

**THE IMPACT OF FOREIGN LANGUAGE ANXIETY, TEST ANXIETY, AND
SELF-EFFICACY AMONG SENIOR HIGH SCHOOL STUDENTS IN TAIWAN**

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ABSTRACT: *This study attempted to investigate the relationship among foreign learning anxiety, foreign language test anxiety, and learning self-efficacy with regard to various genders and language proficiency levels. The participants in this study consisted of 256 freshmen in a senior high school in the middle of Taiwan. The data were gathered through questionnaires. The findings revealed significant differences among foreign learning anxiety, foreign language test anxiety, and learning self-efficacy with regard to various genders and language proficiency levels. Regardless of gender or language proficiency level, there was a positive correlation between foreign learning anxiety and foreign language test anxiety. On a contrary, there was a negative correlation between foreign learning anxiety and learning self-efficacy. Besides this, there was also a negative correlation between foreign language test anxiety and learning self-efficacy. This study also provides some context-specific pedagogical implications for Taiwanese EFL teachers and practitioners.*

KEYWORDS: Foreign Learning Anxiety, Foreign Language Test Anxiety, Learning Self-Efficacy

INTRODUCTION

In order to catch up with the trend of globalization, many countries have introduced the study of foreign languages, especially the English Language, in their education system and curriculum at all levels. Taiwan is no exception. In the context of Taiwan as one of the English as a Foreign Language (EFL) speaking countries, the study of the English Language was introduced and has been taught for several decades in elementary and secondary schools as well as colleges and universities. There is no denying that English plays an important role as a secondary school course, especially in senior high school. The English exam score is extremely significant for Taiwanese students since it is the vital criterion to determine if the students are qualified or not to enter a highly reputable university. Taiwan has a long history of text-driven teaching and learning. Unfortunately, the current English instruction in Taiwan

is more heavily grammar-centered and teacher-centered instruction. English classes consist of a lot of lectures and recitations, as well as exams. Because of this, most students are under a lot of pressure when taking their English exam, and learning English is a nightmare for them. The current English exam in Taiwan has a very serious negative washback on English teaching and learning. According to Cheng & Curtis (2004), the term washback refers to the influence of testing on teaching and learning; senior high school students have to take a lot of exams during their English classes because of the University Entrance Exam. In the long run, students who have various language proficiencies might have different degrees of language learning anxiety, test anxiety, and self-efficacy toward English learning achievements. Considering that is a vital issue for Taiwan students who learn English as a Foreign Language, it seems necessary to explore this study further. As a result, two main reasons guided this study: First of all, the studies carried out in Taiwan to explore language learning anxiety, test anxiety, and self-efficacy of EFL learners at the senior high school level are too few. Second, educators' perspectives, students' experiences and the research in the fields of education and psychology show that language learning anxiety, test anxiety, and self-efficacy in EFL/L2 learning process are vital factors that influence learners' foreign language performance and achievement. Based on the reasons why this study will be conducted, the research questions are addressed as follows:

1. What is the relationship among language learning anxiety, test anxiety, and self-efficacy as related to various English proficiency levels?
2. What are the relationships among language learning anxiety, test anxiety, and self-efficacy in relation to various genders?

LITERATURE REVIEW

Some researchers have maintained the idea that anxiety affects language learning, and empirical findings and studies conducted in this field attest to the importance of anxiety regarding student learning and achievement (Jackson, 2001; Cheng, 2004). According to Oxford (1999), anxiety is ranked as high among affective factors impacting language learning, regardless of whether the learning setting is formal or informal. The study findings also have shown that language anxiety is negatively related to achievement in L2 acquisition and is associated with "deficits in listening comprehension, impaired vocabulary learning, reduced word production, low scores on standardized tests, low grades in language courses or a combination of these factors" (Gardner, Tremblay, and Masgoret, 1997) (p.345). In addition to this, some studies show a moderately negative relationship between foreign language anxiety overall and language achievement (Horwitz, 2001; MacIntyre, 1999). In theory, anxiety is like motivation, there is a link between anxiety and learners' proficiency levels,

with anxiety levels often at their highest early on in language learning, and then declining as proficiency increases (Gardner and MacIntyre, 1993).

Test anxiety has been defined as the reaction to stimuli that are associated with an individual's experience of testing or evaluating situations (Stober, 2004). Stober (2004) mentioned that there are two main components of test anxiety: worry and emotional status. "Worry" is refers to concerns about being evaluated and the results of exam failure, and secondly, "emotion" refers to the perceptions and reactions evoked by the test situation. In general, test anxiety includes a number of different symptoms, such as inability to pay attention and concentrate, and awareness of bodily sensations and tension, and so on, and it leads to academic failure in the long run (Sena, Lowe, and Lee, 2007). There is no denying that, one of the factors related to low academic performance and achievement is test anxiety, and some studies mentioned that test anxiety is highly prevalent among students. For example, a research finding found that there is a significant difference of academic achievement among three levels of test anxiety. Students with low test anxiety had higher academic achievement than students with moderate and higher test anxiety. Similarly, students with moderate test anxiety had higher academic achievement than students with higher test anxiety (Chapell, Blanding, and Silverstein, 2005). Besides this, Sansigiry and Sail (2006) noted that test anxiety causes irrelevant thoughts, decreased attention and concentration, thus leads to academic failure. Also, it is linked to memory and has a negative impact on academic performance.

Self-efficacy has the potential to play an important role in the learning process by either helping or hindering learner's progress (Bandura, 1984). Based on Bandura (1997), self-efficacy is defined as "the beliefs in one's capabilities to organize and execute the course of action required to produce given attainments" (p.3). Additionally, four major sources contribute to an individual's self-efficacy (a) enactive experiences, (b) vicarious experiences, (c) verbal persuasion, and (d) physiological indexes (Bandura, 1997), and these four sources are equally important in studying self-efficacy. Multon, Brown, and Lent (1991) found that self-efficacy was positively related to student persistence and academic performance across different areas, experimental designs, and grade levels. Bandura (1997) also found that self-efficacious students have similar characteristics: They take part in classes readily, work harder, persist longer, and have fewer negative emotional reactions when they face challenges, and so forth. Bandura (1997) further states that learners with low self-efficacy believe that they do not have the power and capabilities to learn a language, therefore, admitting failure from the beginning. Learners with high self-efficacy are more likely to succeed at language learning and also to be more motivated to learn the language. Also, a student with a high

sense of self-efficacy is enabled to remain efficient in analytic thinking in complex situations and that fosters cognitive constructions of effective actions (Bandura, 1997). As mentioned above, Cotterall (1999) considered self-efficacy as a crucial variable in success of language learners

METHOD

Participants

The participants in this study consisted of 256 freshmen in a senior high school in the middle of Taiwan. The mean age range was sixteen to eighteen year old. Of the participants, 132 were male and 124 were female students. The participants were placed into three proficiency level groups (pre-intermediate, intermediate, and upper- intermediate) based on their English scores on the High School Entrance Exam. The participants were drawn from three different English language proficiency level groups: 105 were pre-intermediate; 87 were intermediate; and 64 were upper- intermediate English language learners. All were enrolled in the freshmen English course offered by the school.

Instrument

For this study, the participants completed a survey consisting of a 24-item Foreign Language Classroom Anxiety Scale (FLCAS)(Appendix A), a 22-item English as a Foreign Language Test Anxiety Scale (FLTAS)(Appendix B), a 5 –item English Learning Self-Efficacy Scale (ELSES) (Appendix C), and the background questionnaires (including the participants' demographic information such as gender). All the items except the background questionnaire items were placed on a 5-point Likert scale ranging from “strongly disagree” to “strongly agree”. The three-part survey questionnaire in the Chinese language was administered to the participants, Mandarin Chinese was used to avoid unnecessary misreading and miscomprehension in terms of questionnaire contents. Originally, the Foreign Language Classroom Anxiety Scale was directly adopted from Horwitz et al. (1986), and there were 33 question items, which were divided into three broad categories of Foreign Language Classroom Anxiety Scale: communication anxiety, test anxiety, and fear of negative evaluation. The researchers eliminated nine inappropriate items out of the 33original questionnaire items as suggested by a review panel. Finally, this Foreign Language Classroom Anxiety Scale was used to measure two dimensions of foreign language classroom anxiety: English use and test anxiety (questions 1 to 9), and English language class anxiety (questions 10 to 24). The Cronbach's alpha was.80 referring to the final version of the 24-item questionnaires as being reasonably reliable for the formal final version.

Second, the scale of English as a Foreign Language Test Anxiety was used from Sarason's survey (1984), and it was geared towards measuring levels of test anxiety experienced by students when they took English exams. Third, the English Learning Self-Efficacy Scale was adopted from Cheng's questionnaire (2001), and it evaluated individuals' judgment of their competence in learning English.

Data Collection

All participants completed the questionnaire during class time midway through the first semester. The survey questionnaires took around 60 minutes to complete. The students were informed that the survey would have no effect on their grade. Alpha reliabilities for the Foreign Language Classroom Anxiety Scale, the English as a Foreign Language Test Anxiety, and the English Learning Self-Efficacy Scale in the present study were .80, .86, and .78 respectively, indicating reasonably reliable internal consistency for these instruments.

Data Analyses

The descriptive statistics were calculated to determine to what extent the participants felt anxious in the English language classroom, during English language tests, and how they judged their own competence in learning English. The independent-samples T test and the One-way Analysis of Variance (ANOVA) method were adapted in this study to find out if there were significant differences in the means among foreign language learning anxiety, test anxiety, and self-efficacy of the participants. Then, correlational analyses were run to explore the relationships among foreign language learning anxiety, test anxiety, and self-efficacy of the participants.

RESULTS

Differences among various English proficiency levels in their foreign language learning anxiety, test anxiety, and self-efficacy

Based on the one-way ANOVA statistical analysis, it was shown that there is a statistical significance in the English use and test anxiety in terms of their various English proficiency levels (pre-intermediate, intermediate, and upper-intermediate), due to $F(2, 253) = 137.55, p < .01$ (See Table 1).

Table 1: One-way ANOVA (English Use and Test Anxiety Faced by the Various English Proficiency Level Students)

Source	SS	df	MS	F	P
Between Groups	60.66	2	30.33	137.55	*.00
Within Groups	55.79	253	.22		
Total	116.45	255			

Note: * $p < .01$

According to the result of descriptive statistics, the participants with the pre-intermediate proficiency levels ($M=3.40$, $SD=0.44$) had a higher degree of the English use and test anxiety than the participants with intermediate ($M=2.93$, $SD=0.48$) proficiency levels. The participants with intermediate proficiency levels ($M=2.93$, $SD=0.48$) had a higher degree of anxiety than the English use and test anxiety of the participants with upper-intermediate ($M=2.17$, $SD=0.50$) proficiency levels. Also, the results showed that there is a statistical significance in English language class anxiety in terms of their various English proficiency levels (pre-intermediate, intermediate, and upper-intermediate), due to $F(2, 253)=198.226$, $p < .01$ (See Table 2).

Table 2: One-way ANOVA (English Language Class Anxiety Faced by the Various English Proficiency Level Students)

Source	SS	df	MS	F	P
Between Groups	52.19	2	26.09	198.226	*.00
Within Groups	33.30	253	.13		
Total	85.50	255			

Note: * $p < .01$

According to the results of descriptive statistics, the participants with pre-intermediate proficiency levels ($M=3.25$, $SD=0.32$) had higher degree of English language class anxiety

than of the participants with intermediate ($M=2.89$, $SD=0.39$) proficiency levels. The participants with intermediate proficiency levels ($M=2.89$, $SD=0.39$) had a higher degree of English language class anxiety than of the participants with upper-intermediate ($M=2.10$, $SD=0.39$) proficiency levels. Overall, it showed that there is a statistical significance in foreign language learning anxiety in terms of their various English proficiency levels (pre-intermediate, intermediate, and upper- intermediate), due to $F(2, 253)=249.58$, $p < .01$ (See Table 3).

Table 3: One-way ANOVA (Foreign Language Learning Anxiety Faced by the Various English Proficiency Level Students)

Source	SS	df	MS	F	P
Between Groups	56.25	2	28.12	249.57	*.00
Within Groups	28.51	253	.11		
Total	87.76	255			

Note: * $p < .01$

According to the results of descriptive statistics, the participants with pre-intermediate proficiency levels ($M=3.32$, $SD=0.31$) had a higher degree of foreign language learning anxiety than the participants with intermediate ($M=2.91$, $SD=0.33$) proficiency levels. The participants with intermediate proficiency levels ($M=2.91$, $SD=0.33$) had a higher degree of anxiety than the foreign language learning anxiety of the participants with upper-intermediate ($M=2.13$, $SD=0.38$) proficiency levels.

With respect to the test anxiety among the various English proficiency levels, one –way ANOVA has identified that there is a statistical significance in their various English proficiency levels (pre-intermediate, intermediate, and upper- intermediate), due to $F(2, 253)=524.55$, $p < .01$ (See Table 4).

Table 4: One-way ANOVA (The Test Anxiety Faced by the Various English Proficiency Level Students)

Source	SS	df	MS	F	P
Between Groups	99.19	2	49.57	524.57	*.00
Within Groups	23.19	253	.09		
Total	123.06	255			

Note: * $p < .01$

According to the result of descriptive statistics, the participants with pre-intermediate proficiency levels ($M=3.58$, $SD=0.34$) had higher degree of the test anxiety than the participants with intermediate ($M=2.72$, $SD=0.28$) proficiency levels. The participants with intermediate proficiency levels ($M=2.72$, $SD=0.28$) had a higher degree of anxiety than that of the test anxiety of the participants with the upper-intermediate ($M=2.03$, $SD=0.29$) proficiency levels.

Regarding the learning self-efficacy among the various English proficiency levels, one –way ANOVA has identified that there is a statistical significance in their various English proficiency levels (pre-intermediate, intermediate, and upper- intermediate), due to $F(2, 253)=22.70$, $p < .01$ (See Table 5).

Table 5: One-way ANOVA (Learning Self-Efficacy among the Various English Proficiency Level Students)

Source	SS	df	MS	F	P
Between Groups	6.39	2	3.19	22.70	*.00
Within Groups	35.63	253	.14		
Total	42.03	255			

Note: * $p < .01$

According to the results of descriptive statistics, the participants with upper-intermediate proficiency levels ($M=3.06$, $SD=0.47$) had a higher degree of anxiety and the learning self-efficacy than of the participants with intermediate ($M=2.80$, $SD=0.34$) proficiency levels. The participants with intermediate proficiency levels ($M=2.80$, $SD=0.34$) had a higher degree of anxiety and learning self-efficacy than of the participants with pre-intermediate ($M=2.66$, $SD=0.33$) proficiency levels.

The index of relationship between the FLCAS and FLTAS was a Pearson product-moment correlation coefficient. The Pearson r indicated a significant positive relationship between the two scales, especially in the upper- intermediate proficiency ($r=.50$, $p<.01$) level and pre-intermediate proficiency level ($r=.36$, $p<.01$). The index of relationship between the FLTAS and ELSESES was a Pearson product-moment correlation coefficient. The Pearson r indicated a significant negative relationship between the two scales, especially in the pre- intermediate proficiency level ($r=-.24$, $p<.05$) (See Table 6).

Table 6: A Pearson Product-Moment Correlation Coefficient among the FLCAS, FLTAS, and ELSESES of Various English Proficiency Level Students)

Proficiency Levels	Scales	FLCAS	FLTAS	ELSESES
Upper-Intermediate	FLCAS	1	.50**	-.12
Upper-Intermediate	FLTAS	.50**	1	-.16
Upper-Intermediate	ELSESES	-.12	-.16	1
Intermediate	FLCAS	1	-.20	-.12
Intermediate	FLTAS	-.20	1	.13
Intermediate	ELSESES	-.12	.13	1
Pre- Intermediate	FLCAS	1	.36**	.02
Pre- Intermediate	FLTAS	.36**	1	-.24*
Pre- Intermediate	ELSESES	.02	-.24*	1

Note:** $p<.01$, * $p<.05$

Differences among genders in foreign language learning anxiety, test anxiety, and self-efficacy

According to Independent-t test analyses, it was shown that there is a statistical significance in foreign language learning anxiety between male and female participants, due to $t(254)=-2.350$, $p<.05$. The male participants' ($M=2.97$, $SD=.53$) foreign language learning anxiety was of a higher degree than the female participants' foreign language learning anxiety ($M=2.80$, $SD=.60$). To be specific, it showed that there was a statistical significance in English use and test anxiety between male and female participants, due to $t(253)=-3.648$, $p<.05$. The male participants' ($M=3.08$, $SD=.62$) foreign language learning anxiety had higher degree than the female participants' one ($M=2.78$, $SD=.70$). On the contrary, there was no statistical significance in English classroom anxiety between male and female participants, due to $t(254)=-.479$, $p>.05$. Regarding test anxiety, there was a statistical significance in test anxiety between male and female participants, due to $t(254)=-5.366$, $p<.05$. On the average, the male participants' ($M=3.11$, $SD=.69$) test anxiety was of a higher degree than the female participants' one ($M=2.67$, $SD=.62$). In terms of learning self-efficacy, there was a statistical significance between male and female participants, due to $t(254)=2.91$, $p<.05$. On the average, the female participants' ($M=2.88$, $SD=.41$) learning self-efficacy was of a higher degree than the male participants' one ($M=2.73$, $SD=.38$).

The index of relationship between the FLCAS and FLTAS was a Pearson product-moment correlation coefficient. The Pearson r indicated a significant positive relationship between the two scales between the male ($r=.78$, $p<.01$) and female ($r=.76$, $p<.01$) groups. The index of relationship between the FLCAS and ELSESES was a Pearson product-moment correlation coefficient. The Pearson r indicated a significant negative relationship between the two scales between the male ($r=-.23$, $p<.01$) and female ($r=-.42$, $p<.01$) groups. The index of relationship between the FLTAS and ELSESES was a Pearson product-moment correlation coefficient. The Pearson r indicated a significant negative relationship between the two scales between the male ($r=-.26$, $p<.01$) and female ($r=-.44$, $p<.01$) groups (See Table 7).

Table 7: A Pearson Product-Moment Correlation Coefficient among the FLCAS, FLTAS, and ELSESES of both Genders)

Genders	Scales	FLCAS	FLTAS	ELSESES
Female	FLCAS	1	.76**	-.42**
Female	FLTAS	.76**	1	-.44**
Female	ELSESES	-.42**	-.44**	1
Male	FLCAS	1	.78**	-.23**
Male	FLTAS	.78**	1	-.26**
Male	ELSESES	-.23**	-.26**	1

Note:** $p < .01$, * $p < .05$

Finally, the results of two-way ANOVA indicated that significant interaction effect occurred between the two study factors, namely genders and English proficiency levels on the FLCAS, FLTAS, and ELSESES (See Table 8).

Table 8: Test of Interaction effects

Scales	Gender	Level	Gender x Level
FLCAS	2.36a (.12)b	243.01(.00*)	4.39 (.01*)
FLTAS	46.53 (.00*)	566.08 (.00*)	5.39 (.00*)
ELSESES	6.75 (.01)	20.30 (.00)	3.21 (.04*)

Note: This test of interaction effects based on a two-way ANOVA among various genders and English proficiency levels on the FLCAS, FLTAS, and ELSESES

a refers to F value

b refers to statistical significance p value

*significant effect at the .05 level

We concluded that a significant interaction effect occurred between genders and English proficiency levels in this study. Based on a significant interaction effect, the simple main effect analysis was performed in this study in various genders and English proficiency levels for the FLCAS, FLTAS, and ELSSES. In other words, we needed to adapt the one-way ANOVA method to further analyze and discuss the differences between two genders and three different English proficiency levels for their FLCAS, FLTAS, and ELSSES. The most noticeable of these findings are as follows:

First, the results of simple main effect analyses focused on male and female participants and indicated that there were significant differences among the three English proficiency levels in terms of their FLCAS, FLTAS, and ELSSES. It revealed that the pre- intermediate level students had a higher degree of foreign language classroom anxiety and test anxiety than intermediate level students, and intermediate level students had a higher degree of foreign language classroom anxiety and test anxiety than upper intermediate level students. It also showed that the upper- intermediate level students had a higher degree of English learning self-efficacy than intermediate level students, and intermediate level students had a higher degree of English learning self-efficacy than pre-intermediate level students.

Second, the results of simple main effect analyses focused on upper- intermediate proficiency level participants and indicated that there were significant differences between the male and female participants regarding their FLCAS, FLTAS, and ELSSES. It revealed that the male students had higher degree of foreign language classroom anxiety and test anxiety than female students; however, female students had higher degree of English learning self-efficacy than male students. The results also identified that there was no significant difference between male and female participants in the intermediate proficiency level group for their FLCAS, FLTAS, and ELSSES. Interestingly, there was significant difference between male and female participants in the pre-intermediate proficiency level group only for their FLTAS, and male students had higher degree of test anxiety than female students.

DISCUSSIONS AND CONCLUSIONS

The findings revealed that the participants experienced foreign language classroom anxiety and test anxiety in learning English in this study, and the relationship between foreign language classroom anxiety and test anxiety were positively related regardless of gender and English proficiency levels. According to Koralp's (2005) study, it was discovered that there was a positive correlation between test anxiety and foreign language anxiety. In other words, the findings of this study corresponded with Koralp's (2005) findings. Besides this, Cheng

(2001) has showed that students' level of anxiety about English class was negatively and strongly correlated with their English self-efficacy. Furthermore, self-efficacy was found to have an effect on learners' level of second language learning anxiety. In other words, learners of low English self-efficacy revealed having experienced a significantly higher level of English class anxiety than those of relatively high English self-efficacy. Basically, the findings of the study are also consistent with Cheng's findings (2001). Both Gardner, Tremblay, Masgoret (1997) and Wharton (2000) have shown that there was a highly negative correlation between language learning anxiety and the proficiency level. In this study, we can conclude that the same results echo Gardner et al (1997) and Wharton's (2000) results. Further, Khaldieh (2000) observed that less proficient students exhibited more anxiety than capable students.

Matsuda and Gobel (2004) believed that gender played a significant part in foreign classroom anxiety. Recently, Na (2007) discovered that males have higher anxiety in learning English than their female counterparts. In a similar vein, the findings of this study also correspond to Na's findings (2007). Interestingly, the findings of this study are different from the recent findings of Narayanan, Rajasekaran, and Iyyappan (2008).

IMPLICATIONS FOR FOREIGN LANGUAGE INSTRUCTION

As mentioned above, there is no denying that foreign language classroom anxiety, test anxiety, and learning self-efficiency are influenced by gender and various proficiency levels of the participants in this study. The results of the current study would help foreign language teachers in various ways regarding their instruction of foreign language learners in their classes.

First, as Horwitz, Horwitz, and Cope (1991) note, teachers must be able to explore their students' language learning anxiety sources as well as help anxious learners cope with existing anxiety-provoking situations and endeavor to make the learning context less stressful and relaxed. In other words, creating a low-anxiety classroom atmosphere is clearly a significant prerequisite to language learning success.

Second, test anxiety can develop for a number of reasons. Lack of confidence, fear of failure, and other negative thought processes may also contribute to test anxiety. Encourage students to use positive self-talk as an alternative to negative thoughts about their perceived ability and performance prior to and during testing situations. Teach ways of positive self-thought, such as "trust me, I can do it," "I study hard and am doing the best I can." On the other hand, teachers can teach students successful and useful test-taking strategies, such as understanding

the test time limits and the importance of test pacing, coping with different test formats (multiple choice, essay), etc to their students.

Lastly, teachers can teach various learning strategies to help students to develop realistic expectations and achievable goals based on gender and language proficiency level and, can eventually raise learners' self efficacy. One way to increase learning confidence is by using cooperative learning rather than individual learning. Cooperative learning creates positive interdependence between peer groups. Through scaffolding, students can support each other in terms of language learning. In addition to this, an alternative assessment and evaluation should be taken into consideration regarding linguistic performance, such as role playing, writing a learning diary and so forth. Last but not least, language learning anxiety, test anxiety, and learners' self efficacy play an important role in language learning among foreign language learners. It is vital that foreign language teachers should look closely at the affective state of the learners as this greatly influences their learning.

LIMITATION OF THE STUDY

Some limitations should be considered before applying the results obtained in this research. First of all, due to the small number of the participants, the results can not be generalized to all Taiwan EFL senior high school settings. Second, another drawback relates to the data collection technique, the only data collection technique was questionnaire. It is suggested that researchers could adapt other forms of data collection, such as classroom observation, face to face interviews, and student journal entries in order to build a more comprehensive and deeper image of such complicated issues as language learning anxiety, test anxiety, and learners' self efficacy. Finally, it is difficult to measure affective variables on a short slice of time, and it would also be useful to conduct a longitudinal study to explore learning and test anxiety over time.

REFERENCES

- Bandura, A. (1984). Recycling misconceptions of perceived self-efficacy. *Cognitive Therapy and Research*, 8(3), 231-255.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Chapell, M. S., Blanding, Z. B., & Silverstein, M. E. (2005). Test anxiety and academic achievement in undergraduate and graduate students. *Journal of Education Psychology*, 97(2), 268-278.
- Cheng, Y. S. (2001). Learners' beliefs and second language anxiety. *Studies in English*

Literature and Linguistics, 27(2),75-90.

- Cheng, Y. S. (2004). A measure of second language writing anxiety: *Journal of Second Language Writing*, 13, 313-335.
- Cheng, L. & Curtis, A. (2004). Washback or backwash: A review of the impact of testing on teaching and learning. In L. Cheng, Y. Watanabe, & A. Curtis (Eds.), *Washback in language testing: Research contexts and methods* (pp. 3-17). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cotterall, S. (1999). Key variables in language learning: what do learners believe about them? *System*, 27(4), 493-513.
- Gardner, R. C., & McIntyre, P. D. (1993). On the measurement of affective variables in second language learning, *Language Learning*, 43, 157-194.
- Gardner, R. C., Tremblay, P., & Masgoret, A. M. (1997). Toward a full model of second language learning: An empirical investigation, *The Modern Language Journal*, 81(3), 344-362.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (1986). Foreign language classroom anxiety. *Modern Language Journal*, 79 (1), 125-132.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1991). Foreign language classroom anxiety. In E. K. Horwitz & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp.27-36). Upper Saddle River, NJ: Prentice Hall.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112-126.
- Jackson, J. (2001). Reluctance in second language: case discussions. *System*, 30, 65-84.
- Khaldieh, S. A. (2000). Learning strategies and writing processes of proficient vs. less-proficient learners of Arabic. *Foreign Language annals*, 33, 522-534.
- Koralp, S. (2005). A retrospective analysis of English language learning anxiety experienced by prospective teachers of English. Unpublished MA These. Turkey.
- MacIntyre, P.D. (1999) Language anxiety: a review of the research for language teachers. In D. Young (ed.) *Affect in Foreign Language and Second Language Learning: A Practical Guide to Creating a Low-anxiety Classroom Atmosphere*. USA: McGraw-Hill College.
- Matsuda, S., & Gobel, P. (2004). Anxiety and predictors of performance in English language classroom. *System*, 32, 21-36.
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of Counseling Psychology*, 18, 30-38.
- Na, Z. (2007). A study of high school students' English learning anxiety. *The Asian EFL Journal*, 9(3), 22-34.

- Narayanan, R., Rajasekaran, N., & Iyyappan, S. (2008). Some factors affecting English learning at tertiary level, *Iranian Journal of Language Studies*, 2, 4, 485-512.
- Oxford, R. (1999). Anxiety and the language learner: New insights. *Affect in Language Learning*, Cambridge University Press, New York.
- Sarason, I. G. (1984). Stress, anxiety, and cognitive interference: Reactions to tests. *Journal of Personality and Social Psychology*, 46, 929-938.
- Sansigiry, S. S., & Sail, K. (2006). Effect of students' perception of course loads on test anxiety. *American Journal of Pharmaceutical Education*. 70(2), 1-6.
- Sena, W. J., Lowe, P., & Lee, S. W. (2007). Significant predictors of test anxiety among students with and without learning disabilities. *Journal of Learning Disabilities*, 40(4), 360-376.
- Stober, J. (2004). Dimension of test-anxiety: Relations to ways of coping with pre-exam anxiety and uncertainty. *Journal of Anxiety, Stress, and Coping*, 17(3), 213-226.
- Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning*, 50, 203-204.

Appendix A. Foreign Language Learning Anxiety Scale (Chinese Version)

1. 英文考試對我來說，輕鬆沒壓力。
2. 我擔心英文會被當掉。
3. 在課堂上我被點名用英文回答問題時，我常感到顫抖。
4. 越學習英文越感到困惑。
5. 當我在英文課發言時，我感到有自信。
6. 假如有人要我用英文回答時，我會感到焦慮。
7. 不論在任何情況下講英文，我都覺得不舒服。
8. 假如路人用英文向我問路時，我不會覺有壓力。
9. 在電話中用英文交談，我覺得困擾。
10. 當我被要求在上課時用英文回答，我通常會腦筋一片空白。
11. 當我在英文課發言時，我感到很困惑、緊張。
12. 我總覺得其他同學的英語說得比我好。
13. 我上英文課時，覺得有自信。
14. 上英文課，要我主動回答問題，讓我覺得很尷尬。
15. 當我說英語時，我擔心其他同學會取笑我。
16. 我不擔心在語言課程中犯語法的錯誤。
17. 上英文課時，我的思緒常會遠飄，不夠專心。
18. 當我聽不懂老師的指正時，我會感到懊惱。
19. 即使我在語言課程中準備周全，我仍感到焦慮、緊張。
20. 我常覺得不想上英文課。

21. 我害怕被英文老師糾正我的錯誤。
22. 英語課進度很快，我會擔心趕不上其他同學的程度。
23. 我覺得上英文課比其他課程更緊張。
24. 若能按照自己的方式學習英文，我會覺得自信且輕鬆。

Appendix B. Test Anxiety Scale (Chinese Version)

1. 考試時，我很擔心。
2. 考試時，我總認為別人會考得比我好。
3. 當我知道要考試時，我沒信心也無法放鬆。
4. 在考試的時候，我會想一些和考試不相關的事。
5. 考試前，我會一直擔心考試這件事。
6. 一邊考試，一邊想我會考不及格。
7. 考完試之後，我很擔心成績。
8. 即使考了好成績，我還是覺得沒信心。
9. 考試之後，我覺得我應該可以表現得更好。
10. 考試時，我的情緒對我的表現會產生負面影響。
11. 考試時，我容易忘記我所讀的。
12. 當我準備考試時，我很擔心。
13. 當我越認真讀，對內容越感到困惑。
14. 當考試時，我不確定我是否會表現得很好。
15. 考試對我造成很大的困擾。
16. 當考試時，時間限制讓我壓力很大。
17. 我準備的時間越少，考的成績越差。
18. 如果沒有考試，我反而會更認真讀書。
19. 考試對我的學習造成反效果。
20. 即使有充分的準備，我還是很擔心考試。
21. 我擔心考試沒有做好充分準備。
22. 考試前我的心情很紛亂。

Appendix C. English Learning Self-Efficacy Scale (Chinese Version)

1. 我相信自己有能力把英文學好。
2. 我覺得自己一直都學不好英文。
3. 我覺得英文不是我擅長的科目。
4. 我覺得學好英文對我而言是一件容易的事。
5. 我相信自己具有英文方面的天份。