RELATIONSHIP BETWEEN THE FOREIGN LANGUAGE CLASSROOM ANXIETY AND CHINESE CHARACTER ACHIEVEMENT AMONG LAOS MANDARIN STUDENTS

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Abstract

The main aim of this study was to investigate the relationship between Foreign Language Classroom Anxiety (FLCA) and Chinese character achievement of Mandarin learners in Laos. The sample of the research consisted of 133 (54 females, 79 males) attending a three-year Mandarin course at Hua Qiao Champasak Technology College. The results of Pearson correlation revealed foreign language classroom anxiety was found to be significantly and positively correlated with English achievement ($r=0.178$, $p<0.05$). In addition, although independent sample t-test showed there was no significant difference in Chinese character achievement and foreign language classroom anxiety between male students and female students, the mean ($M=104.48$) demonstrated that females exhibited higher levels of anxiety than males ($M=103.47$), and females' achievement ($M=23.24$) are lower than males ($M=24.94$). Following these results, certain suggestions were set for foreign language teachers to be aware of foreign language classroom anxiety level, its causes, and results in Mandarin language classroom settings.

Keywords: Chinese Character Achievement; Foreign Language Classroom Anxiety; Mandarin leaners

1.0 INTRODUCTION

Anxiety is the subjective feeling of tension, fear, and worry related to the excitement of the autonomic nervous system (Spielberger, 1983). Anxiety itself is multifaceted, and there are many types of anxiety, such as state anxiety, trait anxiety, and achievement anxiety. However, in the field of second language acquisition, learners will experience a unique kind of anxiety,

namely language anxiety or foreign language anxiety which is the anxiety of a specific situation (Horwitz, 2010).

Horwitz, Horwitz, and Cope (1986) defined foreign language anxiety as the unique complex structure of self-perception, feeling, belief, and behavior related to classroom language learning due to the uniqueness of the language learning process, and further proposed be foreign language anxiety included communication apprehension, test anxiety, and fear of negative evaluation. Powers and Smythe (1980) defined communication apprehension as the anxiety or fear syndrome experienced by a person in real or expected communication with another person or other people. Test anxiety is a kind of performance anxiety caused by fear of failure. And the fear of negative evaluation was defined as fear of evaluation of others, avoidance of evaluation emotion, and expectation of negative evaluation of others (Horwitz et al. 1986).

In Mandarin learning, Chinese characters are especially difficult to learn, which has almost become a recognized view (Zhou, 2007). The success or failure of Mandarin learning largely depends on the success or failure of Chinese character learning (Li, 2009). However, in previous anxiety research related to Mandarin learning, most studies (e.g. Fu, 2019; Tang, 2018; Zhou, 2015) focused on the relationship between anxiety and Mandarin achievement, but ignore the relationship between anxiety and Chinese character achievement. In addition, gender is often regarded as an important factor affecting the second language learning anxiety. He (2014) found Mandarin learning anxiety showed significant differences in gender for 93 Mandarin learners from 26 countries, that is, female students experience higher levels of anxiety. However, Basith et al. (2019), Cao and Tian (2017) , and Zhou (2015) found that gender had no significant influence on Mandarin learning anxiety of students. However, little research focused on the gender difference of Mandarin learners' anxiety in Laos. Therefore, to fill the gaps, this study is to investigate the relationship between the foreign language classroom anxiety and Chinese character achievement. Moreover, the gender factor will also be examined because of the inconsistent conclusions in previous research.

This study aims to investigate the level of Foreign Language Classroom Anxiety (FLCA) and Chinese character achievement of Mandarin learners in Laos, relationship between FLCA and their Chinese character achievement, and identify the difference of gender regarding their levels of foreign language classroom anxiety and their performance in Chinese character achievement. Therefore, this research will answer the following questions:

1) What is the level of FLCA and Chinese Character achievement among the students?

2) Is there a relationship between students' foreign language classroom anxiety and their Chinese character achievement?

3) Is there a difference between male and female students regarding their levels of foreign language classroom anxiety and their performance in Chinese character achievement?

Then, three null hypotheses were developed based on the research questions.

Ho1: There is no relationship between students' foreign language classroom anxiety and their Chinese character achievement.

Ha1: There is a relationship between students' foreign language classroom anxiety and their Chinese character achievement.

Ho2: There is no significant difference between male and female students in foreign language classroom anxiety.

Ha2: There is a significant difference between male and female students in foreign language classroom anxiety.

Ho3: There is no significant difference between male and female students in Chinese character achievement.

Ha3: There is a significant difference between male and female students in Chinese character achievement.

2.0 LITERATURE REVIEW

2.1 The Relationship between Anxiety and Mandarin performance

The previous statistical results are basically consistent. There is a negative correlation between anxiety and academic performance, whether in the target language context or the non-target language context.

Zhou (2015) examined the foreign classroom anxiety and test anxiety of 134 Mandarin learners and the relationship between these two kinds of anxiety and test scores. The Pearson correlation coefficient shows that there is a significant correlation between students' classroom anxiety, test anxiety and the scores of Hanyu Shuiping Kaoshi (HSK). Among them, the HSK scores are significantly negatively correlated with classroom anxiety and test anxiety, which are r=-0.726, p<0.01 and r=-0.454, p<0.01, that is, the higher the classroom anxiety value and test anxiety value, the lower the test score. And there is a significant positive correlation between foreign classroom anxiety and test anxiety, that is, students with high foreign

classroom anxiety have higher test anxiety.

Liu (2016) conducted a study about the relationship between the anxiety and achievement of 147 Mandarin learners in Japan. Descriptive statistics showed that the Mandarin learner's foreign language classroom anxiety mean was 87.76. The Pearson's correlation coefficient indicated the relationship between students' foreign language classroom anxiety and test scores was significantly negatively correlated (r=-0.224**, p<0.01). The author stated that Mandarin course was optional courses for learners and many learners learn Mandarin only to gain credits. Therefore, although anxiety and performance are significantly correlated, the correlation is not high.

Tang (2018) investigated the anxiety of 53 Mandarin learners from Central Asia who study in China. These Mandarin learners have studied Mandarin for three months for the elementary Chinese level. The survey results showed that the average anxiety score of Mandarin learners is 99. The author divided all students into low anxiety group (33 points-80 points), medium anxiety group (80 points-99 points) and high anxiety group (99 points-125 points) based on the average total score. The data showed that more than half (58%) of Mandarin learners have moderate or above anxiety. The Pearson correlation coefficient results show that Mandarin classroom anxiety and HSK total scores show a significant negative correlation (r=-0.359, p<0.01). At the same time, the scores in the listening part and the reading part have a significant negative correlation with anxiety. However, there is no significant correlation between the writing score and classroom anxiety.

2.2 Gender Difference in Anxiety

A total of 93 Mandarin learners from 26 countries participated in a study conducted by He (2014). Descriptive data shows that women's mean score of anxiety is 86.93, which is higher than the men's (M=82.06). The results of a one-way analysis of variance of male and female participants showed that there was a significant difference in the communicative situation (p<0.05), and there is an extremely significant difference in the degree of fear (p<0.01). Although on the whole, there is little difference in anxiety between male students and female students, the above data shows that girls feel more anxiety in Mandarin communicative situations than boys. At the same time, for negative evaluations from others, girls have a stronger sense of anxiety than boys.

Wang (2015) conducted a survey on learning anxiety of Mandarin learners. Participants in this survey are 132 Chinese learners from Nanjing Normal University with 84

boys and 48 girls. The level of anxiety is generally moderate with an average of 94.28. Among them, the average of boys' anxiety (*M*=93) is lower than the average of girls' anxiety (*M*=96.52). The author used a *t*-test to examine the differences in learning anxiety of different genders. The data showed that there was no statistically gender difference in Mandarin learning anxiety (*t*=-1.085, *p*=0.280>0.05). Among the 33 items in the anxiety scale, only one item, "I am very confident in speaking Chinese in class", has a significant gender difference, which means that boys' anxiety level lower than girls' when speaking Mandarin.

However, Wu (2016) reported some results which are different from other studies. That is, although there are gender differences in the Mandarin learning anxiety of intermediate Mandarin learners, no gender difference was found among beginner Chinese learners with male (*M*=91.19) and female (*M*=93.08). The result indicated, as the difficulty of learning tasks increases, it may lead to more obvious gender differences in Mandarin learning anxiety.

3.0 METHODOLOGY

3.1 Participants

There are a total of 217 Mandarin learners majoring in Information Technology (IT) and Accounting at Hua Qiao Champasak Technology College. These 217 students are assigned to 9 classes with 10-30 students in each class.

According to the table of Kreicie and Morgan (1970), the sample size should be around 140 if the population is 220. Thus, 147 students in six classes were selected to participate in this survey. Finally, 133 valid questionnaires from 79 males and 54 females were collected. All participants between 18 and 22 years old have the same ethnic background and language background, that is, they are Lao and Mandarin beginners. These participants are required to complete Mandarin as part of their degree requirements.

3.2 Instruments

The Foreign Language Classroom Anxiety Scale (FLCAS)

FLCAS is originally employed by Horwitz et al. (1986). Then, Lee (2011) developed the English Language Anxiety Survey (ELAS) based on FLCAS, including communication apprehension (13 items), test anxiety (9 items), and negative evaluation (10 items). Considering that this research was implemented in an Asian context, which is the same as Lee (2011) who investigates the anxiety of English language learners in Taiwan University. Therefore, this research will modify to a version for Mandarin learners based on English Language Anxiety Survey (ELAS) in Lee' (2011) study. Similarly, the questionnaire used a 5-point Likert type

scale ranging from "strongly disagree" (1 point) to strongly agree" (5points), including Communication Anxiety (13 items), Test Anxiety (9 items), and Fear of Negative Evaluation (10 items).

1) Communication Anxiety (13 items) mainly occurs when students communicate with others in the target language for fear of making mistakes, e.g. "I feel that the other students speak Mandarin better than I do."

2) Test Anxiety (9 items) is students' anxiety when taking a test, e.g. "I become nervous when the teacher asks me unexpected questions and I have to answer them verbally."

3) Fear of Negative Evaluation (10 items) is afraid of negative evaluation from classmates or teachers when the student has a chance to show the language, e.g. "I worry about a Mandarin teacher who might have negative feelings about me due to my bad performance on Mandarin listening comprehension exercises."

The participants in this study are Mandarin learners from Laos which are different from the respondents in the previous study. Therefore, a pilot test was conducted to investigate the reliability of these questionnaire items. 39 students who were not involved in the survey but belonged to the target population were required to fill out the questionnaire. The Cronbach's alpha coefficient showed the reliability of FLCAS was acceptable with 0.938.

The FLCAS are scored by assigning points to the options chosen by the participants for each item (Strongly disagree=1 to Strongly agree=5). For more meaningful analysis, the numerical indicators were divided into five levels (very low, low, intermediate, high, very high) to judge the scale for the responses according to the Azwar categorization system (Azwar, 2013).

Table 1: Categorization scheme of Foreign Language Classroom Anxiety Scale

Score	Anxiety intensity
$X \leq 64$	Very low anxiety
$64 < X \leq 85.34$	Low anxiety
$85.34 < X \leq 106.67$	Moderate anxiety
$106.67 < X \leq 128$	High anxiety
$X > 128$	Very high anxiety

Chinese Character Test (CCT)

The Chinese Character Test is a test that investigates the ability of Mandarin learners to

recognize the Chinese characters they have learned, consisting of 15 multiple-choice questions. The score for each question is two points for correct answers and 0 points for wrong answers. Therefore, the minimum score of the 15 items is 0 points and the maximum is 30 points.

4.0 RESULT AND DISCUSSION

Research Question 1： What is the level of FLCA and Chinese Character achievement among the students?

Table 2: *Descriptive Statistics for FLCA and Chinese Character achievement*

Scales	Min	Max	*M*	*SD*
FLCA	54	160	102.21	18.03
Chinese Character score	4	30	24.25	5.19

*Note. M=mean; SD=standard deviation

Table 2 clearly showed that the mean score of foreign language classroom anxiety was 102.21, with the minimum value is 54 and the maximum value is 160. The average score (*M*=102.21) with a total score of 160 for 32 items, indicating that Mandarin learners in this study have a moderate anxiety level according to the categorization scheme in Table 1. The result supported Tang' (2018) research, which also selected elementary Mandarin learners as a sample.

The resulted descriptive statistics for Chinese character achievement of the study showed that the scores ranged from 4 to 30 (the scores are out of 30), and with regards to mean, the sample had 24.25, indicating the students' Chinese Character score was above the medium score of 15.5.

Research Q2: Is there a relationship between students' foreign language classroom anxiety and their Chinese character achievement?

Table 3: Correlation between FLCA and Chinese Character Achievement

		Chinese Character Achievement
FLCA	Pearson correlation	.178*
	Sig(2-tailed)	.040
	N	133

* Correlation is significant at the 0.05 level (2-tailed).

Pearson correlation coefficients was conducted to investigate the relationship between FLCA and Chinese character achievement. The finding in Table 3 showed there is a significant correlation (r=0.178, p<0.05) between foreign language classroom anxiety and Chinese character achievement although the correlation is very weak according to the Chua (2012). Therefore, the Ha1 has been accepted. This result is inconsistent with previous research (Liu, 2016; Tang, 2018; Zhou, 2015) which proved the negative relationship between anxiety and Mandarin performance.

The finding in this study indicates that the impact of anxiety on performance is not entirely negative. As Brown (2000) stated the positive influence of anxiety in competition as facilitating anxiety structure, moderate anxiety can also promote student learning and improve academic performance. This result also validated Sung et al.'s (2016) view who proposed the stress-of-uncertainty model to explain students' test anxiety. Based on this model, anxiety does not necessarily only have a negative impact on performance. Appropriate anxiety can enhance people's motivation and help people focus on tasks. However, high levels of anxiety may inhibit people's performance. Therefore, the stress-of-uncertainty model conforms to the inverted U curve, which means anxiety may first have a positive impact on performance, once it reaches the critical point, anxiety will have a negative impact on performance.

In this study, most of the participants are beginner Mandarin learners. They only studied Mandarin for a year or so when the questionnaires were distributed. Possibly, learners have not developed a high level of anxiety in the process of learning Mandarin because they are full of curiosity about Mandarin at the beginning. Therefore, the anxiety caused by a moderate challenge can enhance rather than weaken the learner's motivation to learn Mandarin.

Research Q3: Is there a difference between male and female students regarding their levels of foreign language classroom anxiety and their performance in Chinese character achievement?

Means (M) and standard deviation (SD) were calculated to compare Chinese character achievement and anxiety cores for male and females (Table 4). To further examine the gender difference, independent sample *t*-test was also performed (Table 5).

Table 4: Comparison of Mean and Standard Deviations for Different Genders on FLCA and Chinese Character Achievement

Measure	Gender	*M*	*SD*

Communication anxiety	Male	42.73	7.45
	Female	43.06	9.06
Test anxiety	Male	29.23	5.70
	Female	30.15	6.71
Fear of negative evaluation	Male	31.51	6.10
	Female	31.28	6.79
FLCA	Male	103.47	17.73
	Female	104.48	21.10
Chinese Character Achievement	Male	24.94	3.65
	Female	23.24	6.76

Table 5: Independent t-test results of FLCA and Chinese character achievement for males and females

	t	*p*-value
Foreign language classroom anxiety	0.193	0.765
Chinese character achievement	1.684	0.096

Table 4 shows the mean and standard deviation for Chinese Character Achievement of Mandarin learners. This result, therefore, indicates that male students (*M*=24.94, *SD*=3.65) experienced higher levels of Chinese Character Achievement than female students (*M*=23.34, *SD*=6.76) did. This result is different from most previous result which found female students do better than male students in school (Dordinejad & Ahmadabad, 2014)

Table 4 also presents the mean and standard deviation of anxiety levels of male and female students within the three components of anxiety and the overall foreign language classroom anxiety. In terms of these three components of anxiety, it is observed that female students' communication anxiety (*M*=43.06, *SD*=9.06) and test anxiety (*M*=30.15, *SD*=6.71) were higher than that of males with *M*=42.73, *SD*=7.45 and *M*=29.23, *SD*=5.70. However, the fear of negative evaluation level of male students (*M*=31.51, *SD*=6.10) is slightly higher than that of girls (*M*=31.28, *SD*=6.79). In general, females' mean anxiety scores (*M*=104.48, *SD*=21.10) were higher than males (*M*=103.47, *SD*=17.73), which points out that female students are more anxious than males.

The results indicated that Laos female Mandarin learners have scored higher mean in Communication Anxiety and Test Anxiety than male learners. It is observed that in Laos male students has less anxiety to learn Mandarin when faced with the situation of communication and exams in Mandarin class. However, for fear of negative evaluation, the result makes it clear that male students are more anxious than females. That is, boys are more concerned about negative evaluates from teachers or peers in Mandarin classes than girls. Basically, these results supported the previous research such as He (2014) and Wang (2015).

However, it can be seen from Table 5 that the independent sample t-test did not show significant statistically differences in anxiety (t=0.193, p>0.05) and Chinese character achievement (t=1.684, p>0.05) between boys and girls. Therefore, the Ha2 and Ha3 are rejected. Although in the study of English as a second language, many researchers (Doğan & Tuncer, 2016; Dordinejad & Ahmadabad, 2014) have confirmed that gender plays an important role in anxiety, yet in Mandarin learning, some studies (Wang, 2015; Wu, 2016; Zhang & Yang, 2011) including this study did not find significant gender differences in anxiety research. The reason for this difference may be that Mandarin learning is less mandatory than English learning. Many learners learn Mandarin because of interest rather than force from society or their parents. In addition, as Wu (2016) stated, elementary Mandarin learners may not show significant gender differences in achievement and anxiety due to the shorter Mandarin learning time and simple learning content.

5.0 CONCLUSION

It was found that Mandarin learners at Hua Qiao Champasak Technology College were more anxious in their Mandarin language classrooms. Mandarin classroom anxiety was moderately high anxiety level. By computing Pearson correlation coefficients, we found there is a significant positive correlation between foreign language classroom anxiety and Chinese character achievement. However, independent sample t-test showed no significant difference between gender in their anxiety and Chinese character achievement.

Based on the findings of the study, the following measures are necessary for the Mandarin teaching. Firstly, a relaxing and pleasant Mandarin learning classroom is important for students. Teachers should design some teaching activities that can help students relieve their anxiety. Secondly, teachers should make students realize that it is common to make mistakes in language classes and do not pay too much attention to the mistake. Thirdly, teachers should encourage students more than criticize them. Especially in the primary stage,

students need to receive more positive evaluations to enhance their motivation and reduce their anxiety in learning.

Although some useful results have been stated, the researcher was faced with two limitations. This study only used self-reported questionnaire as a measure of FLCA. Future research can comprehensively measure learners' Mandarin learning anxiety combining quantitative and qualitative methods. On the other hand, sample in this study was limited to only one college in Laos, thus the results can hardly be generalized to other populations and situations. More samples are expected in future studies.

6.0 ACKNOWLEDGEMENT

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