test (e.g., TOEFL, IELTS, TOIEC, TOEP, ProTEFL...). Hung and Huang (2019) states that standardized English testing serves as teaching effectiveness and learning outcomes evaluation and achieving pedagogical changes. However, English benchmarking practice has been criticized (Wu & Lee, 2017). Researches have shown that test anxiety negatively affects both the process of language learning and the outcomes of the test (Amiryousefi & Tavakoli, 2011).

Test anxiety affects people of all ages in every field of life whenever they have to be evaluated, assessed, and graded concerning their abilities, achievements, and interests (Lufi et al. 2004). Research relating test anxiety to academic achievement has established that high levels of anxiety are associated with lower levels of performance in school (Everson, Millsap, Rodriguez, 1991: 243). Further, the result of previous research has proven the inevitable effects of test anxiety among foreign language students, especially on the learning

process or achievement (Aydin, 2009). Julkunen's research (1992) showed that test anxiety affects the actual language potentials of language students. Nevertheless, the level of anxiety among people varies and depend highly on how they react and manage anxious feeling in facing anxiety. One of the contributing factors in test anxiety is gender. Females have been reported to experience higher levels of test anxiety than males (Hembree, 1988; Zeidner, 1998). In the same vein, Aydin (2006) reported that language proficiency, environmental and situational factors, time limit, gender, ethnic and socio-economic backgrounds, test techniques, exam format and instructions are significantly correlated with the level of test anxiety among language students. Hence, the researcher feels the need to conduct a study on test anxiety concerning gender, language proficiency and expected studies factors need to be addressed as a way to help both the students and the educators.

Furthermore, to date, there are relatively very few previous studies on test anxiety in Indonesian context limited in number and scope, three of which are Fitria (2013), Syafrizal and Fadilah (2018), and Muliawati, Ismail, Lismalimda and Rizka (2020). Despite the contribution of these three studies in investigating Indonesians' students' Test Anxiety, there are still some points that need to be addressed first, the subject of the research among university students from various background and expected studies. Second, expected studies of the students. None of the mentioned research above conducted specific research with certain criteria that this study wants to explore. Although there are abundant research into anxiety and foreign language anxiety, few investigation have directly focused on test anxiety, especially in Indonesian context, which is still limited.

Therefore, there is an urgency to explore this phenomenon among English students, to find out whether or not English language testing affects them in taking and doing the test as well as to bridge gaps in the relevant research. However, as explained above, the research in Indonesia in this nature and context is too limited to guide and explore these problems, which prompted the researcher to investigate the degree of test anxiety level among test takers by utilizing a questionnaire developed by Spielberger (1984). Overall, the study results can benefit both the educator and students in a way that the educators would be more informed about students' test anxiety, and the students can learn how to overcome it with the educators' help. This study can also pave the way for further research in test anxiety, especially with its relationship with English language standardized test performance, a study investigating test anxiety with language performances and achievements in the Indonesian context.

RESEARCH METHOD

This research is classified as a quantitative study using a survey research design to direct this study. Survey research is a popular research design that has been used widely in education (Creswell, 2012: 376). According to Cohen et al. (2017), surveys gather the data at a certain point in time to describe the existing conditions, to identify the standards against the existing conditions that can be compared, and to determine the relationship that lies between certain events. In survey research, the researcher collects quantitative data using questionnaires or interviews and the data collected will be statistically analyzed, to describe the trends on responses to questions and to test research questions or hypothesis (Creswell, 2012: 376). In this study, the trends that being described are those related to participants/ students' test anxiety in doing English language testing.

A. Subject of the Research

The participants of the current study are the students at Yogyakarta State University from bachelor degree and master degree. who have previously taken English proficiency test (e.g. TOEFL, IELTS, TOEIC, ProTEFL There were 230 students involved in this study. However, there was one invalid questionnaire, so the researcher deducted one questionnaire out of 230 questionnaires. Thus, there were 229 valid participants involved in this study. 72,1% or 165 were female and 27,9% or 64 were male. In addition, the participants have a different level of education. 190 were undergraduate students and 39 were master students.

B. Data Collection Technique

In order to obtain the data regarding participants' test anxiety, Spielberger's (1948) Test Anxiety Inventory (TAI) was employed as a research instrument. The TAI contains 20 items. The data obtained from this questionnaire were analysed by using SPSS (and by calculating the mean scores and percentage). The researcher used three sets of data for the present study, and they were the Background information, TAI Scores, and the students; English test scores. Considering descriptive statistics, first the mean, minimum and maximum range, and standard deviation of all these sets of data were calculated.

For TAI, some descriptive statistics were also offered for each of their items. In fact, for each item, the number of participants who had opted for each choice was counted. These statistics help readers understand which areas of language learning create more anxiety in students. The next step was to answer the research questions. As all the research questions were to find out the interaction between the variables, a Two Way Anova test was employed. The results are presented in chapter four. Prior to distributing the questionnaire to the targeted participant, the researcher conducted a pilot study to validate the questionnaire. The researcher selected five participants for the pilot study. The researcher selected the five participants to review the content of the questionnaire before distributing it to the intended participants of the research. The pilot test participants are asked to make comments and suggestions concerning survey directions, procedures, and items. They examine the completeness of the questionnaire as one of the ways to determine content validity (Gay, 2011). The feedback from the pilot study will be carefully studied.

C. Data Analysis Technique

As it has been stated above that this study's nature is to find out the contribution of the two independent two variable; gender and proficiency and to the dependent variable; test anxiety. Thus, it is crucial to conduct appropriate analysis to analyze the data. The data obtained from this research will be analyzed quantitatively using statistic software (SPSS) by calculating the means of participants' responses. There are two statistical techniques that will be used to analyze the data: descriptive statistic and inferential statistical analysis. A descriptive statistic is used to examine the level of test anxiety in English language testing among the participants. This analysis serves to describe and present the data in terms of summary frequencies (Cohen et al., 2017: 503). This analysis is used to present the Mean score (M), the frequency of data distribution, and the maximum and minimum scores. As for inferential statistic, this statistic is used

to make inferences and predictions based on collected data, such as hypothesis testing and difference testing (Cohen et al., 2007: 504). In this study, this analysis serves as hypothesis testing to find out the significant differences in test anxiety between female and male test takers that are also based on their self-proficiency score. For inferential analysis, Two Way Anova will be employed. Prior to this, a test of normality and homogeneity will be done to fulfil the statistical procedure.

D. Validity and Reliability of the Data

According to Cohen et al., (2017: 146), reliability in quantitative research is a synonym for dependability, consistency and replicability over time, for over instruments and over groups of respondents, which concern with precision and accuracy of some features. Besides, Heale and Twycross (2015: 66) states that reliability relates to the consistency of a measure, which means that the participant should have approximately the same responses each time the test is completed. Based on that definition, the researcher tries to find the reliability of the instrument by using Cronbach's Alpha Coefficient formula was carried out by using the SPSS program for windows.

Table 1. Reliability statistics

Reliability Statistics	
Cronbach's Alpha	N of Items
.931	20

As we can see from the table above, the reliability coefficient for this instrument is 0.903. According to Cohen et al (2017: 506) the alpha coefficient of 0,931 is very high reliable.

FINDINGS AND DISCUSSIONS

A. Test Anxiety Levels of All Students

The table below represents all students' test anxiety level. As can be seen at Table 1, the highest score was 80 while the lowest was 22 with the mean of 52,47. This condition revealed that the students faced test anxiety. This results was similar to Fitria's research (2013) which showed an overall mean of 40,48.

Table 2. Descriptive Statistics for TAI All Students

	N	Min	Max
TAI	229	22	80

Then, the data were classified into low, moderate and high anxiety, according to Spielberger's Test Anxiety Inventory (TAI). The table below shows that out of 229 participants, there are 42 students or 18.31% experienced low- test anxiety level and 53 students or 23.10% experienced high-test anxiety level. In sum, there are 134 or 58.59% out of 229 students experienced moderate-test anxiety level. This shows that as a whole, the students experienced moderate-test anxiety level.

Table 3. Students' TAI level

Test Anxiety Level	Range	Frequency	Percentage
Low	26 – 40	32	18.31%
Moderate	41 – 61	134	59.39%
High	62 – 82	33	25.10%
Total			100%

B. Gender and Proficiency Test Anxiety Level

Based on the comparison of the mean scores between male and female students, it can be seen that female students reported higher level of test anxiety compared to the male students with the mean scores of 54.82 and 50.53 respectively. Meanwhile, Table 3 indicates that as a whole, students who have advanced proficiency (C1) with the mean scores of 57.38 has the highest mean of test anxiety, followed by B1 level (53.20), A2 (51.41) and B2 with the least mean scores (48.71) as is shown in Table 4 below.

Table 4. TAI Differences

Gender	TAI Total
Male	50.53
Female	54.82
Proficiency	
A2	51.41
B1	53.20
B2	48.71
C1	57.38

Concerning the classification of test anxiety, as shown in the table below, it is apparent that both male and female students experienced moderate test anxiety level with a total of 36 male students (56.25%) and 98 female students (59.39%). The result indicates that male students do have lower test anxiety level compared with female students with higher percentage in low- TAI classification (26.56%). These findings strengthen previous research who found that females tend to have higher test anxiety level than males.

Turning now to the classification of test anxiety, as can be seen from the table above, the beginner and intermediate proficiency (A2 & B1) surprisingly did not dominate moderate and high level anxiety whilst the higher proficiency B2 and C1 have the highest percentage three of classification as is shown in Table 5 below.

Table 5. TAI Classification

Test Anxiety Level Classification			
Criteria	Low	Moderate	High
Male	26.56%	56.25%	17.18%
Female	25.45%	59.39%	25.45%
A2	16.84%	58.94%	24.21%
B1	21.62%	59.45%	18.91%
B2	15.87%	69.84%	14.28%
C1	23.52%	35.29%	41.17%

C. Hypothesis Testing

Table 6. Hypothesis Testing Result

Dependent TAI Total	df	F	p
Gender	1	1	5,314
Proficiency	3	3,655	0.013
Gender*Proficiency	3	1,488	0.219

As Table 6 shows, there is a significant difference ($p= 0.022$, Significance level 0.05), therefore H_0 is rejected, which means that there is a significant difference in test anxiety level between male and female students. This result support the previous finding that has been discussed above, that the differences in test anxiety level between female and male students are significant in which female students reported higher test anxiety as compared to the male students. Then, the table above indicates that there is a significant difference in test anxiety level among self-proficiency ($p= 0.013$, Significance level 0.05), therefore H_0 is rejected and H_1 is received, which means that there is a significant difference in test anxiety level among self-proficiency. As it has been discussed in previous chapter above, this result contradicts the previous result, which stated that the students with higher proficiency have higher test anxiety than those who have lower proficiency with advanced proficiency (C1 and B1). Meanwhile, the result for interaction level indicates that there is no significant difference in test anxiety level between gender and self-proficiency ($p= 0.219$, Significance level 0.05), therefore H_0 is received and H_1 is rejected which means that there is no significant interaction between genders and self- proficiency on test anxiety amongst students.

DISCUSSION

This result showed that the students in Yogyakarta State University who have faced English standardized testing experienced and faced test anxiety. Further, if we classify the students into low, moderate, and high anxiety level, among 134 out of 229 students experienced moderate-test anxiety level and 53 of them experienced high-test anxiety level. This finding confirms that test anxiety is a distinct phenomenon to language learning (Horwitz et al., 1986: 127).

In the case of gender, the results build on existing evidence of the differences in test anxiety level based on the students' gender that there is a significant difference between male and female students' test anxiety. Some possible explanations on these results have been proposed to account by previous researcher (Peña et al., 2016: 159); social roles and acceptance to anxiety. As men and women are assigned into different social roles, the pressure to succeed academically have put females under serious pressure than males do, as female tend to be more anxious of failing in test. Another explanation suggest that men appear to be more defensive in admitting the existence of anxiety as it threatens their masculinity side (Peña et al., 2016).

If we now turn to proficiency and test anxiety cases, the analysis indicates that students with advanced or higher proficiency experienced higher test anxiety level than those in lower level. The results, as shown in Table 15 showed that C1 or advanced proficiency scored the highest TAI Total (57.38) being the top among the other proficiencies, followed by B1 (53.20), A2 (51.41) and B2 (48.71). This current study differ from that Aydin et al. (2006)

who suggests that lower level proficiency seems as the main reason for test anxiety. In her research, Aydin et al. (2006) found that low level of proficiency as producing factors to test anxiety. These results rise questions since it has different result with that of Aydin et al. (2006). Interestingly, this finding might propose a new idea concerning proficiency and test anxiety study.

CONCLUSION AND SUGGESTION

A. Conclusion

Overall, these results build on existing evidence of gender and proficiency differences on test anxiety among students, which was in line with previous research. However, the results on proficiency provides a new insight into higher proficiency who experienced the highest test anxiety level. While previous research has focused on low proficiency that contributes into test anxiety, these results demonstrate that higher proficiency faced higher test anxiety. Therefore, it remains unclear whether or not gender and proficiency has an interaction effect on test anxiety in general. The small and uneven distribution for each proficiency and gender might cause and affected the results the current study on the interaction effect between two variables. Consequently, taken the results into account, it is apparent that test anxiety issues is happening among students across gender and self-proficiency. Thus, an awareness of this issues might be a key role in decreasing the level of test anxiety among students. However, the students at Yogyakarta State University who have taken English standardized testing limit the generalizability of the results. It is beyond the scope of this study to generalize the population as this research limit the subject to gender and proficiency variables. Thus, further research is needed to establish more firm research on gender and proficiency effect on test anxiety and how it affects students' English test performance.

B. Suggestion

To teachers, As it has been discussed previously, test anxiety is one of crucial aspect that affect foreign language learning process, students need to be able to overcome test anxiety and teachers need to be able to give students solution and condition that can help students cope with the situation. Therefore, teachers' roles in helping to cope with this situation is needed. The researcher suggest that the teachers should be aware of the existence of test anxiety among students. Teacher awareness on this matter is needed since test anxiety can negatively affect students' learning outcome and process. Second, the teachers are expected to prepare the students in facing a test by familiarizing the students with test content, format, technique, and environment. In that way, the students will be prepared in facing a test and they know how to overcome their test anxiety.

To other researcher, the present study has found interesting findings on test anxiety level concerning students; gender and self-proficiency. The researcher realizes that the other variables such as students' studies expectation, students' major and education background, in relation with test anxiety can be a potential variable to explore for further research. Thus, a future research to validate the findings achieved from this study is needed, especially in higher institution level. In addition, a research on teachers and instructor side in overcoming test anxiety problems among students might contribute to solve the problems of test anxiety among students. It might provide more

in-depth understanding of this topic since this study is still limited to certain subjects and variables.

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