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Abstract

This study sought to measure 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 of a 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, rasch analysis, TEFL

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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 Rasch 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?

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 two categories, namely; first, innate *anxiety which* is a tendency to worry that 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 self-perception, 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,

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, 2001; 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 psychometric 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 as follows: (1) there are two known forms of anxiety that affect learning, namely debilitating anxiety and facilitative anxiety (Oxford, 1999; Spielmann & Radnofsky, 2001). (2) Debilitating 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

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*

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:

Table 2. *Number of samples from each semester and class*

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

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,

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

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

ENTRY NUMBER	RAW SCORE	COUNT	MEASURE	ERROR	INFIT MNSQ	ZSTD	OUTFIT MNSQ	ZSTD	PTMEA CORR	Items
1	298	95	.07	.11	1.92	6.2	1.15	7.2	-.46	I0001
32	202	96	1.44	.13	1.23	1.5	1.30	1.8	.02	I0032
28	377	96	-1.08	.14	1.16	1.0	1.17	1.0	.03	I0028
11	233	95	.93	.12	1.12	.9	1.23	1.6	.05	I0011
22	385	96	-1.24	.15	1.00	.0	1.03	.3	.07	I0022
2	297	94	.06	.11	1.64	4.5	1.64	4.4	.08	I0002
24	370	96	-.94	.14	.97	-.1	.93	-.4	.16	I0024
10	399	96	-1.56	.16	1.25	1.4	1.24	1.4	.18	I0010
6	288	96	.24	.11	1.04	.4	1.06	.6	.24	I0006
8	358	96	-.73	.13	1.42	2.5	1.40	2.3	.28	I0008
15	355	95	-.73	.13	.82	-1.2	.79	-1.4	.28	I0015
13	260	96	.59	.11	1.21	1.6	1.22	1.7	.36	I0013
25	348	96	-.57	.12	.91	-.6	.86	-.9	.37	I0025
12	300	96	.09	.11	1.01	.1	1.00	.0	.44	I0012
29	337	96	-.41	.12	.96	-.3	.94	-.4	.44	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	.13	.79	-1.4	.85	-1.0	.55	I0021
9	337	96	-.41	.12	.97	-.2	.93	-.5	.55	I0009
18	270	96	.47	.11	.64	-3.4	.65	-3.3	.57	I0018
7	323	96	-.21	.12	.73	-2.3	.71	-2.4	.59	I0007
33	309	94	-.12	.12	.98	-.1	.97	-.2	.59	I0033
16	297	96	.12	.11	.82	-1.5	.80	-1.7	.61	I0016
3	316	96	-.12	.12	.82	-1.5	.80	-1.7	.62	I0003
31	259	96	.61	.11	.87	-1.1	.87	-1.1	.65	I0031
26	260	96	.59	.11	.97	-.2	1.00	.0	.67	I0026
27	290	96	.21	.11	.57	-4.3	.58	-4.2	.68	I0027
MEAN	303.	96.	.00	.12	1.00	-.2	1.00	-.1		
S.D.	51.	1.	.72	.01	.27	2.0	.30	2.1		

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

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

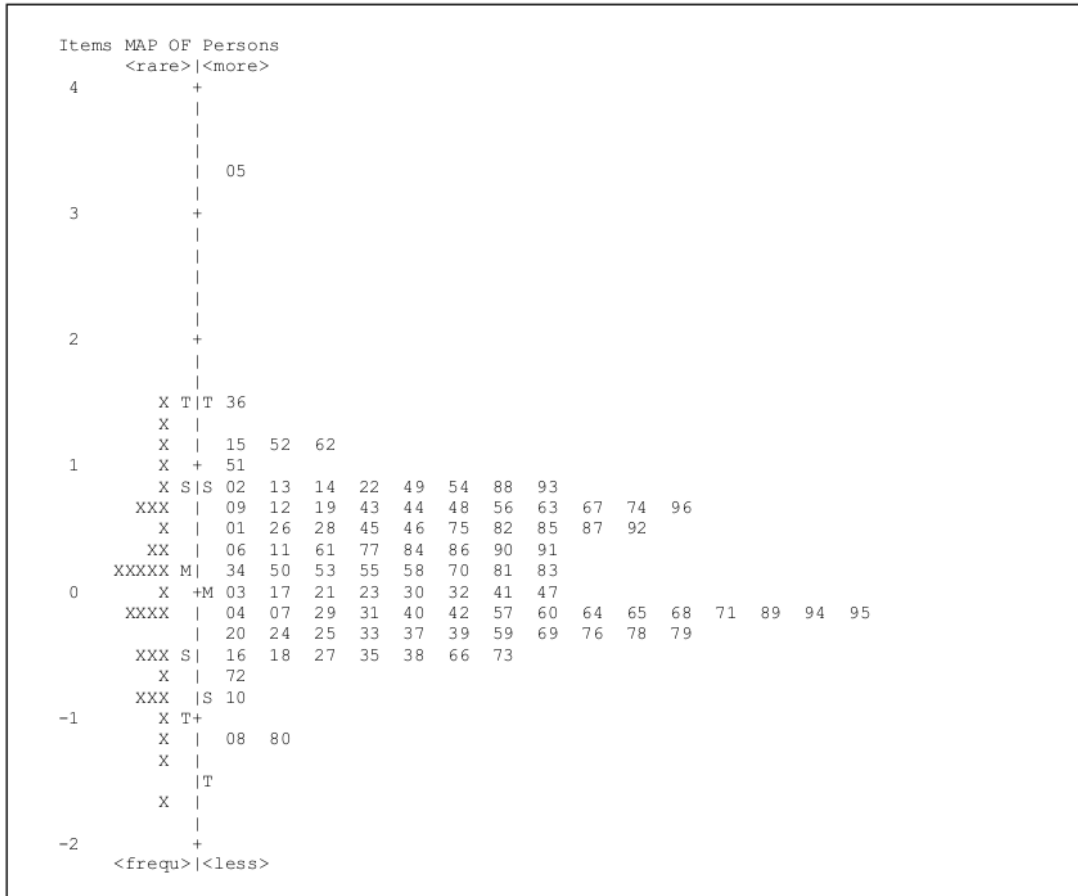
Table 5 shows that, overall, the level of the students' anxiety (n = 96) in learning English can be grouped into two tiers based on the value of *separation* = 2.43, with a value of estimation reliability = .86. Furthermore, Figure 1 shows that the 2.43 groups of anxiety levels referred respondents with 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.

Table 5. Levels of anxiety and estimation reliability

	RAW SCORE	COUNT	MEASURE	MODEL ERROR	INFIT		OUTFIT	
					MNSQ	ZSTD	MNSQ	ZSTD
MEAN	101.1	31.9	.19	.21	1.00	-.2	1.00	-.1
S.D.	12.8	.4	.61	.02	.44	1.7	.44	1.7
MAX.	149.0	32.0	3.39	.37	3.00	6.0	3.37	6.5
MIN.	67.0	30.0	-1.23	.20	.24	-5.0	.23	-4.9
REAL RMSE	.23	ADJ.SD	.57	SEPARATION	2.43	Person RELIABILITY	.86	
MODEL RMSE	.21	ADJ.SD	.58	SEPARATION	2.68	Person RELIABILITY	.88	
S.E. OF Person MEAN = .06								

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.

Figure 1. Person Map

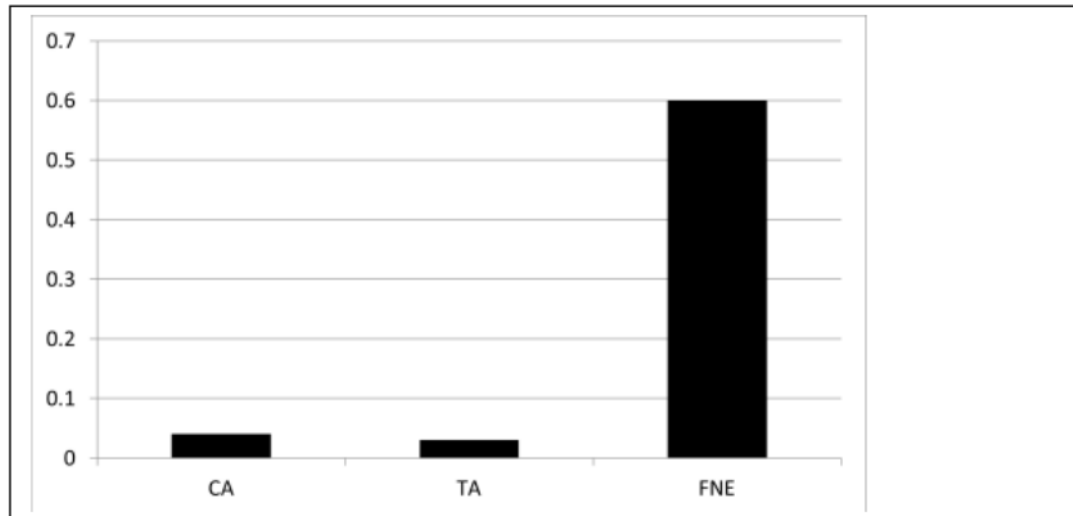


Respondents' anxiety levels in the three dimensions of foreign language classroom anxiety

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.

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.

Table 7. Mean measures of the three dimension of FLCA



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 prerequisites 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 Post-hoc 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), $Z = -2.048, \alpha = .041$,

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 foreign language learning (e.g., Yamashiro & McLaughlin, 2001; Jackson, 2002; 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 anxiety than female respondents. However, Park and French's research (2013) shows 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

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 FLCAS. 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 FLCAS 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 FLCAS 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 be 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.

References

- Alrabai, F. (2015). The influence of teachers' anxiety-reducing strategies on learners' foreign language anxiety. *Innovation in Language Learning and Teaching*, 9(2), 163-190.
- Árnadóttir, G., & Fisher, A. G. (2008). Rasch analysis of the ADL scale of the A-ONE. *American Journal of Occupational Therapy*, 62(1), 51-60.
- Azher, M., Anwar, M. N., & Naz, A. (2010). An investigation of foreign language classroom anxiety and its relationship with students achievement. *Journal of College Teaching & Learning (TLC)*, 7(11).
- Aydin, S., Harputlu, L., Uştuk, Ö., Güzel, S., & Çelik, Ş. S. (2017). The children's foreign language anxiety scale: Reliability and validity. *Dil ve Dilbilimi Çalışmaları Dergisi*, 13(2), 43-52.
- Aydın, S., Yavuz, F., & Yeşilyurt, S. (2006). Test anxiety in foreign language learning. *Balıkesir University Journal of Social Sciences Institute*, 9, 145-160.
- Bohlig, M., Fisher, W. J., Masters, G. N., & Bond, T. (1998). Content validity and misfitting items. *Rasch Measurement Transactions*, 12(1), 607.
- Bond, T. G., Fox, C. M. (2013). *Applying the Rasch Model: Fundamental Measurement in the Human Sciences*, Second Edition. United Kingdom: Taylor & Francis.
- Brown, H. D. (2007). *Principles of Language Learning and Teaching*. South Korea: Pearson Longman.
- Buyukkarci, K. (2014). Formative microteaching in teaching and foreign language anxiety. *The Anthropologist*, 18(2), 505-511.
- Azher, M., Anwar, M. N., & Naz, A. (2010). An investigation of foreign language classroom anxiety and its relationship with students achievement. *Journal of College Teaching & Learning (TLC)*, 7(11).
- Cui, J. (2011). Research on High School Students' English Learning Anxiety. *Journal of Language Teaching & Research*, 2(4).
- Dewaele, J. M., & Ip, T. S. (2013). The link between foreign language classroom anxiety, second language tolerance of ambiguity and self-rated English proficiency among

- Chinese learners.
- Shirvan, M. E., & Taherian, T. (2018). Longitudinal examination of university students' foreign language enjoyment and foreign language classroom anxiety in the course of general English: latent growth curve modeling. *International Journal of Bilingual Education and Bilingualism*.
- Elaldi, S. (2016). Foreign Language Anxiety of Students Studying English Language and Literature: A Sample from Turkey. *Educational Research and Reviews*, 11(6), 219-228.
- Elkhafai, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The modern language journal*, 89(2), 206-220.
- Ganschow, L., & Sparks, R. (1996). Anxiety about foreign language learning among high school women. *The Modern Language Journal*, 80(2), 199-212.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gerencheal, B. (2016). Gender Differences in Foreign Language Anxiety at an Ethiopian University: Mizan-Tepi University Third Year English Major Students in Focus. *Online Submission*, 1(1), 1-16.
- Gregersen, T. S. (2003). To Err Is Human: A Reminder to Teachers of Language-Anxious Students. *Foreign Language Annals*, 36, 1, 25-32.
- Gregersen, T., & E. K. Horwitz. 2002. Language Learning and Perfectionism: Anxious and Non-Anxious Language Learners' Reactions to Their Own Oral Performance. *The Modern Language Journal*, 86, 4, 562-570.
- Gürsoy, E., & Akin, F. (2013). Is younger really better? Anxiety about learning a foreign language in Turkish children. *Social Behavior and Personality: an international journal*, 41(5), 827-841.
- Hashimoto, Y. (2002). Motivation and willingness to communicate as predictors of reported L2 use: The Japanese ESL context. *University of Hawai'i Second Language Studies Paper 20 (2)*.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual review of applied linguistics*, 21, 112-126.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *Tesol Quarterly*, 20(3), 559-562.
- Huang, S., Eslami, Z., & Hu, R. J. S. (2010). The Relationship between Teacher and Peer Support and English-Language Learners' Anxiety. *English Language Teaching*, 3(1), 32-40.
- Jackson, J. (2002). Reticence in second language case discussions: Anxiety and aspirations. *System*, 30(1), 65-84.
- Kamil, D. (2012). Secondary school EFL teachers self-efficacy, understanding of and practices in school-based curriculum development in the district of Kerinci, Indonesia. (Unpublished doctoral dissertation). International Islamic University Malaysia, Malaysia.
- Levine, G. S. (2003). Student and instructor beliefs and attitudes about target language use, first language use, and anxiety: Report of a questionnaire study. *The Modern Language Journal*, 87(3), 343-364.
- Lucas, R. I., Miraflores, E., & Go, D. (2011). English language learning anxiety among foreign language learners in the Philippines. *Philippine ESL Journal*, 7(94-119).

- MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language learning*, 39(2), 251-275.
- Na, Z. (2007). A study of high school students' English learning anxiety. *The Asian EFL Journal*, 9(3), 22-34.
- Lucas, R. I., Miraflores, E., & Go, D. (2011). English language learning anxiety among foreign language learners in the Philippines. *Philippine ESL Journal*, 7(94-119).
- Oxford, R. L. (1999). Anxiety and the language learner: New insights. *Affect in language learning*, 58, 67.
- Palacios, L. M. (1998). Foreign language anxiety and classroom environment: A study of Spanish university students (Unpublished doctoral dissertation). The University of Texas, Austin, TX
- Park, G. P., & French, B. F. (2013). Gender differences in the foreign language classroom anxiety scale. *System*, 41(2), 462-471.
- Rasch, G. (1980). Probabilistic Models for Some Intelligence and Attainment Tests. Denmark: Danmarks paedagogiske Institut.
- Sadiq, J. M. (2017). Anxiety in English Language Learning: A Case Study of English Language Learners in Saudi Arabia. *English Language Teaching*, 10(7), 1-7.
- Schmidt, R. (2001). Motivation and Second Language Acquisition. United States: Second Language Teaching & Curriculum Center, University of Hawaii' at Mānoa.
- Shams, A. N. (2006). Use of Computerized Pronunciation Practice in the Reduction of Foreign Language Classroom Anxiety.
- Ganschow, L., & Sparks, R. (2001). Learning difficulties and foreign language learning: A review of research and instruction. *Language Teaching*, 34(2), 79-98.
- Spielmann, G., & Radnofsky, M. L. (2001). Learning language under tension: New directions from a qualitative study. *The Modern Language Journal*, 85(2), 259-278.
- Tian, C. H. E. N., Manfei, X. U., Justin, T. U., Hongyue, W. A. N. G., & Xiaohui, N. I. U. (2018). Relationship between Omnibus and Post-hoc Tests: An Investigation of performance of the F test in ANOVA. *Shanghai archives of psychiatry*, 30(1), 60.
- Tóth, Z. (2008). A foreign language anxiety scale for Hungarian learners of English. *WoPaLP*, 2(1), 55-77.
- Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of consulting and clinical psychology*, 33(4), 448.
- Williams, K. E., & Andrade, M. R. (2008). Foreign language learning anxiety in Japanese EFL university classes: Causes, coping, and locus of control. *Electronic Journal of Foreign Language Teaching*, 5(2), 181-191.
- Wright, B. D., & Linacre, J. M. (1991). A user's guide to BIGSTEPS: Rasch-model computer program. *Chicago: Mesa*.
- Wright, B. D., & Masters, G. N. (1982). *Rating scale analysis*. MESA press.
- Wright, B. D., & Mok, M. (2000). Understanding Rasch measurement: Rasch models overview. *Journal of applied measurement*.
- Yamashiro, A., & McLaughlin, J. (2001). Relationships among attitudes, motivation, anxiety, and English language proficiency in Japanese college students. *Second language acquisition research in Japan*, 113-127.
- Yamat, H., & Bidabadi, F. S. (2012). English language learning anxiety among Iranian EFL

- freshman university learners. *Research Journal of applied sciences*, 7(8), 413-420.
- Yassin, A. A., & Razak, N. A. (2018). Investigating Foreign Language Learning Anxiety among Yemeni University EFL Learners: A Theoretical Framework Development. *English Language Teaching*, 11(10), 38-51.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest?. *The modern language journal*, 75(4), 426-439.
- Zheng, Y., & Cheng, L. (2018). How does anxiety influence language performance? From the perspectives of foreign language classroom anxiety and cognitive test anxiety. *Language Testing in Asia*, 8(1), 1-19.

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