ISSN |2355-3669| E-ISSN |2503-2518| Volume 8| Number 1|June 2021|

## MEASURING TEFL STUDENTS' FOREIGN LANGUAGE CLASSROOM ANXIETY: A RASCH ANALYSIS APPROACH

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#### Abstract

This study sought to measures the foreign language classroom anxiety of the English Department students of a university in Indonesia and to compare the anxiety across independent demographic variables of gender and length of study at the department. The literature shows that foreign language learning anxiety affects one's achievements in learning a foreign language. Data were collected through administration of the adapted version of Foreign Language Classroom Anxiety Scale to 96 students selected through stratified random sampling technique. The anxiety was assessed through Rasch analysis while analyses for significant difference in the anxiety across the two independent variables were conducted using tests of inferential statistics. The findings show the existence significant number of students who tend to be highly anxious in learning English. The findings also indicate a significant difference in the students' anxiety across the independent variable of semester where semester 4 students tend to be more anxious than those of other semesters. No significant difference in the students' anxiety was found across the independent variable of gender. The implications of these findings were then discussed.

Keywords: Foreign language classroom anxiety, racsh analysis, TEFL

Manuscript submitted: April 8, 2021 Manuscript revised: May 5, 2021 Accepted for publication: June 7, 2021

### Introduction

Information about students' anxiety in foreign language learning is not only important in relation to the choice of learning methods or strategies in the classroom the teacher would employ in teaching (Elkhafaifi, 2005; Shams, 2006; Alrabai, 2015), but is also indispensable in the process of foreign language curricula development (Zheng & Cheng, 2018) and assessments (Young, 1991; Buyukkarci, 2014). If armed with knowledge about student anxiety in learning foreign languages, curriculum designers can prepare contents that help minimize this anxiety while fostering student confidence. Similarly, in designing educational evaluation, such information can help test maker, for example, in designing a test that minimizes biases resulting from the anxiety. Furthermore, foreign language teachers can anticipate variables and conditions that can cause the anxiety.

Although there is an abundance of literature related to Foreign Language Learning anxiety, most of them are generated from quantitative research using omnibus tests approach, where the results of data analysis are obtained by aggregating all responses to items of an instrument measuring different dimensions of the Foreign Language Learning anxiety into omnibus means that describe trends in the anxiety as a whole (e.g., Ganschow & Sparks, 1996; Na, 2007, Huang, Eslami, & Hu, 2010; Lucas, Miraflores & Go, 2011; Cui, 2011, Yamat & Bidabadi, 2012; Gursoy & Akin, 2013; Sadiq, 2017; Yassin & Razak, 2018). Of course, this approach can fulfill the relevant research objectives, but, to some extent, it does not provide a more detailed analysis of the student's response to each item and each measured dimension (Tian, Manfei, Justin, Hongyue, & Xiaohui, 2018). One approach that can meet these expectations is the stochastic Rasch analysis approach (Rasch, 1980).

In Rasch analysis, ordinal data from respondents' responses to a scale or an inventory are transformed into interval ones in the form of a common linear logit scale. Rasch analysis is also sensitive to idiosyncrasies of persons and items (Wright & Linacre 1991; Bond & Fox, 2001). Thus, a deeper examination on a person's ability and item difficulty and a more precise and comprehensive identification of the characteristics of the persons and items will be possible (Kamil, 2012). Furthermore, drawing on Wright (2000) and Kamil (2012) suggests that Rasch analysis allows evaluation amid the existence of missing data, and simplifies "presentation of results in the form of graphical summaries of population and detailed individual profiles in a way that would be easily understood and interpreted by educators, policy makers and the concerned public" (pp.74-75).

In the light of the background described above, this study aims to measure, by means of Rash analysis, the level of anxiety of English Study Program students a state higher education in Indonesia in learning English. Specifically, this study seeks to answer the following research questions:

- 1. What is the level of the anxiety of the English Education Study Program students in learning English?
- 2. How is the anxiety level of English Education Study Program students on the three factors of anxiety about foreign language learning?
- 3. Is there a significant difference in students' anxiety across independent variables of gender and semester ?

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### Literature Review

Pertaining to the understanding of anxiety, Ellis (1994) defines anxiety in general as an uncomfortable emotional condition in which a person feels in danger, helpless and tense in anticipation of the danger. Furthermore, Horwitz (2001) and Oxford (1999) distinguish anxiety into categories, namely; first, innate anxiety which is а tendency worry that two to is permanent. Second, situational anxiety that is related to certain events or tasks. In terms of its impacts on learning, Gardner (1985) states that anxiety in foreign language learning is one of the affective factors that affects the success of foreign language learning. Furthermore, Horwitz et al. (1986) formulated anxiety in foreign language learning as a unique combination of selfperception, beliefs, feelings and behavior related to foreign language learning in the classroom which is born from the uniqueness of the language learning process. Summarizing research on the topic, Toth (2008) suggests that so far there are generally two approaches in research on anxiety in foreign language learning. The first is called the *anxiety transfer* approach and the second is known as the unique anxiety approach. The first approach assumes that anxiety in foreign language learning is simply a result of transfer from other forms of anxiety into the domain of foreign language learning. While the second approach assumes that anxiety in learning a foreign language is a separate anxiety construct, which is different from other forms of anxiety that arises due to experiences in learning and the use of foreign languages. However, research by MacIntyre and Gardner as cited in Brown (2007) shows that global anxiety transfer cannot be used as a reference for estimating success in foreign language learning. Therefore, research so far has focused more on language anxiety as a unique construct and situational characteristics.

In addition, Horwitz, MacIntyre, and Gardner in Brown (2007, p.162) identify three components in anxiety in foreign languages learning:

- 1. Communication fear that arises from the inability of learners to adequately express thoughts and ideas.
- 2. The fear of negative social judgments that arises from a student's need to make a positive social impression on others, and
- 3. Exam anxiety or fear of academic evaluations.

Research in this area has so far been dominated by three issues. First, it relates to the construct validation of anxiety in foreign language learning itself; second, concerning the development of measurement instruments; and thirdly, relating to the measurement results with these instruments. Research (e.g., Yamashiro & McLaughlin, 2001; Jackson, 2002; Hashimoto, 2002; Awan, Azher, Anwar , & Naz, 2010; Dewaele & Ip, 2013; Zheng & Cheng, 2018) have consistently shown a negative correlation between the level of anxiety of students in learning a foreign language with the success rate of learning a foreign language. Other studies have also shown differences in anxiety levels between genders (Park & French, 2013; Gerencheal, 2016), age groups and grade levels (Aydin, Harputlu, Çelik, Uştuk, & Güzel, 2017).

Furthermore, anxiety in learning foreign languages was also found to be correlated with, among others, the variable prior history of visiting foreign countries, prior high school experience with foreign languages, expected overall average for current language course, perceived scholastic competence, and perceived self-worth (Onwuegbuzie, Bailey, & Daley, 1999), classroom environment (Palacios, 1999), and psychoticism, extraversion, and neuroticism (Dewaele,

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2013). The main message of these findings is the need to pay attention to and to develop learning strategies to overcome the affective barriers experienced by foreign language learners.

As mentioned earlier, in general, the main issue related to the identity of the anxiety construct in foreign language learning is the existence of two approaches, namely the *anxiety* transfer approach and the unique anxiety approach. Most of the research on the issue indicates that the unique transfer approach can better predict the association between anxiety and success rates in foreign language learning. This construct has also been identified as having three components. However, research by MacIntyre and Gardner (1989) shows that the test anxiety component has a strong association with general anxiety, so that the components are problematic in that it is also commonly experienced in other situations, not only in foreign language learning. In the field of instrument development, several instruments have been developed, the most popular of which is the Foreign Language Classroom Anxiety Scale (Horwitz, 1986). The scale has also been translated and validated in multiple languages, for example, to the Japanese language (Brown, Robson, and Rosenkjar in Smith, 2001dne; Hashimoto, 2002); Chinese (Jackson, 2002), Hungarian (Toth, 2008), Turkish (Aydin, Yavuz, & Yesilyurt, 2006), all show a high level of reliability. So far no one has translated and used the scale in the context of foreign language learning in Indonesia. For that reason, it is also the aim of this study to use the Indonesian version of the scale and evaluate its psycometric properties.

Regarding the construct validation of the scale, studies have shown that the Foreign Language Classroom Anxiety Scale (FLCAS) refers to a specific measurement of anxiety in foreign language learning, not a measurement of global anxiety levels. Spielberger, McCroskey, and Watson and Friend in Toth (2008) shows that the questionnaire has an r = .29 with the Trait scale of the STAI (Spielberger, 1983), r = .28 with Personal Report of Communication Apprehension (McCroskey, 1970), r = .36 with the Fear of Negative Evaluation Scale (Watson & Friend, 1969), and r = .53 with the Test Anxiety Scale (Sarason, 1978), r = .53. Research by MacIntyre and Gardner, in Toth (2008) also shows that the three dimensions in this questionnaire are independent from one another. The main findings of measuring anxiety levels using the FLCAS (Horwitz, 1986) can be summarized are two known forms of anxiety follows: (1)there that affect learning, namely debilitative anxiety and facilitative anxiety (Oxford, 1999; Spielmann & Radnofsky, 2001). (2) Debilitative anxiety is anxiety that has a negative impact on learning, while facilitative anxiety is actually beneficial in motivating learning and encouraging people to complete tasks. (3) Sparks and Ganschow (2001) suggest that language anxiety is likely a consequence of learning difficulties and could be the result of weakness in the first language. (4) Research by Levine (2003) shows that anxiety varies depending on whether students talk to fellow students or to teachers. (5) Gregersen (2003) found that students who were anxious made more mistakes, exaggerated those mistakes and self-corrected more than students who were less anxious. (6) Gregersen and Horwitz (2002) found a link between anxiety and perfectionism. People who have unrealistic standards for their own abilities tend to have higher levels of anxiety. (7) Research by William and Andrade (2008) found that the majority of students referred to teachers as creators of the learning atmosphere that caused their anxiety.

#### Methodology

This research is quantitative in nature and used survey design to address the research questions. For this purpose, the Foreign Language Classroom Anxiety Scale (Horwitz, 1986) was

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distributed to the respondents to collect the data which were then analyzed using Rasch analysis and appropriate inferential statistical techniques.

## Research site, population, and sample

The population of this study was all the students of an English Department at a state university in Indonesia, who were in semester 2, 4, and 6. The eighth semester students were not included because at the time of the research as they were conducting teaching practices program at schools. The total number the population was 225 which is detailed the following table.

Table 1.	Research	population
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Semester	Number		
2	89		
4	50		
6	86		
Total	225		

Samples were randomly taken using stratified random sampling technique from each of the semesters, targeting at least 30% of the total number of students in the semester, while still adhering to the yardstick that the accumulated number of samples from each semester is at least 30% of the total population of the Study Program. For the purpose of the study, the stratifications used were semester and class. The sampling resulted in a sample of 96 students. Details of the number of samples taken from each semester and class from each study program are shown in the following table:

Semester	Number				
2A	15				
2B	12				
2C	12				
4	15				
6A	16				
6B	11				
6C	15				
Total	96				

Table 2. Number of samples from each semester and class

## Data collection and analyses

The data were collected using the Foreign Language Classroom Anxiety Scale (Horwitz, 1986) which was translated into *Bahasa Indonesia*. The scale consists of 33 items with a Likert-scale response category ranging from 5=Strongly Agree to 1=Strongly Disagree. The items of the scale are based on the theory that anxiety in foreign language learning that consists of three dimensions,

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namely *Communication Apprehesion (CA), Test Anxiety (TA)* and *Fear of Negative Evaluation (FNE).* The scale has been widely used in research in this field, for example by Toth (2008), Brown, Robson, and Rosenkjar, (2001), and William and Andrade (2008). Items of each of the three dimensions of the scale are presented in the following table:

### Table 3. Dimensions and items

Dimension	Item	Number		
Communication	1,4,9,14,15,18,24,27,29,30,32	11		
Apprehension				
Test Anxiety	3,5,6,8,10,11,12,16,17,20,21,22,25,26,28	15		
Fear of Negative	2,7,13,19,23,31,33	7		
Evaluation				
	Total:	33		

Translation of the scale into Bahasa Indonesia was made in order to facilitate the respondent's best possible understanding of the scale. To ensure that the translation matches the meaning of the original questionnaire, the researcher asked two competent English lecturers to evaluate it using back-to-back translation technique. Some revisions were made on the initial draft of the translation. The evaluators stated that the final Indonesian version of the scale was appropriate and can be used for the research. The Indonesian version of the instrument consists of two parts. The first part contains questions pertaining to the respondents' demographic information which includes semester, group, and gender. The second part is the scale's items. To adapt the instrument to the respondent's study program (i.e. English), the researcher added the word "English" to items requiring this specification. Data analyses were conducted using three different statistical techniques that suited the nature of the research questions and the data. To answer research question number 1 and 2, data were analyzed by Rasch Analysis using Winsteps software. While for answering research question number 3, the interval data from Rasch Analysis were further analyzed using t-Test and Kruskal-Wallis Test. The interpretation of the response to instrument items in this study refers to the item endorsability principle in Rasch Analysis, where the higher the logit measure value of an item, the lower the level of agreement or endorsability of the respondent towards the item, which means the lower the respondent's anxiety in the condition stated in the item. Conversely, the higher the logit measure value of a respondent on the logit scale, the higher the level of agreement or endorsability for the items on the instrument, or the higher the level of the anxiety.

## Findings

## Findings of preliminary data analysis

Preliminary data analysis was needed in this study because the use of Rasch Analysis requires the validity and the reliability of the measurement results to be evaluated as the first step for producing useful information for conclusion drawing and decision making. These are done by examining the item polarity and item fit indices. Item polarity provides information on whether items in an instrument measure what it intends to measure. This information is provided by

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the Point Measure Correlation (PTMEA CORR) value which must be positive for each item and is in the infit-mean-square (IMS) range of 0.5 to 1.5 which indicates that the item fits the Rasch model. Results of analysis of preliminary data (Table 4) show the item number 1, in addition to having PTMEA CORR- negative, also has Infit Mean-Square 1. 92, which is outside the range of 0.5 to 1.5.

#### Table 4. Item polarity

+										+
	RAW						OUT		PTMEA	
NUMBER	SCORE	COUNT	MEASURE	ERROR	MNSQ	ZSTD	~	ZSTD		Items
	298	95	.07	. 11	+  1.92	6.21				I0001
32	202	96	1.44		1.23				.021	
28	377	96	-1.08			1.0				
1 11	233	95	.93		11.12		1.23	1.6		
22	385	96	-1.24		11.00		1.03	.3		
2	297	94	.06		1.64		1.64	4.4		
24	370	96	94			1		4		
1 10	399	96	-1.56			1.4		1.4		
6	288	96	.24			.4		.6		
8	358	96	73		1.42			2.3		
15	355	95	73		.82	-1.2		-1.4		
13	260	96	.59		•	1.6		1.7		
25	348	96	57	.12	.91	6	.86	9	.371	I0025
12	300	96	.09	.11	1.01	.1	1.00	.0	.44	I0012
29	337	96	41	.12	.96		.94	4		I0029
4	359	95	81	.13	1.09	.6	1.04	.3	.45	I0004
19	286	95	.22	.11	.91	7	.93	6	.46	I0019
17	217	96	1.19	.12	.80	-1.4	.82	-1.2	.47	I0017
5	244	96	.80	.12	.78	-1.9	.76	-2.0	.52	I0005
23	314	96	09	.11	.78	-1.9	.74	-2.2	.52	I0023
14	280	96	.34	.11	.71	-2.7	.71	-2.6	.53	I0014
20	339	95	50	.12	1.01	.1	.99	.0	.53	I0020
30	287	96	.25	.11	1.04	.4	1.06	.5	.53	I0030
21	209	96	1.32			-1.4		-1.0		I0021
9	337	96	41	.12	.97	2	.93	5	.55	I0009
18	270	96	.47		.64	-3.4		-3.3		I0018
7	323	96	21			-2.3		-2.4		I0007
33	309	94	12			1		2		
16	297	96	.12		.82	-1.5		-1.7		
3	316	96	12		.82	-1.5		-1.7		
31	259	96	.61		.87	-1.1		-1.1		
26	260	96	.59			2		.0		
27	290	96				-4.3				I0027
	303.	96.	.00		•	21				
S.D.	51.	1.				2.01				İ
+										+

The literature offers different solutions to the issue of *misfitting items*. In general, the solutions offered fall into two groups. The first group advocates the abolition of the misfitting items from the instrument with some fundamental reason (e.g. Arnadottir & Fisher, 2008; Bohlig, Fisher, Masters, & Bond, 1998). The first opinion warns that misfit items with a mean-square outside the tolerable range have a negative impact on the measurement, and thus poses a serious threat to validity. Meanwhile, the second group argues that misfitting items cannot be simply eliminated because up to 5% of the items contained in an instrument have the possibility to misfit randomly

ISSN |2355-3669| E-ISSN |2503-2518| Volume 8| Number 1|June 2021| Available online at http://jurnal.radenfatah.ac.id/index.php/edukasi

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or accidentally. A measurement instrument is considered unidimensional if less than 5% of all items are found to misfit (Wright & Masters, 1982; Wright & Mok, 2000). Or, at least, a thorough consideration of the theoretical importance of these items is required before deciding to abolish them (Bohlig, Fisher, Masters, & Bond, 1998).

In terms of quantity, one misfit item (item number 1) covered only 3.3% of the total items. This figure is still below 5% of the tolerable amount of misfitting items. However, a negative PTMEAS CORR value cannot be tolerated in the measurement with the Rasch Model because it shows the possibility that the item does not really refer to the anxiety construct in foreign language learning. To maintain the validity of the results of the measurement of the level of anxiety, the researcher decided to delete item 1 that has a negative PTMEAS CORR from the next data analysis. This, however, also suggests that the Indonesian version of the scale measured what it is purposed to measure.

## Respondents' anxiety in learning English

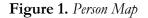
Table 5 shows that, overall, the level of the students' anxiety (n = 96) in learning English can be grouped into two tiers based on the value of *separation* = 2. 43, with a value of estimation reliability = .86. Furthermore, Figure 1 shows that the 2. 43 groups of anxiety levels referred respondents with logit values in the range of 1 standard deviation above the mean and 1 standard deviation below the mean. Indeed, there are several respondents with logit values above and below this range, but the numbers are not significant.

	RAV	v				MODEL		INFIT		OUTFIT	
	SCOP	RE	COUNT	MEAS	URE	ERROR	М	NSQ	ZSTD	MNSQ	ZST
MEAN	101.	.1	31.9		.19	.21	1	.00	2	1.00	
S.D.	12.	. 8	.4		.61	.02		.44	1.7	.44	1.
MAX.	149.	. 0	32.0	3	.39	.37	3	.00	6.0	3.37	6.
MIN.	67.	.0	30.0	-1	.23	.20		.24	-5.0	.23	-4.
REAL	RMSE	.23	ADJ.SD	.57	SEPA	ARATION	2.43	Pers	son REL	IABILITY	.8
MODEL	RMSE	.21	ADJ.SD	.58	SEPA	ARATION	2.68	Pers	son REL	IABILITY	.8
S.E.	OF Perso	on ME	AN = .06								

## **Table 5.** Levels of anxiety and estimation reliability

Figure 1 also shows that most of the samples have a relatively high level of anxiety in learning English. This is indicated by the fact that more than 50% (51) of the respondents have the logit value above the *Mean* (M). However, Figure 1 shows that there is no systematic distribution pattern of respondents' anxiety levels along the logit scale, either by semester or class.

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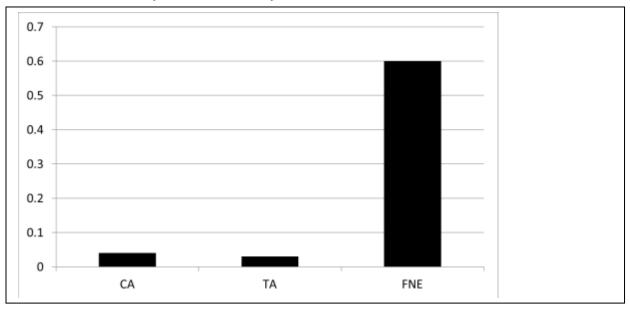
Items MAP OF Persons <rare>|<more> 4 05 3 2 X T|T 36 Х 15 Х 52 62 1 51 Х + X S|S 02 13 14 22 49 54 88 93 12 19 43 26 28 45 XXX | 09 44 48 56 63 67 74 96 Х 01 46 75 82 85 87 92 XX 06 11 61 77 84 86 90 91 58 70 81 83 XXXXX M| 34 50 53 55 X +M 03 17 21 23 30 32 47 0 41 XXXX | 04 07 29 31 40 42 57 60 64 65 68 71 89 94 95 20 24 25 33 37 39 59 69 76 78 79 XXX S| 16 18 27 35 38 66 73 72 X XXX |S 10 -1 X T+ Х | 08 80 Х 1 ΙT Х -2 <frequ>|<less>

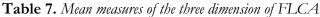
# Respondents' anxiety levels in the three dimensions of foreign language classroom anxiety

The comparison of the means of the total measures of a set of items on each of the three FLCA dimensions (Table 7) shows that the Fear of Negative Evaluation (FNE) dimension has the highest value (0.6), considerably higher than the mean measures for the other two dimensions, ie Communication. Apprehension (CA [0.0] 4) and Test Anxiety (TA [0.03]). Referring to the principles of interpretation of the measure of items of the research instrument where the higher the measure value, the lower the endorsability of the item by the respondent, it can be concluded that in general respondents have a higher level of anxiety on the CA and TA dimensions than the FNE dimension.

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Specifically, the item with the highest level of agreement- hence, one with which the respondents feel most anxious, is item 10 (I worry about the consequences of failing my foreign language class) from the Test Anxiety dimension with measure of -1.56. While the item that has the lowest level of agreement is item 32 (I would probably feel comfortable around native speakers of the foreign language) from the Communication Apprehension dimension, measure 1.52.





# Comparisons of the students' anxiety levels in learning English across the variables of gender and semester

*Gender,* of the 96 samples, 31 were males and 62 were females, and 3 others did not provide information about this. While in the overall population of the students in semester, 2,4 and 6, there were 87 males and 138 females

Ho = There is no significant difference between the anxiety level of PBI male students and the anxiety level of PBI female students in learning English

The *t*-Test result show that there is no significant difference in the anxiety level of male students with the anxiety level of female students in learning English. t = -1.109, df = 91,  $\alpha = .270$ . Thus *Ho* was accepted.

**Semester,** there are 3 groups of respondents according to semester, namely groups of students in semesters 2.4, and 6. Since the prerequites for the use of parametric test were not met, the non-parametric test of Kruskal-Wallis was used. The result showed a difference in anxiety levels between at least one group n=96, df = 2,  $\alpha = .038$ . Thus Ho was rejected. Furthermore, the Posthoc test using the Mann-Whitney U test showed a significant difference between the semester 2 group (Mean Rank = 24.78), and the Semester 4 group (Mean Rank = 34.57), Z = -2.048,  $\alpha = .041$ ,

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and using the *t* test, a significant difference was also found between the Semester 4 group (M = .4587) and the Semester 6 group, t = 2.622, df = 55,  $\alpha = .011$ . Thus, the semester 4 students had the highest level of anxiety.

#### Discussion

The results of the analysis in this study have shown that; first, most of the respondents tended to have a relatively high level of anxiety in learning English. There are a substantial number of students (> 50%), who had problems with anxiety in learning English. As the literature suggests, the anxiety can have a positive and negative effect on student achievement in (e.g., Yamashiro McLaughlin, 2001; Jackson, 2002; foreign language learning & Hashimoto, 2002; Awan, Azher, Anwar, & Naz, 2010; Dewaele & Ip, 2013; Zheng & Cheng, 2018) This study also shows that respondents have a high level of anxiety in the CA and TA dimensions. The same phenomenon was also found in Amengual-Pizarro's research (2018). This indicates that respondents are concerned about their ability to communicate using the foreign language they are learning. Thus, it seems that respondents need more reinforcement from teachers and peers to increase their confidence in communicating in the foreign languages they are learning and be provided a greater portion of communication practices as also suggested by research by Jin and Dewaele (2018). The fact TA is also the main source of respondents' anxiety in learning foreign languages is also in line with the results of the item analysis. The results show that anxiety about the consequences of failing to complete the foreign language learning program as a whole (item 10) comes from this dimension and is the item with the highest agreement level. In Amengual-Pizarro's research (2018), this item ranks the second as item with the highest agreement level. These indicate the need for efforts to change the negative stigma of testing, for example by developing tests that focus more on evaluating the learning process in order to identify aspects that students should improve in their learning, not as a device to pass or fail them.

The third finding of this study indicates a significant difference in the level of students' anxiety across different semesters. The difference was found between semester 2 and 4 and between semester 4 and 6, where those of semester 4 tended to have higher anxiety. Pertaining to these phenomena, research by Elahi, Shirvan, and Taherian (2018) shows that FLCA is dynamic; it tends to decrease along the learning process and is negatively correlated with the Foreign Language Enjoyment (FLE) variable. However, their study also shows that there is a time point at which respondents experience both FLCA and FLE. This study also shows that there was no significant difference in the level of anxiety in learning foreign languages between male and female respondents. This may indicate that gender may not be a variable that can be constantly associated with anxiety in learning the foreign language. However, the literature shows inconsistent findings regarding the relationship between gender and FLCA. For example, research by Azher, Anwar, and Naz (2010) and Elaldi (2016) shows that male respondents tend to have higher levels of respondents. However, Park and French's research (2013) shows anxiety than female the contrary. Meanwhile, Jiang and Dewaele's research (2019) indicates that there is no difference in the level of anxiety between respondents from the two groups of independent variables. As it seems, further research is still needed on this issue.

## Conclusions

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Overall, the study found a substantial number of students who tended to have high levels of anxiety in learning English. It appears that the main sources of the students' anxiety were the CA and TA dimensions of the FLCA. The significant difference found in the comparison of anxiety levels between semesters shows that the fourth semester group had a relatively higher level of anxiety than the other semester groups. In the context of this study, the gender variable did not show a significant association with the level of anxiety of the respondents. Finally, it was shown that the Indonesian version of FLCA scale functioned meaningfully for the purposes of the study.

Based on the findings and discussion above, the researchers recommend the following three recommendations. Further research is needed to examine more deeply the impact of the students' anxiety in learning foreign languages, which was beyond the scope of this study, especially on their academic performance. So that anticipatory and remedial steps can be planned and implemented if deemed necessary. As FLCA seems to be dynamic, attention should always be given to it during the course of a foreign language program and foreign language educators should always aware of it. Further research with greater number of sample would be beneficial for the evaluation of the Indonesian version of the FLCAS developed in this study.

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ISSN |2355-3669| E-ISSN |2503-2518| Volume 8| Number 1|June 2021|

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