# DOES PERCEIVED LANGUAGE DIFFICULTY HINDER LANGUAGE LEARNING?

By

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# A THESIS

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#### ABSTRACT

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While foreign language anxiety's debilitating effects on learners' achievement is a common thread in the L2 literature, few studies have been done on its sources. And although various recourses claim that some languages are harder for English speakers to learn than others, no empirical studies are cited. This is an empirical study that investigates 1) the relationship between perceived language difficulty and foreign language anxiety (FLA) in a beginner-level Chinese lesson as well as their effect on learning; 2) if and how participants' self-ratings of state anxiety change at different times during the treatment. English speakers were randomly placed into two groups and told different facts about Chinese showing why it is an easy or a hard language to learn. Four groups were formed based on their responses to a questionnaire: highanxiety group who were told Chinese was easy (N = 20), low-anxiety group who were told Chinese was easy (N = 15), high-anxiety group who were told Chinese was difficult (N = 17), low-anxiety group who were told Chinese was difficult (N = 16). The students then received a lesson that was taught in Chinese. Their state anxiety was measured throughout the lesson and their learning was measured by a translation guiz at the end. The results showed that perceived language difficulty might have a considerable debilitative effect on high-anxiety participants. The high-anxiety easy group scored significantly higher than the high-anxiety difficult group. Their state anxiety levels changes as the lesson progressed as well. The study suggests that both teachers' and students' misconception about language difficulty need to be reconsidered.

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# **CHAPTER 1 INTRODUCTION**

#### **Background of the study**

For many language learners, foreign language anxiety (FLA) impedes their communication in the L2 as well as their learning outcomes (e.g., grades) (Horwitz, 2000). Anxiety stems from experiencing negative affective responses repeatedly in foreign language (FL) classrooms, and gradually becomes "situational-specific"(MacIntyre & Gardner, 1991c). Much research has been done to investigate FLA's effects on language learning, although many of them are correlational studies (as mentioned in Sheen, 2008). In early studies, researchers have found both anxiety's facilitating and debilitating effects on language production and learning (Chastain, 1975; Kleinmann, 1977). Questionnaire studies then have been dominant the research on FLA and have generally found its negative effects on learning (Young, 1991). Little research has been done on the sources of FLA. However, Young(1991) suggested that learner and instructor beliefs about language learning and teaching were important sources that generated language anxiety.

Various anecdotal reports have claimed that there is a relative difficulty hierarchy of foreign languages (FL). They argue that certain FLs are more difficult, thus require much longer time for English speakers to reach a certain proficiency level. In fact, there is no published empirical evidence in the field so far clearly showing this. Because of these claims, instructors and students often bring these ideas about FL learning into these FL classrooms, so it is possible that their misbeliefs of FL play a role in language learning. Note that it is very likely that certain aspects of some languages take English speakers longer to learn, but there is little empirical evidence available.

# Aim of the research

This study aims to investigate the effects of perceived language difficulty and its relationship with FLA. In addition, it sets out to examine whether or not perceived language difficulty could make language learners more anxious in a foreign language classroom. The study involved sixty-eight native speakers of English enrolled in a language learning and teaching course at Michigan State University. Their FLA levels were measured by modifying Horwitz et al.'s foreign language classroom anxiety scale (FLCAS) (1986). Then, they were randomly placed into two conditions (*easy* and *difficult*) and participated in a Chinese lesson for one hour and twenty minutes. Their state anxiety levels were measured three times during the lesson and they were given a test to measure learning. In summary, this study used an experimental design to provide a clear understanding of to what extent language difficulty would influence language learning. No other studies have been done on the same topic; therefore, the results of the study will shed some light on how language difficulty and FLA interrelated and why FL teachers and learners should recognize its effects on learning.

#### Organization of the study

This thesis consists of six chapters. The next chapter provides a review of literature and research in the field that are relevant to this study followed by the two research questions that were generated on the basis of previous studies and theories. Gaps in the previous literature are then identified and discussed. Chapter 3 then explained the methodological approaches that the study used. The three instruments (i.e., modified FLCAS, Anxiometer, and translation quiz) used are then identified and discussed further in the chapter. The experimental procedure is presented subsequently. Chapter 4 presents the results of the study, with reference to the two research questions. Chapter 5 further analyzes the results and offers more details in the discussion of the

results. The discussion is also related to and compared with previous research on FLA. A summary of key findings with pedagogical and theoretical implications is included in Chapter 6. Finally, the limitations of the current study are considered.

# CHAPTER 2 FOREIGN LANGUAGE ANXIETY AND DIFFICULTY: A REVIEW OF THE LITERATURE

## **Chapter Introduction**

This chapter reviews the literature associated with the main areas of interest in this study. These areas are foreign language anxiety, foreign language difficulty and learner's belief, the stereotype threat of language learners, the Pygmalion effect, and each of their mediating effects on learning.

2.2 identifies the literature that explains what foreign language anxiety is, ways that are used to measure it and its significance and sources. The most prevalent theoretical framework of foreign language anxiety was proposed by Horwitz et al. (1986), and a myriad of studies have been conducted under this framework. 2.3 presents the understudied concept of a possible language difficulty hierarchy and learners' beliefs that are relevant to it. 2.4 then introduces stereotype threat and the Pygmalion effect, both of which originated in psychology, and their effects on learning.

#### **Foreign Language Anxiety**

Foreign language anxiety (FLA) is considered one of the most important affective factors influencing the success of language learning (Horwitz, 2001). It has been studied for over three decades in the field. In its infancy, FLA was not clearly understood; its effects on language learning were also ambiguous (Scovel, 1978). Nearly a decade after Scovel made his claim, Horwitz, Horwitz, and Cope (1986) established a new theoretical framework of FLA that was specific to second language learning. Their theory is by far the most influential one in our field

as well as the most widely supported. They argued that FLA is aroused from the language learning process and they start as negative emotional reactions some learners experience when learning or communicating in the foreign language. It consists three components: 1) communication apprehension; 2) fear of negative social evaluation, and 3) test anxiety. First, apprehension of communication stems from learners' inability of expressing their "authentic selves" (Horwitz et al., 1986). Under the influence of communicate apprehension, a talkative person might become speechless. Similarly, learners might also experience uncertainty about how to make a proper social impression because of their inability to express or comprehend in their foreign language. Thirdly, academic evaluations are a source of anxiety for language learners, and language classes are usually filled with quizzes and tests.

MacIntyre and Gardner (1991f) proposed an alternative approach and suggested that FL anxiety is a situational-specific anxiety as opposed to state anxiety ("at-the-moment" experience) and trait anxiety (stable disposition) (Spielberger, 1983). They proposed that language learners repeated experience of anxiety and worry in the language classroom could traumatize them and make them become anxiety-ridden when they enter the same situation.

#### Foreign Language Classroom Anxiety Scale

Before specially designed questionnaires of language anxiety were created, learners' diaries were used to investigate their language anxiety. Bailey's (1983) study revealed her own language learning experience. From her dairy entries, a conclusion was then made about a possible role of anxiety in foreign language classrooms: it could make learners both feel stressed and make them work harder. Chastain (1975) conducted a study on relationship between learners' grades and their anxiety levels. Among French, German, and Spanish courses, only the

French class showed a significant negative correlation between test anxiety and course grades. All three other classes demonstrated facilitating effects of anxiety on the course grades. Similar findings were then illustrated by Kleinmann's 1977 study.

Horwitz et al. (1986) then devised a questionnaire to solve the inconclusive situation of language anxiety research. The Foreign language classroom anxiety scale (FLCAS), the most widely used questionnaire, was created by Horwitz et al. (1986). It is a well-designed questionnaire that is intended to assess the degree of FL anxiety in classroom setting. This selfreport provides users with thirty-three items on a five-point Likert scale with answers ranging from *strongly agree* to *strongly disagree*. According to Horwitz's (1986) preliminary study, FLCAS's reliability was as high as .93 (Cronbach's alpha) and its test-retest reliability was .83. Results of almost all studies using FLCAS indicated a negative relationship between learners' anxiety scores and their achievements (i.e. grades or proficiency scores) (Horwitz & Young, 1991). The scale was reexamined by Aida (1994). In Aida's study, ninety-six second-year Japanese language learners at the University of Texas completed the FLCAS, and the descriptive results were consistent with Horwitz's preliminary study, suggested that FLCAS could be used in the context of English learners learn Japanese.

## The Significance of FLA

There are extensive amounts of research that have examined FLA's debilitating effects on language learning (Horwitz & Young, 1991); however, very little has been done on what causes it. The most often cited skill source that produces FL anxiety is speaking (Koch & Terrell, 1991; Young, 1991). Young (1991) investigated the role of anxiety in oral production, especially

students' OPI (Oral Proficiency Interview) scores. A negative correlation was found between learners' anxiety levels and scores of the OPI.

However, studies have found that FL anxiety was highly relevant with other aspects of language learning. Listening anxiety is particularly problematic given that it plays an important role when communicating. Elkhafaifi (2005) revealed that listening anxiety negatively correlated with listening comprehension, as well as the course grade. Saito et al. (1999) suggested that reading in other languages can be anxiety provoking to some learners. Foreign language reading anxiety scale (FLRAS) was also created to measure learners' level of reading anxiety. Writing can be affected by FL anxiety as well (Cheng, Horwitz, & Schallert, 1999). MacIntyre and Gardner (1991a) conducted a study to examine differences in anxious learners' essays and non-anxious learners' essays. 31 novice French learners were asked to write an essay on either a very stressful experience or a relaxed experience. Results comparing these two essays indicated that anxious writers' essays tended to only include descriptive of events (i.e. only speaking skill was used), while confident writers' essays used "both speaking and understanding skills" (1991a).

MacIntyre and Gardner (1994) found that FL anxiety was also involved in all three stages of cognitive processes (input, processing and output), and had both pervasive and subtle effects. Linguistically, anxious learners are less likely to use personal and interpretive speech(Steinberg & Horwitz, 1986), which will lead to inauthentic communication and arise anxiety even more. MacIntyre et al. (1997) demonstrated that low anxiety learners often had a high self-rated score while high anxiety learners tended to underestimate their proficiency. Thus, they concluded, "One can best view the link between anxiety and proficiency as reciprocal" (MacIntyre et al., 1997).

# **Sources of FLA**

Young (1991) summarized that both learners' and teachers' beliefs are sources of FL anxiety in her review of sources of FLA, which was in line with Horwitz's (1988) study. In her 1988 study, she found learners held misbeliefs about language learning such as: an emphasis on speaking like a native speaker; thinking two years is enough for becoming fluent in a foreign language; feeling some people are more capable of learning language than others. Thus, the mismatch between learners' unrealistic beliefs about language learning and the reality often led to frustration and stress (Horwitz, 1988). Furthermore, Young (1991) pointed out that instructors' belief about teaching could be anxiety provoking when they "believe their role is to correct students constantly when they make any error." It deserves to be noted that specific sources of FL anxiety remain an area that is overlooked in SLA. Very few studies have investigated it with a focus on classroom implications. For example, what should teachers do to help reduce students' anxiety? Thus, it remains a rather inclusive topic in the filed (MacIntyre & Gardner, 1991f; Young, 1991).

# Foreign Language Difficulty and Learner's Belief

Language difficulty is an understudied, rarely mentioned concept in the field of SLA. However, people tend to rank languages based on their perceived relative difficulties of languages. Anecdotal reports often suggest a ranking of languages based on hours need to be fluent in a target foreign language. For Anglophone learners, Mandarin Chinese was constantly ranked as one of the "exceptionally difficult" language together with Japanese, Korean and Arabic("Language Difficulty Ranking ", 2015). Even though the informal information online claimed that the ranking was first published by the Defense Language Institute (a military

enterprise teaches and researches on issues about language teaching)("DLI's Language Guidelines," 2010), there is no peer-reviewed published study that has been examined or replicated.

Language learners may as well hold beliefs about target languages' relative difficulties (Bernat & Gvozdenko, 2005). In Horwitz's (1988) study, The Beliefs About Language Learning Inventory (BALLI) was administrated to first-year foreign language learners at the University of Texas to examine their language learning beliefs. The example items that are relevant to language difficulty in BALLI are:

1) Some languages are easier to learn than others.

2) The language that I am studying is a) a very difficult language b) a difficult language

c) a language of medium difficulty d) an easy language e) a very easy language.

(Horwitz, 1988)

Results of the study indicated that students showed "overwhelmingly" support toward the concept of language learning hierarchy. In a review study Horwitz did a decade later, she compared studies used BALLI beliefs across cultures. She found that American learners held stronger beliefs about relative difficulty of languages compared to learners from other cultures. (Horwitz, 1999) American Japanese learners also rated Japanese a relatively difficult language while learners of English generally judged English as "a language of medium difficulty". (Horwitz, 1999; Oh, 1996) Note that leaner's belief of target language's relative difficulty is rarely linked to FL anxiety and achievement, even though language learners needed to go through deconditioning to get rid of their personal language learning "superstitions" and "myths". (Horwitz, 1988)

# **Stereotype Threat and Pygmalion Effect**

Stereotype threat is a phenomenon that disadvantaged groups underperform in the academic setting (Steele, 1997; Steele & Aronson, 1995). The disadvantaged groups may include racial groups (African-American American) or gender groups (women in math classes). The conforming of the negative group stereotype leads to increased anxiety, and anxiety mediates stereotype threat once again. (Spencer, Steele, & Quinn, 1999) In addition, research shows that stereotype threat can be manipulated by giving participants cues and thus will affect academic performance (Osborne, 2001). People can feel threatened even if he or she does not believe the stereotype. (Steel & Aronson, 1995) So far, there is no study has been done in our field that have made use of the theory of stereotype threat, even though it could play a role in language learning process. Nevertheless, whether or not stereotype threat has a mediation effect on FLA is still unknown.

In addition, teachers' stances toward students in the classroom could be another factor that influences students' learning outcomes. Pygmalion effect is one of the self-fulfilling prophecy theories that are about the influence of teachers' expectations on students' performance. Studies have shown that the greater teachers' expectation is, the "better" students will become. (see Rosenthal, 1994) It is, again, not assured that if the Pygmalion effect is absolutely relevant to this current study, and its effects in classrooms are yet to be inspected.

# **Chapter Summary and Research Questions**

This chapter has reviewed literature concerning three main areas that are critical to this present research. Firstly, the literature that addresses the major theoretical framework of FL anxiety was described. FLCAS, as the most influential measurement, is also reviewed together

with the detrimental effects and sources of FL anxiety. The bias that involved with language difficulty was then reviewed with a particular focus on learner's belief. Finally, two rarely mentioned social psychological concept stereotype threat and Pygmalion effect are presented.

An increasing number of language instructors and researchers have recognized its significance when it comes to learning a language in the classroom. Empirical studies have also shown the debilitating associations of FL anxiety on achievement. Language difficulty might be a myth that learners have perceived in daily life and has been always neglected by many.

It should be noted that, until now, very little empirical research has connected FLA and perceived language difficulty and given insights on how to diminish the negative effects of these two concepts on language learning and teaching. The predominant focus on FL anxiety's debilitating effects on students' achievement has provided few pedagogical implications when it comes to FL teaching. In conclusion, more studies on this issue appear to be needed.

This study is an attempt to fill the gap of current literature by manipulating novice language learners' belief in a FL classroom. Three key research questions are thus raised to explore the relationship between learner's belief that associated with language difficulty and FL anxiety.

1. Do learners who are told Chinese is difficult to learn perform worse than learners who are told Chinese is easy?

2. Do the self-rating anxiety levels change across the four conditions as the treatment progresses? If so, how will the ratings change across four groups during the lesson?

# **CHAPTER 3 METHODOLOGY**

### **Participants**

Sixty-eight participants were recruited because they were all enrolled at Michigan State University in the fall of 2014 and spring of 2015. Answers to a questionnaire that related to language learning experience were collected prior to the day of experiment to make sure that only native speakers of English who had never been exposed to any type of Mandarin Chinese instruction were included in the current study. In addition, the participants all had taken or were taking some FL classes; these languages included German, Japanese, French, Spanish, Hebrew, and Italian. They were all at their early or mid-20s, and most of them were education major with a focus on language teaching and ESL. To motivate participants to learn as real learners, they were informed that if they could score the top quarter of the class in the translation quiz at the end, they would get a five-dollar gift card as compensation. In fact, they all got the gift cards after the intervention.

# Instruments

A 33-item modified FLCAS (see Appendix A) and a question regarding students' FL learning experience were filled out and answered by participants approximately one week before the intervention. Instead of using Horwitz et al.'s (1986) original five-point Likert scale, a sixpoint Likert scale was used by adding an extra option ( "I don't remember", coded as 0 point ), in case that participants forgot about their experience and forced to choose an untrue one. The reason for using the modified FLCAS was that it has a high validity (Cronbach's alpha=. 95), and its original version has demonstrated ability to measure FLA accurately (Aida, 1994).

The Fear Thermometer named Anxometer (adopted from MacIntyre & Gardner, 1991c; see Appendix B) was used to measure participants' at-the-moment anxiety. This visual analog of thermometer was given to participants three times at the beginning, middle and end of the intervention respectively. The Anxometer was intended to measure learners' state anxiety resulted in the previous tasks and activities. However, sometimes knowing the next activity could influence the ratings as well. (This discussion will be continued in Chapter 5) Participants needed to mark their readings of anxiety on a scale of one-to-ten. Anxometer was chosen for its intuitive design and simplicity of use.

After the lesson, each participant took a 20-item translation quiz (see Appendix C) at the end of the intervention. They needed to translate short sentences from Chinese Pinyin (Romanization of Chinese characters) into their L1 (English). These items included all the vocabulary words and grammar points they had learned during the intervention. The overall reliability of the quiz was .97 (Cronbach's alpha). For each question, two points were given for vocabulary, one point was given to grammar (preposition), and one point was given to positional relationships of objects. Thus, participants could receive up to 80 points.

#### **Procedures and Design of the Study**

This study employed an experimental classroom study design to address the research questions in Section 2.5. Four groups were formed based on their responses to the modified FLCAS and two random assigned experimental conditions (*easy* and *difficult*). These four groups are 1) high-anxiety easy group (n=16); 2) low-anxiety easy group (n=17); 3) high-anxiety difficult group (n=15), and 4) low-anxiety difficult group (n=20).

| Group                        | Mean   | SD    |
|------------------------------|--------|-------|
| High-anxiety easy group      | 118.35 | 15.33 |
| (n = 16)                     |        |       |
| Low-anxiety easy group       | 80.73  | 14.48 |
| (n = 17)                     |        |       |
| High-anxiety difficult group | 118.59 | 15.94 |
| (n = 15)                     |        |       |
| Low-anxiety difficult group  | 77.50  | 11.67 |
| (n = 20)                     |        |       |

Table 1 Descriptive Statistics for modified FLCAS scores

Modified FLCAS scores range from 51(least anxious) to 160 (most anxious)

On the day of intervention, participants met for their regularly scheduled class and received a Chinese lesson taught by the researcher. Those who met the language requirement (L1 is English; no Chinese learning background) signed the consent forms. Then they read a two-sided cue with short reading passages and responded to questions about Chinese language. The two easy groups received a cue like this:

"The purpose of this study is to determine how well you can learn some Chinese when the teacher does not speak any English during the session. We also want to determine if using this method makes you nervous. In the lesson, we will focus only on grammatical structures that are very easy for English speakers to learn.

As you may know, Chinese is a difficult language to learn to read because of the characters. Learning to speak Chinese, however, is quite easy for several reasons. Do you know or can you guess what features make Chinese easy for English speakers? Write your response below."

After everyone finished reading and responding, the researcher told them to turn the paper over and the participants continued reading some factual statements about why Chinese is an easy language to learn and asked them to respond whether or not they had known any of the statements before. Note that these statements were all factual and it can be found in Appendix D. While the easy groups reading and answering information, the two difficult groups were going through the opposite information about how hard learning Chinese was. Note that participants did not know that they were given different information until the debriefing after the intervention.

The lesson was about one hour and twenty minutes long, and it was completely in Chinese (Chinese characters were replaced by *Pinyin*) except for instructions classroom activities, which were in English on the PowerPoint slides. The reason for choosing to use as much Chinese as possible in this study's intervention was because firstly, to increase participants' anxiety levels. Secondly, using target language to motivate students and increase classroom authenticity of the treatment.

The researcher then asked participants to mark their levels of anxiety on the Anxometer for the first time and started the lesson with teaching four tones aided by pictures and plenty of gestures. As an assessment, participants needed to hold up a corresponding tone card when the researcher articulated it. Participants then marked their anxiety level on the Anxometer for the second time. Ten vocabulary words (*pen, book, toy, cell phone, key, wallet, headset, bag, car, glasses*) written in Pinyin were taught by having participants remember words with pictures that were posted on the wall of the classroom. They were allowed to go check the words as many times as they needed, but they had to write them down after went back to their seats. The researcher then called on students from different groups to repeat the words in Chinese. Five Chinese prepositions (*inside, outside, above, under, beside*) were taught by showing the prepositional relationship of actual objects. These objects used were the same ten words taught earlier in the class. The worksheet (see Appendix D) was then distributed, and students needed to

choose whether or not the sentences they heard matched the pictures. The researcher called on students from different groups to give their answers to the class. A review of words and grammar points was done by asking students to name the objects and their prepositional relationships. Each student then came to the front and put the objects in the positions as the researcher told them. In the end, students were asked to rate their anxiety level on Anxiometer for the third time followed by the translation quiz and debriefing. Figure 1 shows the design of the study.



Figure 1 Design of the study

# **Chapter Summary**

This chapter outlined the research design and described the data collection procedure in detail. An experimental classroom study design was adopted to address the research questions in Chapter 2. Three different instruments were identified to measure independent variables, and four groups were formed based on the self-report modified FLCAS and two experimental conditions. Data will be further examined in next chapters.

## **CHAPTER 4 RESULTS**

# Introduction

This chapter presents the analysis of research data collected from classroom treatment to address the research questions posed in Chapter 2. Both translation quiz scores collected at the end of the treatment and the self-ratings of Anxometers collected in the process of the treatment are examined.

#### **Results of Research question 1**

This question considered if different perceptions of language difficulty level would affect FL learning outcomes; it also asked whether or not learners who scored high on the FLCAS would perform worse than those who FLCAS scored low. Since this study primarily focused on the effects of perceived language difficulty on language learning, the question was answered in three ways to offer a deeper insight into this issue. First, the descriptive statistics across four groups were explored. Second, a hierarchical multiple regression was used to determine to what extent two factors predicted learners' translation quiz scores. A hierarchical regression was conducted because it could take into account more variance from the continuous variable (i.e., the FLCAS scores), rather than only using categorical variables (i.e., learners' high and low anxiety group memberships, which were set arbitrarily prior to the intervention). Thirdly, a two-way ANOVA and post hoc analysis were conducted to investigate group differences.

Firstly, raw scores calculated from the translation quiz were inspected, especially the group means, medians, and 95% confidence intervals. Table 2 below illustrates the group differences in terms of the translation quiz scores.

|                       | High-anxiety<br>easy group | High-anxiety<br>difficult group | Low-anxiety<br>easy group | Low-anxiety<br>difficult group |
|-----------------------|----------------------------|---------------------------------|---------------------------|--------------------------------|
| Mean                  | 72.95                      | 64.06                           | 70.73                     | 73.13                          |
| Median                | 75.00                      | 61.00                           | 79.00                     | 74.50                          |
| SE                    | 1.79                       | 3.96                            | 4.54                      | 1.71                           |
| 95% CI lower<br>bound | 69.21                      | 55.66                           | 61.00                     | 69.49                          |
| 95% CI upper<br>bound | 76.69                      | 72.46                           | 80.00                     | 76.76                          |
| SD                    | 7.98                       | 16.34                           | 17.58                     | 6.83                           |

 Table 2 Descriptive statistics of quiz scores for four groups

The mean scores for high–anxiety easy, low-anxiety easy and low-anxiety difficult groups were quite similar while the high-anxiety difficult group had the lowest mean score. The means were also very close to the full score (80), which indicated a negative skewed data set; the incentive might have motivated participants to score higher, thus, creating a ceiling effect. If we look at the medians, it was obvious that the low-anxiety easy group (*median* = 79) outperformed the other three groups, especially the high-anxiety difficult group. When comparing the medians to means, it was discernable that medians were higher than means. This could attribute to the several outliers and extreme outliers on the lower side of the data. The much larger SDs of the low-anxiety easy group and the high-anxiety difficult group indicated that there was unequal variance across groups and conditions, which eventually led to a non-normally distributed data set.

In the next step, a hierarchical multiple regression was performed to provide more insight into the question that between FLA levels and perceived language difficulty which one predicted more about the learning outcomes. Because previous research has shown anxiety has a considerable negative effect on language learning (Field, 2013, p. 322; Horwitz, 2001),

participants' FLCAS scores were entered in step 1 as a continuous independent variable. The perceived language difficulty was then entered as a categorical variable in step 2 to investigate to what degree it affect the quiz scores. Assumptions were checked. However, for the aforementioned reasons in the preceding paragraph, the quiz scores (the dependent variable used in this study) were not normally distributed, and the variance was not homogeneous. In addition, there were also quite a few extreme outliers and outliers in the data set. Thus, a log transformation was done on the dependent variable to compensate the unmet assumptions for multiple regression (Larson-Hall, 2009, p. 184). As showed in Table 3 below, after entered the anxiety scores in the regression model, the independent variable of FLCAS added 1% ( $R^2 = .01$ ) explanatory power to the model, which was not statistically significant (p = .43). After the second independent variable of perceived language difficulty was entered, it accounted for another 1% ( $\Delta R^2 = .01$ ) in the model, which was not significant (p = .35). Note that both factors in this model contributed an equal percentage variance (1%), and it was considered quite a small effect size(Larson-Hall, 2009, p. 119), which means that neither of them were good predictors of learners' learning outcomes.

| Model                        | В     | SEB  | Beta  | R <sup>2</sup> | $\Delta R^2$ | р   |
|------------------------------|-------|------|-------|----------------|--------------|-----|
|                              |       |      |       |                |              |     |
| Step 1                       |       |      |       | .01            | .01          |     |
| Constant                     | 1.88  | 0.06 |       |                |              | .00 |
| FLCAS scores                 | 0.00  | 0.00 | -0.10 |                |              | .43 |
| Step 2                       |       |      |       | .02            | .01          |     |
| Constant                     | 1.90  | 0.06 |       |                |              | .00 |
| FLCAS scores                 | 0.00  | 0.00 | -0.11 |                |              | .39 |
| Perceive language difficulty | -0.03 | 0.03 | -0.12 |                |              | .35 |

**Table 3** Hierarchical multiple regression analysis predicting learning outcomes

As the third step to answering research question one, a two-way independent ANOVA was then conducted using the log transformed quiz scores to examine whether differences existed when we compared four groups' performance (high-anxiety easy group, low-anxiety easy group, high-anxiety difficult group, low-anxiety difficult group). No statistical group differences were found (significant at alpha level = .05). This test also showed that there was no statistically significant effect for the main effect of FLA only, F (1, 64) = 0.65, p = .42, partial eta-squared = .01, nor language difficulty, F (1, 64) = 0.89, p = .35, partial eta-square = .01. However, there was a significant interaction between perceived language difficulty and FLA of learning outcomes, F (1, 64) = 3.97, p = .50, partial eta square = .06, which was a small effect size (Larson-Hall, 2009, p. 119).

Post hoc tests with Bonferroni adjustments were then performed to inspect where the significant differences lay in the interaction. Bonferroni adjustments were used here to lower the chance of Type I error. (Field, 2013, p. 459) The tests revealed that when participants were told Chinese is difficult, the high anxiety group did borderline significantly worse than the lower anxiety (p = .051). When they were told Chinese is easy to learn, there were no significant differences found (p = .415). In addition, between these two high anxiety groups, the group under "Chinese is easy" condition scored significantly higher than the "Chinese is difficult"

group (p = .045). While, for the two low-anxiety groups, no significant differences were found (p = .409).

In summary, both perceived language difficulty condition and FLA alone might not be significant predictors for language learning according to hierarchical multiple regression, and they had small effect sizes ( $R^2 = .01$ ). An interaction effect was detected by two-way independent ANOVA, which was examined by post hoc tests. The post hoc tests showed that the high-anxiety easy group did significantly better than the high-anxiety difficult group; for the two "Chinese is easy" groups, the high-anxiety group underperformed the low-anxiety group (p = .051).

# **Results of Research question 2**

The second research question asked if and how participants' self-rating on the Anxometers changed at different times during the treatment. To answer this question, first, the descriptive statistics of beginning, in the middle and at the end of the treatment were investigated respectively. Then three Friedman tests were performed to check whether and how participants' state anxiety levels changed across three times during the Chinese lesson. As the last step, Kruskal-Wallis tests were conducted to examine whether or not there were differences across four groups at the same time of anxiety self-ratings.

| <b>I</b>           | Time 1 | Time 2 | Time 3 |
|--------------------|--------|--------|--------|
|                    |        |        |        |
| Mean               | 3.88   | 3.41   | 4.54   |
| Median             | 3.00   | 3.00   | 4.00   |
| SE                 | 0.28   | 0.23   | 0.31   |
| 95% CI lower bound | 3.33   | 2.94   | 3.93   |
|                    |        |        |        |
| 95% CI upper bound | 4.44   | 3.88   | 5.16   |
|                    |        |        |        |
| SD                 | 2.30   | 1.93   | 2.54   |

 Table 4 Descriptive statistics of self-ratings on Anxometers

As illustrated in Table 4 above, the mean ratings from Time 1 (before the class started) to Time 2 (during the lesson) decreased from 3.88 to 3.41, but rose to 4.54 at Time 3 (after the lesson; before the translation quiz). It is also discernable from the medians that by the end of the class (Time 3), participants rated their state anxiety higher than Time 1 and 2 (from 3.00 to 4.00). Note that none of the three times ratings were normally distributed according to Kolmogorov-Smirnov test of normality: Time 1, D (68) = .18, p < .001; Time 2, D (68) = .19, p < .001; Time 3, D (68) = .14, p < .05.

As the second step, four Friedman tests were conducted separately to see the changes for each group's rating over times. Friedman test was chosen because the data did not meet one-way repeated ANOVA's assumptions of homogeneity of variance. For the high-anxiety easy group, a significant difference was detected, X = 12.33, df =2, p = .002. Three Wilcoxon signed ranked tests were then ran to see where the differences lay across three times of measuring for the high-anxiety easy group. Asshowed below, participants' self-ratings decreased significantly from Time 1 to Time 2 and increased from Time 2 to Time 3. Thus, for the high-anxiety easy group, their state anxiety levels significantly decreased from the beginning to the middle of the lesson; but increased significantly before the translation quiz.

**Table 5** High-anxiety easy group self-ratings differences across times. (Wilcoxon signed ranked tests with adjusted  $\alpha$  level = .017)

| Anxometer rating differences across time | <i>p</i> value |
|--|----------------|
| Time 1 > Time 2*                         | .014           |
| Time 1 < Time 3                          | .131           |
| Time 2 < Time 3*                         | .005           |
|  |                |

Note: the asterisk (\*) indicated the significant difference: p < .017

For the last step, three Kruskal-Wallis tests were used to investigate the group differences at each time. Kruskal-Wallis tests were used because the data was not normally distributed, thus it failed to meet the assumptions of one-way ANOVA. Among all three tests, only Time 3 showed significant statistical differences among four groups, X = 8.12, df = 3, p = .044. Six Mann-Whitney U test with adjusted  $\alpha$  level = .0083 were performed to see where the differences lay across four groups at Time 3. Among all six pair-wise comparisons, only high-anxiety easy group showed significantly higher self-ratings than the low-anxiety easy group (p = .009), which indicated when knowing Chinese is easy, the high-anxiety participants tended to rate themselves more anxious on the scales of the Anxometer before taking the translation quiz and after doing the demonstration in the front.

As the overall means across three times of measurement illustrated, participants' state anxiety levels generally decreased from Time 1 to Time 2, then rose from Time 2 to Time 3. Under the effects of both FLA and perceived language difficulty, the high-anxiety easy group's anxiety level changed significantly at different times of the Chinese lesson with a decline from Time 1 to Time 2 and an increase from Time 2 to Time 3. This was also consistent with the generally trend showed by the descriptive statistics. Then, group differences of three times of measurement were compared, and a significant group difference was found by Kruskal-Wallis test at Time 3 only, with the high-anxiety easy group rated higher than the low-anxiety easy group. The analysis of all preceding results will be further discussed in the next chapter.

# **CHAPTER 5 DISCUSSION**

# Introduction to discussion of results

This chapter provides a more detailed analysis of the results presented in the previous chapter based on the two research questions. Section 5.2 focuses on discussing the debilitating effects of perceived language difficulty and FLA. The changes of participants' state anxiety ratings at the beginning, middle and end of the treatment are also discussed in Section 5.3. The last section then summarizes the chapter.

# **Discussion of results: first research question**

This question asked how perceived language difficulty and FLA influenced language learning outcomes (i.e., the quiz scores). As the first step, the descriptive statistics of group quiz scores were investigated. Since the data was non-normally distributed, the medians of each group's scores were better indicators of students' performance, and they revealed that the lowanxiety easy group did the best, followed by the high-anxiety easy group, low-anxiety difficult group and high-anxiety difficult group.

A hierarchical multiple regression was then used to inspect to what extent these two factors accounted for the variances in the model. The finding revealed that neither of them was significant predictors of the learning outcomes, and each of them only accounted for 1% of variance with small effect sizes. The result of multiple regression seemed to suggest that there were other factor(s) in the model that could account for more variances than perceived language difficulty and FLA (e.g., learner's motivation of learning Chinese and their language learning aptitude). In addition, the nonsignificant results could be attributed to the fact that not all

assumptions of hierarchical multiple regression were met: the data was not normally distributed, also quite a few extreme outliers and outliers existed. Even though the translation quiz scores were transformed and made more linear, there were still considerable effects of the bias in the data set that might hinder the test's ability to detect patterns in the data. Furthermore, multiple regressions usually need either a large effect size or a larger sample size. (Larson-Hall, 2009, p. 185) Given the extremely small effect size ( $R^2 = .01$ ) from the multiple regression, the study need more participants to have significant results. On the basis of the above analysis of results, further inquiries need to be done with more characteristics of learner's individual differences (e.g. motivation; aptitude) or a larger sample size involved to account for more variance and have a significant result.

Results from two-way independent ANOVA were then presented in 4.2. A significant interaction effect was found, which indicated both perceived language difficulty and FLA had an effect on group quiz scores. Post hoc tests then confirmed that the high-anxiety group who were told Chinese was easy scored significantly higher than the high-anxiety group that were told Chinese was hard. No differences were found between the two low-anxiety groups. On the other hand, when they were told Chinese was difficult, the high-anxiety group scored lower than the low-anxiety group with a neared significance. No differences were found between the groups who were told Chinese was easy. The findings above seemed to suggest that perceived language difficulty had considerable negative influences on high-anxiety learners. Thus, this finding supports Horwitz (1999)'s study on learners' beliefs of FL learning. As Horwitz (1999) concluded, students showed strong agreements for the concept of language difficulty hierarchy. In the current study, learners might come in the classroom with superstitions of language difficulty, and misconception of Chinese is difficult for English speakers to learn was then

strengthened by the cue they needed to read and response to at the beginning of the treatment. This could possibly lead to the poor performance of the high-anxiety learners who were already overwhelmed by their anxious feelings. This result does, thus, also support previous literature on FLA's debilitating effects on language learning (Horwitz, 2001); the debilitating effects was exacerbated by the perceive language difficulty in this study and led to the score differences between the high-anxiety group and low-anxiety group.

#### Discussion of results: second research question

This question considered if and to what extent participants' state anxiety levels changed as the class progressed. As stated in 4.3, three steps were taken to answer the question. First, the medians and means of self-rating on the Anxometer at each time suggested that there was a general trend of ratings across the three times. The state anxiety decreased from Time 1 to Time 2, and then rose back up and reached highest point at Time 3. It was possible because when participants rated their anxiety at Time 1, which was at the beginning part of the Chinese lesson, they might have felt nervous since they had never taken Chinese classes before. At the second time of rating, which was in the middle of the lesson, many of them appeared to ease into the lesson, thus, the self-ratings of state anxiety reached the lowest point for most of the participants. At Time 3, participants did the rating after their individual demonstration in the front of the classroom and right before the translation quiz, and it was highly possible that test anxiety played a role in creasing their state anxiety levels. This is also in line with Horwitz et al. (1986)'s definition of FLA. She (1986) claimed that academic assessment generates test anxiety, and it consists FLA, together with communication apprehension and fear of negative evaluation.

Results of Friedman tests of each group's rating across three times then revealed that the high-anxiety easy group's state anxiety changed significantly during the lesson. This result demonstrated the mixed effects of perceived language difficulty and FLA, which seemed to indicate the high-anxiety participants who were told Chinese was easy tended to alternate their state anxiety levels more greatly. Wilcoxon signed ranked tests were then performed and suggested that for high-anxiety easy group only, their state anxiety level decreased from the beginning of the class and raised right before the translation quiz significantly. Their state anxiety declined from the beginning of the class, and this was possibly due to the fact that they eased into the lesson gradually which was similar with the other three groups. At Time 3 their state anxiety increased significantly; this is because for high-anxiety learners, knowing that they are going to take a quiz would spike their at-the-moment anxiety greatly. Time 3 also followed the review activity that required them to come to the front of the classroom and demonstrate their Chinese knowledge individually. This could increase their anxiety. Thus, this result is also consistent with the overall general trend as indicated by the descriptive statistics. As the last step, results of Kruskal-Wallis showed that four groups' ratings were significantly different with each other at Time 3 only. Among them, the high-anxiety easy group rated themselves significantly higher on the Anxometer when compared with the low-anxiety easy group. This seemed to be a rather reasonable results in terms of the FLA levels: high anxiety groups rated themselves more anxious on the Anxometer while the low anxiety groups ranked themselves less anxious. No other pair-wise comparisons were statistically significant. A possible reason for this could be that even though the high-anxiety easy group was told Chinese is easy, but they might still found it harder than they thought, and panicked before the quiz and after the review activity. In addition, if we combine the results from the post hoc tests in research question 1 with the preceding result,

a pattern seem to emerge: between the two high-anxiety groups, the one that was told Chinese was easy scored higher than the group that was told Chinese was difficult. This does, thus, lend support to some of the earlier literature on the facilitating effects of anxiety on language learning (e.g. Chastain, 1975; Kleinmann, 1977). However, this facilitating effect only showed for the people who were told Chinese is easy to learn. It is worth noticing that the anxiety discussed in this section is state anxiety, not FLA. FLA is defined as a type of situational-specific anxiety, which was considered developing from state anxiety (MacIntyre & Gardner, 1991c). Since this study is not longitudinal in nature, whether or not learners' state anxiety would develop into FLA is a question that is not yet resolved.

# **Chapter summary**

This chapter summarized and discussed the results of the study, with references to each research question. Relevant literature was also considered and compared with results of the current study.

This study demonstrated the effects of perceived language difficulty on high-anxiety learners. Basically, when high-anxiety learners were told Chinese was difficult, they significantly performed worse than the learners who were told Chinese was easy. Also, learners who belonged to high-anxiety easy group's state anxiety significantly fluctuated as the lesson progressed. Across three times of measuring, there was only one significant group difference at Time 3, with the high-anxiety groups rated more anxious than the low-anxiety groups. At last, the highanxiety easy group rated themselves more anxious at the last time of measurement than the lowanxiety easy group, which was well as expected. It was also obvious that the results from multiple regression and two-way ANOVA were conflicting. It could be because 1) a larger sample size was required for the multiple regression, since the effect size was extremely small;

2) due to celling effect in the quiz scores collected, data was not normally distributed, thus, it could affect the power of both statistical analyses.

The analysis of results presented in this chapter calls for further inquiries on perceived language difficulty involve more affective variables or more participants. Also, to make the conclusion of whether or not perceived language difficulty mediates FLA, more research with longer research duration needs to be done.

# **CHAPTER 6 CONCLUSIONS**

This chapter presents the major findings of the study, followed by implications for teachers and researchers in the field who want to inquiry further on this topic. The study's limitations are then discussed.

# Summary of key findings

This study was aimed for investigating the effects of perceived language difficulty and its relationship with FLA. Particularly, whether language difficulty could pose influences on language learning in the context of English speakers who learn Chinese. The study also examined changes of learners' state anxiety levels in a foreign language class with references to their anxiety levels and conditions. Sixty-eight undergraduate students who enrolled in a language learning and teaching course at Michigan State University participated in the study. Data was collected through the following instruments: the modified FLCAS questionnaire, the Anxometers and the translation quiz. Participants who were qualified for this study were told different facts about Chinese. Then the researcher taught a Chinese lesson and collected the data.

The key findings of the research revealed that perceived language difficulty seemed to have a debilitating effect on anxious learners. This result then could have possibly confirmed that there was a role for perceived language difficulty in foreign language classrooms. The results from comparing learners' state anxiety across times of measurement and groups seemed to suggest that in-class activities were source of changing learners' state anxiety. But whether or not they are source that developed learner's FLA in a longer time frame is a question that the results of the current study cannot answer.

# Pedagogical and theoretical implications

The above results showed the debilitating effect of perceived language difficulty should be considered seriously in FL classrooms. There is by far no peer-reviewed published evidence that shows Chinese or any other languages are more difficult or easier for English speakers to learn. FL teachers should recognize the negative effects of reinforcing high-anxiety learners' conventional wisdom about language difficulty hierarchy. FL teachers should help learners go through deconditioning and gradually get rid of their personal language learning myths (Horwitz, 1988), and stop reinforcing them and start recognizing the effects of perceived language difficulty could be the first step.

In addition, further research of perceived language difficulty should consider using a target language other than Chinese. It is possible that participants in this study did not "believe" the cue of Chinese is easy to learn, because they already had stereotypes toward Chinese, even though they had not learned with any formal instructions. Since this study did not contain any delayed posttests, it is hard to see the long-term effects for both perceived language difficulty and FLA. Thus, longitudinal research studies are also needed in the future to keep tracking learners' FLCAS levels and state anxiety changes. Only by then, a firm conclusion can be made about whether or not perceived language difficulty is source of FLA.

## Limitations

Results of the study must be viewed with the following limitations. The most obvious limitation is the study design. Firstly, the study only tested the short-term effects of perceived language difficulty and FLA. Research on the same area with longer research duration is definitely needed. Secondly, one of the instruments, the translation quiz had a ceiling effect for participants. This led to the negative skewed data, which created a not normally distributed data

set. Thirdly, the cut-off score (FLCAS = 100) that used to differentiate high-anxiety participants from low-anxiety group was arbitrarily chosen at the early stage of the study, since there was no cut-off score set by the researchers who invented the scale (Horwitz et al.1986).

This study was further limited by the target language used. Because the study used Chinese pinyin (without the writing system), the results cannot be generalized to other languages or Chinese with its writing system. However, given the time constraints (an hour and twenty minutes), teaching Chinese without characters is unavoidable, because learning the writing system could cost some time. It would be ideal if the duration of the treatment could be extended and the writing system could be included. APPENDICES

Appendix A – FLCAS (modified)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

#### Please describe ALL past foreign language learning experience.

Examples:

I studied Spanish for four years in high school and one year at MSU. I studied French for two years at MSU and then abroad for one summer. I studied Spanish for three years in high school and Chinese for one semester at MSU.

#### Answer following questions based on your LAST foreign language classroom experience either in the

#### US or abroad.

1. I never felt quite sure of myself when speaking in foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't

remember 🗆

2. I *didn't* worry about making mistakes in foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

3. I trembled when I knew that I was going to be called on in foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

4. It frightened me when I didn't understand what the teacher was saying in the foreign language.
 Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't

 $remember \ \square$ 

5. It wouldn't bother me at all to take more foreign language classes.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

6. During language class, I found myself thinking about things that had nothing to do with the course.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

7. I kept thinking that the other students were better at the language than I was.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

8. I was usually at ease during tests in foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

9. I started to panic when I had to speak without preparation in language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

10. I worried about the consequence of failing the foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

- I didn't understand why some people got so upset over foreign language classes.
   Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □
- 12. In language class, I got so nervous I forgot things I knew.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

13. It embarrassed me to volunteer answers in foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

14. I would *not* be nervous speaking the foreign language with native speakers.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

15. I got upset when I didn't understand what the teacher was correcting.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

16. Even if I was well prepared for language class, I felt anxious about it.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

17. I often felt like not going to foreign language class.

Strongly agree 
Agree
Neither agree nor disagree
Disagree
Strongly disagree
I don't
remember

18. I felt confident when I spoke in foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

19. I was afraid that the language teacher was ready to correct every mistake I made.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

- 20. I could feel my heart pounding when I was going to be called on in language class.
   Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □
- 21. The more I studied for foreign language tests, the more confused I got.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

22. I *didn't* feel pressured to prepare very well for language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

23. I always felt that the other students spoke the foreign language better than I did.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

24. I felt very self-conscious about speaking the language in front of other students.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

25. Language class moved so quickly I worried about getting left behind.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

26. I felt more tense and nervous in the foreign language class than in other classes.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

27. I got nervous and confused when I spoke in the foreign language class.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

28. When I was on the way to foreign language class, I felt very sure and relaxed.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

29. I got nervous when I didn't understand every word the language teacher said.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

- 30. I felt overwhelmed by the number of rules you have to learn to speak a foreign language.
  Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □
- 31. I was afraid that the other students would laugh at me when I spoke the foreign language.
  Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □
- 32. I would probably feel comfortable around native speakers of the foreign language.

Strongly agree □ Agree□ Neither agree nor disagree□ Disagree□ Strongly disagree□ I don't remember □

33. I got nervous when the language teacher asked questions which I hadn't prepared in advance.

 $Strongly agree \square Agree \square Neither agree nor disagree \square Disagree \square Strongly disagree \square I don't$ 

remember  $\square$ 

Appendix B – Anxometer (Time 1 only) Time 1 Name

Place an X next to the number that best captures how anxious or nervous you are feeling.



8-10 : High Anxiety Level5-7 : Moderate Anxiety Level1-4: Low Anxiety Level

Figure 2 Anxometer

# Appendix C – Translation quiz

| Name                                     | _                                       |
|--|---|
| *Translate these sentences into English: |   |
| 1. shū zài bão shàngmian $_{\circ}$      | 16. yănjìng zàichē pángbiān $_{\circ}$  |
| 2. bǐ zài shŏujī xiàmian $_{\circ}$      | 17. ěrjī zài shū shàngmian $_{\circ}$   |
| 3. shŏujī zài bāo lĭmiàn <sub>o</sub>    | 18. chē zài bāo lǐmiàn $_{\circ}$       |
| 4. wáwa zàichē pángbiān <sub>o</sub>     | 19. yàoshi zài shū shàngmian $_{\circ}$ |
| 5. shū zài bão wàimian $_{\circ}$        | 20. bĭ zài qiánbāo wàimian <sub>o</sub> |
| 6. shŏujī zài wáwa pángbiān <sub>o</sub> |   |
| 7. yănjìng zài shū shàngmian.            |   |
| 8. wáwa zài yănjìng pángbiān。            |   |
| 9. ĕrjī zài shū xiàmian <sub>o</sub>     |   |
| 10. shŏujī zài qiánbāo lĭmiàn₀           |   |
| 11. qiánbāo zài bāo wàimian $_{\circ}$   |   |
| 12. yàoshi zài bāo lǐmiàn <sub>o</sub>   |   |
| 13. yănjìng zài shū xiàmian $_{\circ}$   |   |
| 14. bĭ zài ĕrjī pángbiān。                |   |
| 15. yàoshi zài bāo lǐmiàn <sub>o</sub>   |   |

Appendix D Questionnaires for both conditions

Part 1 – Questionnaire for "Chinese is easy" group

Name

Please check one:

\_\_\_\_ I don't know any Chinese.

\_\_\_\_\_ I can speak a little Chinese.

\_\_\_\_\_ I can speak Chinese well or I am a native speaker of Chinese.

The purpose of this study is to determine how well you can learn some Chinese when the teacher does not speak any English during the session. We also want to determine if using this method makes you nervous. In the lesson, we will focus only on grammatical structures that are very easy for English speakers to learn.

As you may know, Chinese is a difficult language to learn to read because of the characters. Learning to speak Chinese, however, is quite easy for several reasons. Do you know or can you guess what features make Chinese easy for English speakers? Write your response below.

# DO NOT TURN OVER THIS PAPER UNTIL WE ASK YOU TO.

Here are some of the many reasons that Chinese is easy.

First, the pronunciation is fairly easy for English speakers because they can distinguish the different sounds quite easily.

Second, unlike Spanish, French, or German, Chinese pronouns have no gender or case marking. One word, *ta*, means *he*, *she*, *him*, and *her*. Furthermore, there are no verb endings. For example, the word for *eat* is always *che*. It does not have to agree with the subject.

Third, Chinese nouns have no gender or plural forms.

Fourth, Chinese word order is usually the same as English word order, meaning that the sentences follow subject, verb, object order. Other languages, such as Japanese, are much more difficult because the verb comes at the end of the sentence.

Fifth, Chinese has no past or future tense. Time is marked by adverbs. For example, you would say, *I eat yesterday* to show past. The verb does not change.

Did you know any of these facts about Chinese before you read this? If so, which?

Appendix D Part 2 – Questionnaire for "Chinese is difficult" group Name

Please check one:

\_\_\_\_\_ I don't know any Chinese.

\_\_\_\_\_ I can speak a little Chinese.

I can speak Chinese well or I am a native speaker of Chinese.

The purpose of this study is to determine how well you can learn some Chinese when the teacher does not speak any English during the session. We also want to determine if using this method makes you nervous. In the lesson, we will focus on grammatical structures that are usually very difficult for English speakers to learn.

We are doing this study because Chinese is a difficult language to learn to read, in part, because of the characters. Learning to speak Chinese is quite difficult as well for several reasons. Do you know or can you guess what features make Chinese difficult for English speakers? Write your response below.

# DO NOT TURN OVER THIS PAPER UNTIL WE ASK YOU TO.

Here are some of the many reasons that Chinese is difficult.

First, the pronunciation is very difficult because of the tones, which do not occur in English. Second some of the sounds are very similar to each other, and English speakers cannot hear the difference.

Third, Chinese has words that indicate the linguistic feature *aspect*. This is has to do with features of the verb such as completion. It is not the same as past tense. For example, if you want to say that something will be completed in the future, you have to mark completion on the verb even though it has not happened yet.

Fourth, word order in Chinese can be manipulated. For example, the object can be moved to the position before the verb resulting in something like, *He the-book put-down*.

Fifth, Chinese has what are called resultative complements. The verbs that correspond to *listen* and *look* in English, for example, indicate only the sensory actions. The verb for *to perceive* has to be added to the verbs if perception has occurred. One would say something like, *I looked-perceived a dog*.

Don't worry if you did not understand these differences, but did you know any of these facts about Chinese before you read this? If so, which?

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