

STUDENTS' TEST ANXIETY IN ENGLISH FOREIGN LEARNERS IN INDONESIAN CONTEXT

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ABSTRACT

Due to the increasing demand of proficiency in English, every school and institution has also demanded their students to learn English. To identify whether the students have understood the subject matter, tests are being conducted to measure the students' understanding. Several studies agreed and confirmed that tests can make the students feel anxious. As an affective factor, test anxiety has been investigated a lot. The current research focuses on test anxiety as the major affective factors. Thus, this research aims to find out the test anxiety level of students at Senior High School level, along with its relationship with the students' gender and major. Moreover, the causes of the test anxiety were investigated according to the students' own perceptions through semi-structured interview. To gather the data for this mixed-method research, the Test Anxiety Scale and semi-structured interview were conducted. The overall result showed that the students had moderate level of test anxiety. Female and science class students tend to be more anxious than the male and social students are. The factors of the test anxiety mentioned by the participants are English understanding, test preparation, time limit, pressure to prove oneself, and test procedure.

Keywords: test anxiety, foreign language learning anxiety, English as a Foreign Language (EFL), test anxiety factors.

Introduction

It has been a common knowledge that there are some factors affecting students' foreign language test negatively; individual differences such as learners' language aptitude, beliefs, motivation levels, expectations, and affective agents. Foreign Language Learning Anxiety (FLLA) is one of these affective factors. (Aydin&Zengin, 2008 cited in Aydin, 2009).

Anxiety is described as an uncomfortable emotional state in which one perceives danger, feels powerless and experiences tension in preparation for an expected danger. Anxiety is generally divided into three types: Trait, state and situation-specific anxiety. Trait anxiety, a more permanent disposition to be anxious, is viewed as an aspect of personality. State anxiety is an apprehension that is experienced at a particular moment in time as a response to definite situation. Lastly, situation-specific anxiety is related to apprehension aroused at specific situations and events (MacIntyre& Gardner, 1991). Given the previous statements, therefore, language anxiety falls under situation-specific category. This was supported by Gardner and MacIntyre's (1993) suggestion, as they describe Language Anxiety as apprehension experienced when a specific situation requires the use of a second language in which the individual is not fully proficient.

Students feel anxious particularly in English subject because it is not their native language, thus, even though the students in Indonesia are used to doing test, they sometimes still feel anxious because they are not familiar with the language. This is supported by Young (1991) as he stated that the more unfamiliar the test tasks, the more the learner anxiety is produced.

This research is limited to the test anxiety scale of students of Senior High School, whether there is a relationship between their test anxiety and their gender and major, and what factors contributing to their anxiety based on their own perceptions.

Test which respectively discussed in this research is a standardized type. Brown (2010; 86) stated that a standardized test, among other things, presupposes certain standard objectives or performance levels. The standards that underlie standardized test are usually a set of carefully defined competencies that apply to a course, a curriculum. The standardized type in here also refers to what is called

as *achievement* test. Achievement test is given at the end of the term, usually done in exam format (Riddell, 2010; 247)

Background

Foreign language learning is a multilayered process affected by individual differences such as learners' language aptitude, beliefs, motivation levels, expectations, affective agents etc. (Aydın&Zengin, 2008). Foreign Language Learning Anxiety (FLLA) is one of these affective factors that has a dynamic impact on this process.

Test anxiety, as an important component of FLLA can develop due to several reasons such as the contextual factors, personal factors, and learners' previous experiences. Indonesia is an exam-oriented country in which the Indonesian learners experience test anxiety at different levels due to this context-specific situation. This is mostly because of the high-stake examinations such as "University Entrance Examination" and/or "Transition from Primary to Secondary Education Exam" (Ergene, 2011) that students enter at the end of the secondary school and/or high school.

Tests are a subset of assessment, a genre of assessment technique. In scientific terms, a test is a method of measuring a person's ability, knowledge, or performance in a given domain (Brown & Abeywickrama, 2010; 3). It is generally prepared administrative procedures that occur at specific times in a curriculum. The students' responses or answers to tests will be measured and evaluated.

Tests are prepared administrative procedures that occur at identifiable times in a curriculum when learners muster all their faculties to offer peak performance, knowing that their responses are being measured and evaluated. In scientific term, according to Brown (2010; 3) has 5 characteristics. They respectively put forwards.

First, test is a method. It's an instrument –a test of techniques, procedures, or items- that requires performance on the part of the test-taker. To qualify as a test, the method must be explicit and structured.

Second, a test must measure, which may be defined as a process of quantifying a test-taker's performance according to explicit procedures or rules. Some tests measure general ability, whereas others focus on very specific competencies or

objectives. For a test which measures general ability, according to Brown (2010; 3), for example is a multi skill proficiency, while specifically test, for example is a quiz on recognizing correct use of definite articles. The results or measurement also varies. It can be letters with the instructors' comments, numerical score, or a percentile rank. If a test does not specify a form of reporting measurement, then it cannot appropriately be defined as a test.

In Indonesia, tests are used throughout institution and school as a valid measurement of the students or learners' ability, knowledge, and performance. Tests usually take place inside a room with a predetermined time. There will be a proctor or a teacher who oversees the process of test-taking.

Anxiety, being a complex term with many components, has been defined as "an unpleasant emotional state or condition that is characterized by the subjective feeling of tension, apprehension, and worry, and by activation or arousal of the automatic nervous system" (Spielberger, 1972, p. 482). According to Gass and Selinker, anxiety may be "a matter of personality, an emotional reaction to a situation, or a combination" (2008, p. 400). Hence, it can be divided as trait, state, and situation-specific anxiety.

The trait anxiety is caused when an individual tends to perceive the stressful conditions as hazardous or threatening (Cao & Liu, 2015). State anxiety, on the other hand, can be defined as the feelings of nervousness and worry at the very moment of the triggering situation (Cao & Liu, 2015); and the last one, situation specific anxiety, is the one felt for a particular situation (MacIntyre & Gardner, 1991).

From another perspective, it is also possible to group anxiety in two different forms; facilitative and debilitating anxiety as Scovel stated in 1978. In fact, the names represent their meanings. As Amiri and Ghonsooly (2015) explained in their study; the facilitative anxiety is helpful for a language learner, on the other hand, debilitating anxiety hinders success.

Given these definitions, foreign language learning anxiety can be classified as a situation-specific anxiety (Aydın, Yavuz, & Yeşilyurt, 2006) and is defined as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning

process” (Horwitz, Horwitz, & Cope, 1986, p. 128). Horwitz et al. (1986) presented three components of language learning anxiety: communication apprehension focuses on interpersonal interactions; fear of negative evaluation is the feeling of fear for evaluation by others and avoidance of the evaluative conditions; test anxiety is the anticipation of a failure in academic evaluation. As an indispensable part of every learning environment, assessment can cause anxiety to many learners. Using assessment tools like quizzes, examinations, reviews or observations can be a source of test anxiety. Although the term has been defined by many researchers (see, Aydın&Zengin, 2008; Horwitz et al., 1986; Sarason, 1984; Young, 1991). Zeidner and Mathews describe test anxiety as behavioral, phonological and psychological reactions to the evaluative situations such as exams or tests in relation to the negative effects or anticipation of these items (2005), while Dusek (1980) defines test anxiety as the displeasing apprehension or psychological condition that has physiological and behavioral characteristics which are experienced at the time of formal testing or in other evaluative conditions.

There are many factors that might trigger test anxiety. Some of these are described in the study of Young (1999). He stated that these factors for the learners are test validity, test techniques, length of the test, time limit, clarity of test instructions, and the testing environment. He stated that the students considered the test invalid if they felt highly stressed in the tests. Similarly, Ohata (2005) pointed out the pressure on students caused by the time limit. In an earlier study, Young (1991) reported on the importance of students’ familiarity with the test format and the questions as another factor for test anxiety.

The relationship between the test anxiety and gender has been studied by many researchers. However, the results in these studies are conflicting. In some studies, females are found to be more anxious than males (see, Chang 1997; Daly, Kreiser, & Roghaar, 1994; Felson & Trudeau, 1991; Hembree, 1988; Lowe & Lee, 2008; Lowe, 2015; McDonald, 2001). In other studies, such as Aydın and Takkaç (2007) the relationship between gender and test anxiety showed a minimal difference and it changed mutually according to the situations; for some of the

items males scored higher than females, while, for other items females' scored higher.

Anxiety refers to a complex, emotional reaction that is evoked in an individual who interprets a specific situation as dangerous or threatening. Being a complex term with many components, anxiety has been defined as “an unpleasant emotional state or condition that is characterized by the subjective feeling of tension, apprehension, and worry, and by activation or arousal of the automatic nervous system” (Spielberger, 1972; 482). The researchers grouped anxiety into three types; trait, state, and situation-specific anxiety.

Foreign language anxiety is classified into situation-specific anxiety and is defined as the specific forms of anxiety that occur consistently over time within a given situation (MacIntyre& Gardner, 1991). It is apprehension experienced when a specific situation requires the use of a second language in which the individual is not fully proficient, specifically associated with second language contexts, including speaking, listening, and learning.

Test anxiety is a situation-specific anxiety. According to Zeidner (1998) (cited in Burgucu; 2010), “test anxiety is the set of psychological, behavioral responses that accompany concern about possible negative results or failure on an exam or similar evaluative situation...” Test anxiety is a subset of affective responses toward test. It is fear or worry of being failed.

Test, being well-prepared and carefully measure the test-takers' ability, knowledge, or performance, it will certainly affect the students' future language development. Otherwise known in the language assessment field as washback (Brown, 2010; 37). Washback can be both promote and inhibit learning. Thus emphasizing what may be referred to as positive and negative washback.

Positive washback, or usually called as beneficial washback, can be referred to an effect that benefits not only the students but also the teachers as they take or construct the tests. Here are some examples of a test that provides beneficial washback.

1. Positively influences what and how teachers teach
2. Positively influences what and how learners learn
3. Offers learners a chance to adequately prepare

4. Gives learners feedback that enhances their language development
5. Is more formative in nature than summative
6. Provides conditions for peak performance by the learner

Negative washback, on the other hand, hinders the language development of the test-takers. It also refers to the unexpected, harmful consequence of a test, such as nervousness of the students and teachers, and lastly, anxious.

In conclusion, the washback of the test is divided into two forms; there are positive and negative washback. Positive washback means the tests have benefits to both teachers and students, while negative washback means tests hinder the test-taking process.

In a close review of the literature on anxiety in language learning, at least six potential sources of language anxiety can be identified. Some are associated with the learner, some with the teacher, and some with the instructional practice. From an analysis of this research, language anxiety arises from: 1) personal and interpersonal anxieties; 2) learner beliefs about language learning; 3) instructor beliefs about language teaching; 4) instructor-learner interactions; 5) classroom procedures; and 6) language testing. (Young, 1991).

Personal and interpersonal anxieties are the most commonly discussed in most study, as it deals with the internal factors of the anxiety, such as low self-esteem and competitiveness. People with low self-esteem worry about what others might think and they are concerned with pleasing others. Such feeling can lead to anxiety.

Learners' beliefs in language learning are the major contributor to language anxiety. For example, a student learns a foreign language and he believes that pronunciation is the most important aspect of language. Later when he cannot speak with the correct pronunciation like the native speaker, he will end up frustrated and stressed.

Instructors' beliefs in language teaching can also lead to the students' anxiety. The instructors who believe that they need to constantly correct when the students make an error, do most of the talking, and set high expectations in students can be contributing to the students foreign language anxiety.

The anxiety which is caused by the instructor-learner interactions is how the instructor corrects the error made by the learners. Because to be seen as “dumb” and always makes an error in front of the learners’ peers can provoke anxiety. However, the correction is not the issue for the students; they too feel that correction is necessary. For them, the manner of giving correction that can make them anxious.

Anxiety which associated with classroom procedures usually deals with having to speak in the target language in front of other people. Classroom procedure in which the students have to do a presentation in front of the class, or to answer orally contribute to their anxiety.

In language testing, the greater the degree of student evaluation and the more unfamiliar and ambiguous the test tasks and formats, the more the learner anxiety produced (Young, 1991; 429). It means that how the test is given, formed, and evaluated can affect the students’ anxiety.

The analysis of test anxiety had been conducted by many researchers. However, there is still a few of them which conducted in Indonesia. Here are several studies concerning the analysis of test anxiety, and the effect of the test-takers’ gender and grade level toward their test anxiety.

EsimGursoy & Tuba Arman, in 2016, conducted a study entitled “Analyzing Foreign Language Test Anxiety among High School Students in an EFL Context” in a vocational high school in Turkey. There, they had found that the anxiety scale is moderate, and that female is more anxious than male. There is also a significant effect of grade level towards the students’ test anxiety.

The next study concerning the analysis of test anxiety is the one that is conducted by Selami Aydin, Fatih Yavuz, Savaş Yeşilyurt in Turkey entitled “Test Anxiety in Foreign Language Learning”. They ought to find the causes, effects, and results of test anxiety towards the students’ learning process.

In 2014, Mohamad Mohamadi, Zahra Alishahi, Nooshin Soleimani also conducted a study entitled “A Study on Test Anxiety and Its Relationship to Test Score and Self-actualization of Academic EFL Students in Iran.” This study set out to explore the relationship between test anxiety and self-actualization as well as test score. The

results of this study suggest that test anxiety could be one of many variables which have a potential influence on the exam score.

Meanwhile, in this research, the researcher will conduct a study to see the level of test anxiety of the twelfth-grade students at Junior High School, and ought to find out whether gender and course grade (being in social or science major) affect their test anxiety. It also will be more explored on the factors contributing their anxiety based on their own perceptions.

Taken into current reality, these problems particularly occur among high school students. This was proposed by other researchers analyzing test anxiety among high school students (Burgucu, Han, and Engin; 2011), (Sparks, Patton, and Ganschow; 2012), (Gursoy and Arman; 2016).

Methodology

The present study was conducted at a local high school. This study was implemented with the 12th grades particularly in an attempt to see the possible effects of the upcoming National Examination. A mixed-method research design was used in the study. Qualitative and quantitative data were collected to answer the following questions:

- 1) What is the level of test anxiety among twelfth grade students at Indonesian Senior High School?
- 2) How do gender and students' major (being in science and social major) contribute to the students' test anxiety?
- 3) What factors do influence students' test anxiety according to the participants' own perception?

3.1. Participants

The participants in this study consisted of 213 twelfth-grade students. The researcher needed to obtain data in such a way that the needed data gained meets the specific purpose for this research, which is to expose the test anxiety scale and their perceptions toward what factors contributing to their anxiety.

To select the sample for this mixed-method research, the researcher applied *sequential sampling method*, which is one of the typology of five types of mixed methods sampling which was developed by Teddlie and Yu in 2007 (Creswell, 2009; 217). Sequential sampling means the sampling from the first phase or

strand informs the second phase or strand. In an Explanatory Design, the researcher needs to determine which quantitative results from the first phase will be the basis for selecting participants in the second, qualitative phase (Bergman, 2008: 77).

3.2. Data Collecting Technique

Both qualitative and quantitative data were collected in the study. Quantitative data were collected via a questionnaire and analyzed statistically by using SPSS 20. The qualitative data were gathered with the help of semi-structured interviews. Purposive random sampling was applied while choosing the participants for the interview. The interviews were conducted with 6 students with every two students represent each anxiety level; low, moderate, and high anxiety.

Several techniques had been applied along the process of data collection. Observation, questionnaire, and interviews were conducted. The observation was conducted first as to seek the existing problems. Once the problems had been identified, the researcher ought to formulate the research questions which led to the objective and the benefits of the study.

After identifying the problems, along with the population, the researcher started to select the sample of the total population to be studied. Later, the researcher started to collect the data using two types of instruments.

As a whole picture of this research, the followings are the step in conducting this research. First, the observation was conducted to identify the existing problems in the location of the research that will take hold. The researcher used informal interview in this step. After recognizing the existing problems, the researcher started to formulate the questions of what and why the problem existed. Therefore, the questionnaire of test anxiety scale and interview were arranged to get the answer of the questions. The researcher then began to formulate the selection of the sample for this research. Using random sampling, the researcher selected the sample purposefully to be given the questionnaire consisted of two questions of demographic information and twenty-two test anxiety scale.

Interview session was conducted after the researcher analyzes the results of the questionnaire as it had been taken into consideration to select the participants to

be interviewed to find out the factors contributing to their anxiety based on their own perceptions. After gaining the data from the questionnaire and interview, the researcher mixed both the data and analyzed them using descriptive analysis to present the findings and the conclusions of the research.

3.3. Instruments

The instrument used in the study was a test anxiety scale that was developed by Sarason in 1984 and is a valid scale that has also been used by many researchers (Aydın et al., 2006; Aydın&Takkaç, 2007; Aydın&Zengin, 2008; Şener, 2015). The instrument has two parts. The demographic information of the participants was collected in the first part and included 3 questions related to gender, course grades and grade level of the students. The second part consisted of 22 questions and aimed to find out the test anxiety level of the participants. In this part the students were asked to indicate how frequently they feel anxious in the given statements (1: never, 2: rarely, 3: sometimes, 4: often, 5: always). The content and face validity of the instrument was established in different studies that used the same instrument (Aydın et al., 2006; Aydın&Takkaç, 2007). As the next step, the instrument was piloted on 15 10th grade students from the same school. Lastly, it was used with the participants and found highly reliable with the 0.86 alpha value.

Range	Level of Anxiety
3.34 – 5.00	High anxiety
1.67 – 3.33	Moderate
0.00 – 1.66	Low anxiety

The interview, provided the qualitative data for the study and conducted to support the findings from the quantitative part. 34 participants were asked three open ended questions in the interviews. The interviews lasted 10-15 minutes and the researchers kept field notes on a template in order not to miss any valuable data.

3.4. Data Analysis

The data analysis process was done in two different steps. As the first step, SPSS software program was used to analyze the quantitative part of the study. The reliability coefficient, the mean scores, frequencies were found. The results of the Levenes' test showed that the data were normally distributed. As a result of the homogeneity of the variances, parametric tests were implemented. Dual comparisons were made by using T-tests to find the effects of some variables such as gender and major on students' anxiety level.

Below are the criteria of the test:

If $\text{Sig.} \leq \alpha$: the null hypothesis (H_0) is rejected

If $\text{Sig.} \geq \alpha$: the null hypothesis (H_0) is received

As a second step, the interviews were content analyzed by identifying recurring themes in the data and putting those into groups and sub-groups. The researcher used the recordings of the interviews to be transcribed into written form and analyze them into groups and sub-groups. The process of analysis itself was done in three steps as proposed by Miles and Huberman (2014; 12), those steps are: 1) data condensation, 2) data display, and 3) conclusion drawing.

4. Results

From the total population of 455 twelfth-grade students, the researcher took almost half of the population due to the money and time inadequacy. The researcher implemented Slovinc's formula to determine the sample. The formulation was as follows.

$$n = \frac{N}{1 + (N \times e^2)}$$

Explanation:

n = total of the sample

N = total of the population (455)

e = error of tolerance (generally it could be 0.01, 0.05, or 0.1)

Therefore:

$$n = \frac{N}{1 + (N \times e^2)}$$

$$n = \frac{455}{1 + (455 \times (0.05)^2)}$$

$$n = \frac{455}{2.14}$$

$$n = 212.62$$

Therefore, the sample for this research was 213 twelfth-grade students.

Table 4.1. Total participants based on their gender

Gender	N
Female	141
Male	72
Total	213

Table 4.2. Total participants based on their major

Major	N
Science	112
Social	101
Total	213

In order to answer the first research question that aims to identify the anxiety level of the students', frequency analysis was conducted and means were calculated. According to the results of the SPSS analysis, the mean of the responses given to the items was M=2.54, which indicates a moderate level of anxiety. Table 1 presents the results of frequency analysis of the questionnaire.

Table 1. Frequency Analysis

No.	Items	Never/Rarely (%)	Sometime (%)	Often/Always (%)	Mean
1.	I worry while I'm taking a test.	25.4	54.5	20.2	2.93
2.	While taking a test, I am thinking that other students are better	24.4	40.8	34.7	3.10

	than I am.				
3.	When I know that I will take a test, I do not feel confident and relaxed.	56.3	43.7	10.8	2.56
4.	During the test, I am thinking unrelated things about the class.	53.0	38.0	8.9	2.42
5.	I feel worried when I learned that I would take a test.	67.6	23.9	8.4	2.10
6.	During the test, I think I will fail.	61.9	30.5	7.5	2.14
7.	After the test, I feel worried.	55.9	31.5	12.7	2.29
8.	I cannot feel confident even if I have good grades.	52.1	31.5	16.4	2.51
9.	After the test, I feel I would do better.	14.0	23.0	63.0	3.67
10.	During the test, my emotions affect my performance negatively.	62.4	27.7	9.8	2.12
11.	During the test, I forget what I know.	39.0	43.2	17.8	2.74
12.	I feel worried when I study for a test.	58.7	32.4	8.9	2.23
13.	The more I work, the more confused I get.	63.9	24.4	11.8	2.20
14.	During the test, I cannot be sure if I will succeed.	31.9	44.6	23.5	2.85

15.	Tests bother me a lot.	77.0	16.0	7.1	1.68
16.	I feel pressured by time limits during test.	34.3	33.8	31.9	2.93
17.	When I have bad grades, I study less.	76.5	17.8	5.6	1.74
18.	I would learn more if I should not have tests.	60.6	26.3	13.2	2.25
19.	Tests affect my performance negatively.	26.7	34.7	38.5	3.12
20.	I worry when I am not prepared well.	18.3	20.2	61.5	3.60
21.	I worry even when I am prepared well.	30.1	32.4	37.5	3.12
22.	I feel crammed before an exam.	81.2	10.8	8.0	1.62

Although the anxiety level of the students was generally moderate in the total number of the students in science and social class, ten of the items had higher means than the general average of the scale which is 2.54. Those eleven items were item number 1, 2, 3, 9, 11, 14, 16, 19, 20, and 21.

Accordingly, more than half of the students feel anxious when they are taking a test (56.3%). The participants claimed that they often have low self-esteem during test by indicating that other students are doing better than they are (34.7%). After taking the test, more than the half of the participants feel like they should have taken the test seriously and study hard before taking it (63.0%). Almost half of the participants stated that they are not sure whether they will pass the test (43.2%). About 73 students feel under pressure because of the time limit in the test (34.3%). The participants stated that preparation is also another factor contributing to their anxiety, they are anxious when they have less preparation (61.5%), they also still feel anxious even when they are prepared well (37.5%).

The other scores in the scale showed that most of the participants did not have a high level of anxiety.

Comparing the means between science and social class, and the means between female and male, it can be seen that science class and female have a higher level of test anxiety than the male and social class students do. The results from SPSS showed that there is a significant difference.

Test Anxiety and Gender

The second research question aimed to answer if there was a significant relationship between test anxiety level of the participants and their genders. Therefore comparative hypothesis was used in this research to find out whether there is a significant difference between the two independent variables. The hypothesis is as follows.

H_a: There is a significant difference between female and male students' test anxiety

H₀: There is no significant difference between female and male students' test anxiety

With the assumption of the hypothesis testing:

If Sig. \leq α : the null hypothesis (H₀) is rejected

If Sig. \geq α : the null hypothesis (H₀) is received

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Anxiety Level	Female	141	2.6031	.44912	.03782
	Male	72	2.3972	.42608	.05021

Independent Samples Test

	t-test for equality of means
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			t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Anxiety Level	Equal variances assumed		3.220	211	.001	.20590	.06395
	Equal variances not assumed		3.275	149.940	.001	.20590	.06287

Based on the result of Independent Sample T-test using SPSS, it was found out that the Sig. (2-tailed) is 0.01(See Appendix 8). Since $0.01 < \alpha (0.05)$, therefore, the H_0 is rejected, which means that there is a significant difference between female and male students' test anxiety. The values in table 2 .indicates that 8 items of the scale showed significant differences between test anxiety and gender. According to the results of the t-test, female students tend to have more test anxiety than male students do in all these 8 items.

Table 2. The Relationship between Test Anxiety and Gender

No.	Items	Gender	N	Mean	Sig.
1.	I worry while I'm taking a test.	Female	141	3.04	0.021
		Male	72	2.74	
2.	While taking a test, I am thinking that other students are better than I am.	Female	141	3.21	0.044
		Male	72	2.89	
5.	I feel worried when I learned that I would take a test.	Female	141	2.28	0.000
		Male	72	1.75	
8.	I cannot feel confident even if I have good grades.	Female	141	2.61	0.38
		Male	72	2.31	
14.	During the test, I cannot be sure if I will succeed.	Female	141	2.96	0.025
		Male	72	2.65	

20.	I worry when I am not prepared well.	Female	141	3.82	0.000
		Male	72	3.18	
21.	I worry even when I am prepared well.	Female	141	3.25	0.031
		Male	72	2.89	
22.	I feel crammed before an exam.	Female	141	1.74	0.014
		Male	72	1.40	

Test Anxiety and Major

With the aim of answering the second research question, the relationship between test anxiety level of participants and their major was analyzed (Table 3). The result of the SPSS showed that the significant (2-tailed) in independent sample t-test is 0.032. Comparative hypothesis also was used in this research to find out whether there is a significant difference between the two independent variables. The hypothesis is as follows.

H_a: There is a significant difference between female and male students' test anxiety

H₀: There is no significant difference between female and male students' test anxiety

With the assumption of the hypothesis testing:

If Sig. \leq α : the null hypothesis (H₀) is rejected

If Sig. \geq α : the null hypothesis (H₀) is received

Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
Anxiety level	Science	112	2.5963	.41156	.03889
	Social	101	2.4640	.48393	.04815

Independent Samples Test

			t-test for equality of means				
			t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Anxiety level	Equal variances assumed		2.155	211	.032	.13229	.06138
	Equal variances not assumed		2.137	197.354	.034	.13229	.06190

The result of the independent sample t-test from the SPSS showed that the sig. (2-tailed) is 0.032. Therefore, H_0 is rejected for $0.032 < \alpha (0.05)$, which means that there is a significant difference in science and social class students' test anxiety. Below are the items that showed significant differences between science and social class students.

Table 3. The Relationship between Test Anxiety and Major

No.	Items	Major	N	Mean	Sig.
7.	After the test, I feel worried.	Science	112	2.48	0.004
		Social	101	2.07	
17..	When I have bad grades, I study less.	Science	112	0.97	0.025
		Social	101	0.89	
18.	I would not learn if I should not have tests.	Science	112	1.19	0.19
		Social	101	1.07	
20.	I worry even when I am prepared well	Science	112	0.95	0.031
		Social	101	1.24	

Interview Result Analysis

For the interview, the six representatives of the students were invited to answer three questions. Each of them represented certain level; low, moderate, and high anxiety. They almost had the same answers regardless the level they were

considered at, which was based on their questionnaire results. Nevertheless, the student who were rated high and low anxiety level had significant distinction in some points.

The interview results supported the answers given in the questionnaire. The first question aimed to find out if they ever had test anxiety. All of the participants stated “Yes” for the first question in the interview. None of the participants stated “No” which shows that they had experienced test anxiety at least once during their learning experience.

The second question in the interview aimed to find out the frequency of their test anxiety. Similar with their questionnaire results, the ones with low anxiety stated that they *rarely* experience test anxiety, the ones with moderate anxiety stated that they *sometimes* feel anxious, while the ones with high anxiety mentioned that they *often* experience test anxiety. None of them stated “Always” which also confirmed the questionnaire results where only 2 of the whole students who “always” feel anxious when they are taking a test.

Finally, the third question addressed the participants’ own perception towards the cause of their anxiety. The most common answer compiled from the participants was about the English itself. The participants (4 out of 6) mentioned that they hardly understand every English word. Interviewee 4 stated “I do not familiar with English at all. So most of the time, during the test, I do not even understand what I am supposed to do. I don’t know what to answer because I don’t even understand the questions.”

The second most common answer was that the participants (3 out of 6) felt anxious if they did not prepare enough. These responses fit the items 11, 13, 20, and 21 in the questionnaire about test preparation. They were afraid they might not be able to finish the test if they did not study before. However, one of the participants stated that “sometimes even though I did study (the night before), I still feel nervous about the test because learning English is hard for me. I still cannot understand some words.” This was also related to the item 21 which was about feeling anxious despite having prepared enough.

Another factor mentioned by the participants was time limit (2 out of 6), which is relevant to the item 6 in the questionnaire. They felt pressured with the time limit.

On one hand, they struggled with the difficulty of the English word; while on the other hand, they also had to finish the test in time. Interviewee 1 stated “My wish is that they can give more time for us to finish the test.”

Beside all those factors, internal pressure and the test procedure were also mentioned by 2 out of 6 participants. One of the participants mentioned that the cause of the test anxiety was because it could affect her grade. She seemed to cannot accept if she had bad grades. Although the pressure merely comes from herself, she admitted that nobody pressured her to have good grades. While for the test procedure, one of the participants even stated that sometimes what was being learned in class is not tested at all. Thus, he felt anxious while doing the test because he could not do the test for it was different with what he had studied before.

Based on the interview results, five most common factors were found. The familiarity with the English itself is the number one factor. The students felt anxious that they might fail the test because they were not sure about their answers since they did not even understand the language. The second factor would be the preparation. Less preparation makes the students feeling not confident about the test. Sometimes even though they did prepare enough, they still feel nervous. The third factor was the time limit. The limited time made them nervous even more while finishing the test. The next factor was the internal factor that came within them. They felt pressured as it was being measured and evaluated by the teachers. Finally, the last factor mentioned by one of the participants was the test procedure. He complained that sometimes what was being taught in class did not being tested in a test. It made him disappointed as he already did study about the material before.

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4. Discussion

When the relationship between test anxiety level and gender was analyzed the study had similar results with that of Aydın (2013), so that females were found to be more anxious only in some aspects in the present study as well. It was found that in contrast with male learners, female learners mostly compared themselves with the other learners, whether they were well prepared or not, they were still anxious about the exams and got more confused during the examinations, they were also more sensitive to the time limits. This result was consistent with the other studies in the literature (see, Chang, 1997; Daly, Kreiser, & Roghaar, 1994; Felson & Trudeau, 1991; Hembree, 1988; Lowe & Lee, 2008; Lowe, 2015; McDonald, 2001).

The interviews aimed to identify the participants' own perceptions regarding the reasons causing test anxiety. Their attributions were pointing mostly to the factors other than their selves such as the time limit, content of the course, proctors who did not know English, unclear instructions and validity of the tests. The students felt pressured and lost concentration in the test environment because of the proctors' behaviors or a new question type that they did not come across with before. What's more the instructions made learners feel stressed and the time limit and the length of the examinations prevented students focusing on the content of the test. These facts are also in line with the literature (Ohata, 2005; Young, 1991). One way to reduce the instruction-related test anxiety might be to use similar instructions in the classroom. In addition, the use of English when communicating in the classroom and giving instructions in English would increase exposure and input, moreover, it can increase the familiarity of the students with the chunks used in questions.

5. Conclusion

In this mixed-method research, there are three research questions. The relationship between students' gender and major on their test anxiety, and the factors contributing to their test anxiety based on their own perceptions.

For the first research question, it was found out that the level of the students' test anxiety level was 2.54, which indicated moderate anxiety. The result of the questionnaire was calculated and it was found out that only 4 students (1.88%) have low anxiety with the average level of 1.56. Those who had high anxiety level were 11 students (5.16%). The average level of their anxiety was 3.46. Meanwhile, the 198 other students (92.96%) had moderate level anxiety with the average means of 2.51. Thus, the average level of the students' test anxiety was moderate anxiety.

To answer the second research question, which is to find out the difference of female and male students' test anxiety, and also the difference between science and social class students' test anxiety, the independent sample t-test was implemented using SPSS software program. For the relationship between test anxiety and gender, the significant (2-tailed) was 0.01. It means that there is significant difference for $0.01 < \alpha (0.05)$. For the relationship between test anxiety and major, the sig. (t-tailed) was 0.032, it also means that there is a significant difference for $0.032 < \alpha (0.05)$. It was later found out that there were significant differences. Also, there were also items in the questionnaire that showed the most significant differences between the two independent variables.

Furthermore, based on the result of the interview, which was to seek out the factors contributing to the students' test anxiety. It was clear that they all agreed to have experienced test anxiety. It was also concluded that based on the students' own perception, the factors are the problem with understanding the English itself, the test preparation, the time limit, the pressure, and lastly, the test procedure.

To sum it all up, based on the overall findings, it can be concluded that the students of senior high school level have moderate level of test anxiety. Through the independent samples t-test, it was found out that female and social class students have higher level of anxiety than the male and social class students do.

The struggle to understanding English itself is seen as the most contributing factor of the students' test anxiety.

The results have implications for language teachers and policy makers. Increased awareness on our teaching and reflective practice might reduce the negative outcomes of the teaching-learning process. Therefore, it is suggested that teachers are engaged in Continuous Professional Development to bridge the gap between theoretical knowledge gained in teacher education institutions with practical knowledge developed in schools. Moreover, the policy makers can overview the current examination system to reduce the negative effects of the system on students' affect.

For the suggestion, for the teachers; through this research, hopefully the teachers will be more aware of the mental health issues related to the learning-teaching process. Also, the teachers can try to apply some teaching techniques to help or even reduce the anxiety of the students.

While for the students; through this research, the students will be more aware of their own anxiety. The students can also treat or take care of themselves as to reduce their anxiety and seek for help if needed or necessary. The students can apply some learning techniques so that their anxiety will be reduced.

On the other hand, for further researchers, it will be good for further researchers to find and apply some teaching technique to reduce the students' test anxiety.

A few limitations of the study must be noted. Since the data were collected from a single type school, it is difficult to generalize the findings to other teaching environments. Thus further studies need to be conducted in similar contexts to compare contextual differences deriving from different school types. Additionally, it should be noted that, other factors such as social, cultural, political and psychological agents must be taken into account by the forthcoming studies.

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