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## On the Relationship Between Foreign Language Classroom Anxiety and English Achievement

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### Abstract

The aim of this study was to examine the relationship between foreign language classroom anxiety and English language achievement among high school third-graders. A sample of 239 students (110 males and 129 females) was assessed for their levels of foreign language anxiety using FLCAS. Participants' scores on their final English test were also used as the measure of their English achievement. The results revealed foreign language classroom anxiety significantly and negatively correlated with English achievement. Implications for both teachers and learners and suggestions for further research are provided.

*Keywords:* Foreign language classroom anxiety; English achievement; Third-grade high school students

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### 1. Introduction

Recent interest in the field of foreign/second language learning has focused on research topics related to individual differences and personal factors. Individual differences, which is a widely current expression in the foreign language teaching field, refer to the different levels of success or failure that foreign language learners can be expected to meet (Skehan, 1989). Numerous contributory language and non-language factors to explain those differences have been examined during the recent years (Brown, 1994; Ellis, 1985; Gass & Selinker, 1994; Larsen-Freeman &

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Long, 1991 and Spolsky, 1989), and among them, affective variables such as motivation, anxiety and learning strategies have been accepted as the most probable (Horwita & Young, 1991).

There have been a number of studies in different instructional contexts with varying target languages which have found a negative relationship between specific measures of language anxiety and language achievement. In the first study using the Foreign Language Classroom Anxiety Scale (FLCAS), Horwitz (1986) found a significant moderate negative correlation between foreign language anxiety and the grades students expected in their first semester language class as well as their actual final grades, indicating that students with higher levels of foreign language anxiety both expected and received lower grades than their less anxious counterparts. MacIntyre and Gardner (1989) also found significant negative correlations between a specific measure of language anxiety (French class anxiety) and performance on a vocabulary learning task.

With respect to a target language which is typically perceived as difficult by English-speakers, Aida (1994) found a significant negative correlation between FLCAS scores and final grades among American second-year Japanese students. This finding was replicated by Saito and Samimy (1996) with Japanese learners at three levels (beginning, intermediate, and advanced). Similarly, in a study of Canadian university learners of French, Coulombe (as cited in Horwitz, 2001) found a somewhat smaller but significant negative correlation between FLCAS scores and final grades in eleven French classes ranging from beginning to advanced. Thus, it appears that the observed negative relationship between anxiety and achievement holds at various instructional levels as well as with different target languages. However, it should also be noted that all the studies reviewed here included students at the college or university level and the relationship between anxiety and achievement in younger learners remains relatively unexplored.

One study is particularly interesting because it focuses on more advanced language learners (pre-service teachers) in a non-North American context. Rodriguez (1995) found a significant negative correlation between FLCAS scores and final grades among Spanish-speaking EFL students in seven English classes in Venezuela. In this case the correlation ( $r = .57$ ) was somewhat higher than reported in the other studies, indicating that the two measures have almost one-third of the variance in common. Considering all the possible influences on final grades, this seems a very substantial correlation and raises the possibility that language anxiety is also an important issue among language teachers, as argued by Horwitz (1996).

Finally, in an Asian EFL context, Kim (1998) not only found significant negative relationships between FLCAS scores and final grades but also reported an interesting difference in the relationship when observed in a traditional reading-focused class and a conversation class. Specifically, students were considerably less anxious in the reading class than in the conversation class. Thus, this study appears to support teachers- and students- intuitive feelings that language classroom which require oral communication are more anxiety-provoking than traditional classrooms.

Several studies have also revealed a negative relationship between language anxiety and outcome measures other than final grades. Trylong (1987) found a negative relationship between anxiety and teacher ratings of achievement; MacIntyre, Noels, and Clément (1997) observed a negative relationship between anxiety and students' self-ratings of their language proficiency (as cited in Horwitz, 2001). Gardner and MacIntyre (1993) present perhaps the most extensive set of findings with respect to language anxiety. Using measures of both classroom anxiety and language use anxiety, they found significant negative correlations with several language production measures including a cloze test, a composition task, and an objective French proficiency measure. Interestingly, they found somewhat higher negative correlations between student anxiety scores and their self-ratings of French competence than with their actual performance on the tests of French ability. Finally, with respect to some of the nonlinguistic but hoped-for goals of language instruction, Spitali (2000) found a negative relationship between FLCAS scores and a measure of attitudes toward people of different cultures in American high school language learners of French, Spanish, and German.

According to MacIntyre and Gardner (1991), research on the effects of anxiety on language learning has shown an understandable emphasis on the output stage in terms of production, performance, course grades, and other criteria. This is because the performance at output stage is the easiest one to obtain and has been regarded by the majority of teachers and parents as the most important indicator of students' learning. Although anxiety does have effects on language learning, the results of research in the relationship between anxiety and foreign language learning are mixed and confusing (Scovel, 1978).

Young (1991) found no significant correlations between the results of Oral Proficiency Index (OPI) and anxiety measures. In her opinion, ability in the foreign language may have become a more important variable. Finding that test anxiety would probably affect those with low levels of

proficiency, she suggests that test anxiety should be viewed with a learner's language proficiency.

Although the results differ, language anxiety displays negative effects in most cases. MacIntyre and Gardner (1991) even suggest that anxiety has been proved to negatively affect performance in the second language. Horwitz (1991) observed significantly negative correlation between anxiety and foreign language achievement after conducting research to verify the reliability and construct validity of the FLCAS. In addition, several studies revealed that language anxiety was negatively correlated with students' performance in terms of standardized tests (Gardner et al., 1987), course grades (Aida, 1994; Chang, 1996; Horwitz, Horwitz, & Cope, 1986; Liao, 1999), and the grades in mid-term exams (Chang, 1996; Liao, 1999). The fact that numerous studies have displayed significantly negative correlations means language anxiety does affect foreign language learning at the output stage.

To explain the negative correlations between language classroom anxiety and second language proficiency, MacIntyre and Gardner (1991) point out that as experience and proficiency increase, anxiety declines in a fairly consistent manner. On the contrary, foreign language anxiety develops if the student's following experiences with the foreign language are not positive. Poor foreign language performance, in turn, reinforces foreign language anxiety. Consequently, these two variables affect each other constantly. In addition to the significant correlations, researchers such as MacIntyre (1995) and MacIntyre and Gardner (1991) further raised the question of causality: Does anxiety interact with pre-existing language ability, which, in turn, impairs foreign language performance or does poor foreign language performance lead to anxiety as consequence? This is a question that needs to be clarified through further studies. On the whole, researchers agree that language anxiety can play a significant casual role in learning a foreign language.

Studies of anxiety have also focused on different language outcomes, such as rate of second language acquisition, performance in language classroom, and performance in language testing. However, there have been very few studies in Iran having investigated this variable to see how it influences Iranian students learning a foreign language. Thus, the present study is intended to contribute to the existing literature by examining the effects learners' foreign language classroom anxiety has on their achievement in English language classroom. This study examined the extent of foreign language classroom anxiety among Iranian senior high school students. Through the findings of this study, teachers will be more

aware of students' psychological needs during the process of language teaching-learning and provide proper assistant to overcome students' certain frustrations in foreign language learning. Rather, the results from this study can contribute to a good guide by reducing the levels of anxiety for those foreign language learners who are anxious in English classes.

The primary purpose of the present study was then to investigate the relationship between foreign language classroom anxiety (FLCA) and English achievement among Iranian high school students. Therefore, the main research question of the study was whether there was a relationship between students' foreign language classroom anxiety and their English achievement. In this context, anxiety, as described by Morris, Davis, and Hutchings (1981), comprises "worry and emotionally". Worry refers to cognitive aspects, "such as negative expectations and cognitive concerns about oneself", the situation at hand, and possible consequences. On the other hand, emotionally concerns one's perception of the physiological-affective elements of the anxiety experience, that is, indications of autonomic arousal and unpleasant feeling states "such as nervousness and tension" (p. 541). In a similar vein, Spielberg (as cited in Horwitz, 2001) defined it as the "subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system".

## **2. Method**

### **2.1. Materials**

The research was correlational utilizing survey methodology. The research method employed in this study also drew on the traditions of research in foreign language anxiety. Survey research has been widely used in foreign language anxiety studies (e.g., Horwitz et al., 1986; Saito, Garza, Horwitz, 1999). Considering that the main purpose of this study was to reveal the foreign language anxiety level among Iranian learners of English and the correlation between this construct and English achievement, the survey research design was appropriate.

The population of the current study was all third-graders studying at 20 high schools in Chenaran, a city in northern Khorasan Province, including 310 males and 321 females (N = 631). The size of the sample was measured as 239 with the 95% confidence level and the confidence interval of 5. However, since the researcher predicted lack of cooperation from a number of subjects, 350 copies of the consent form and the set of questionnaires to be used were printed and distributed.

Among all the 350 participants investigated, 239 students (110 males and 129 females) who provided complete responses to the questionnaires

were selected randomly. Regarding the academic majors of the participants, 52% studied humanities while 31% studied science, and 17% studied mathematics.

The Foreign Language Classroom Anxiety Scale (FLCAS) was administered to participants as the major source of data. The participants' scores on their English language final exam were used as the indicator of their English achievement. In addition to the two main questionnaires, a background questionnaire was handed to the participants to collect some demographic information about them.

According to Horwitz, Horwitz and Cope (1986), FLCA constructs self-perceptions, beliefs, feelings, and behaviors associated with classroom language. The instrument laid out by Horwitz, et al. (1986) was adopted in this research as the questionnaire to detect the participants' level of anxiety in English language. In the present study, English achievement referred to the students' scores on their final English exam which is held countrywide. The final grade was selected mainly because it has been used as a global measure of language proficiency by several researchers (e.g., Chastain, 1975; Glikzman, Gardner & Padric, 1982; Horwitz, Horwitz & Cope, 1991; as cited in Chen, 2007, p. 34).

Horwitz et al.'s (1986) research is a cornerstone study in language anxiety research, aspects of which, such as a definition of this kind of anxiety, a description of its manifestations, theoretical considerations, the Foreign Language Classroom Anxiety Scale, the researchers' findings, and suggested pedagogical implications, have been all deepened and widened in subsequent studies.

In their article, Horwitz and her colleagues asserted that up until that date (1986), research had neither adequately defined foreign language anxiety nor described its specific effects on foreign language learning. In response to this situation, they reviewed earlier work that had examined the relationship between anxiety in language learning settings, and found only one instrument specifically designed to measure foreign language anxiety which was Gardner, Clément, Smythe, and Smythe's (1979) five items designed to measure anxiety in the French classroom, and which was included in their Attitudes and Motivation Battery.

Importantly for subsequent research, Horwitz and her colleagues developed the (FLCAS), which contains 33 items to be answered on a 5-point Likert-type scale, from "strongly agree" to "strongly disagree." It has been shown to have an internal reliability of .93 and test-retest reliability over eight weeks of  $r = .83$ ,  $p = .001$  (Horwitz, 1986, p. 560). The authors claimed that from the results of their study, conducted with

75 university students of Spanish (beginner level), “students with debilitating anxiety in the foreign language classroom setting can be identified and that they share a number of characteristics in common”.

Results arising from the administration of the FLCAS indicated that almost half the students were anxious about speaking, and over a third were worried when they could not understand everything the teacher said. Almost two-fifths were sure that other students were more proficient language learners than they were, and well over half were concerned that they could not keep up with the pace of the language lesson. Over two thirds of students indicated that they felt uneasy about making mistakes, and a tenth of the participants feared being ridiculed by other students when they spoke in the target language.

The authors’ hypotheses that foreign language anxiety is a distinct set of beliefs, perceptions, and feelings in response to foreign language learning in the classroom and not merely a composite of other anxieties, and that anxious students feel uniquely unable to deal with the task of language learning, were given more support by responses to two of the items on the questionnaire: “30. I feel overwhelmed by the number of rules you have to learn to speak a foreign language”, with which 34% of students expressed agreement, and “26. I feel more tense and nervous in my language class than in my other classes”, which was endorsed by 38% of the participants. This item was “found to be the single best discriminator of anxiety on the FLCAS as measured by its correlation with the total score”.

In their conclusion, the authors stated that foreign language anxiety may invoke a variety of individual reactions: from not speaking in class, sitting at the back of the classroom in an attempt not to be called on by the teacher, and putting off doing homework. Horwitz and her colleagues encountered a range of responses from delays in starting foreign language study or even switches in university degree courses (in highly anxious students), to a complete lack of apprehension in the foreign language classroom (in students who experienced low or no language anxiety). As speaking is the skill which appeared to be the most threatening to language learners, the researchers submitted that the present communicative classroom environment is a potentially anxiety-arousing one for many students.

In regard to the purpose and context of this study, FLCAS was translated from English into Persian in a three-step process (Hambleton, 1994) with the permission of Elaine K. Horwitz, the developer of FLCAS. First, the researcher translated the scale into Persian,

and then a TEFL doctoral student and two MA TEFL students back-translated it into English independently. Both the translator and the back-translators were fluent in English and Persian. Next, the researcher and an MA professor of psychology compared the back-translated English versions with their original English versions and noted any differences in the scales. The reviewers (except the researcher) did not have a priori knowledge about the FLCAS; thus, possible biases from knowing the contents of the scale could be minimized. The final Persian version of the instruments was provided as an alternative to the English version for participants to complete.

The Foreign Language Classroom Anxiety Scale (FLCAS) contains 33 items, each of which is answered on a 5-point Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree). Questions were designed to survey three sections:

1. Communication apprehension (item 1,4,9,14,15,18,24,27,29,30, and 32)
2. Text anxiety (item 3,5,6,8,10,11,12,16,17,20,21,22,25,26, and 28)
3. Fear of negative evaluation (item 2,7,13,19,23,31, and 33)

Statements of the FLCAS in item 2,5,8,11,14,18,22,28, and 32 were negatively worded and the responses to those items were reversed and recoded. The theoretical range of this scale is from 33 to 165. Participants with higher scores indicate higher levels of foreign language anxiety. The FLCAS has demonstrated the internal reliability achieving an alpha coefficient of .93 and test-retest reliability, yielding an  $r = .83$  ( $p < .001$ ) (Horwitz et al., 1991). Moreover, concurrent validity studies have shown low positive correlation with the state-trait anxiety ( $r = .29$ ,  $p < .002$ ) (Spielberger, 1983), and the test anxiety scale ( $r = .53$ ,  $p < .001$ ) (Sarason, 1978; as cited in Horwitz, 2001). Coefficient alphas for the three subscales of FLCAS, i.e. Communication apprehension, Test anxiety, and Fear of negative evaluation were reported as .71, .85, and .58, respectively. In addition, the reliability of the total scale was computed as .87.

The third-grade English language final exam was prepared by Iran Ministry of Education (Assessment and Evaluation Center) and was held throughout the country. The test is developed on the basis of materials being taught through the third year of high school, and designed to measure students' overall achievement in English, more particularly their achievement in mastering the content of English book 3. This test includes subtests of spelling, vocabulary, structure, reading comprehension, and some others related to the materials covered in the course. By definition,



this test can be considered as a general achievement test (Farhady, Ja'farpur, & Birjandi, 2006).

The final English grade was selected mainly because it has been used as a global measure of language proficiency by numerous researchers (e.g., Chastain, 1975; Gliksman, Gardner & Padric, 1982; Horwitz et al., 1991, as cited in Chen, 2007).

Participants' scores on the test were obtained through a printed report prepared by Chenaran Office of Education, Academic Assessment and Evaluation Department after the written request of the researcher. The reliability (KR-21) of the test was estimated as .06.

### **3. Procedure**

To answer the research question, first, the data were collected at ten high schools in urban and rural areas. Before the administration of questionnaires, the students were given a brief oral overview of the research project by the researchers himself. They were also informed that if they took part in the research, they would go into a draw to win a reward provided by the researcher. In order to measure language anxiety, the FLCAS developed by Horwitz et al. (1986) was used. Pearson product-moment correlation was used to examine the relationship among each of the independent variables and the dependent variable (i.e., English achievement).

As the next step, the participants' levels of foreign language classroom anxiety were determined after consulting Horwitz, the developer of FLCAS and calculating the mean score of FLCAS as 96.6. As she suggested, students with a total score ranging from 107-165 were considered as fairly anxious (high anxiety group) and those with scores ranging from 83-106 were regarded as slightly anxious (moderate anxiety group). Participants with total scores ranging from 33-82 were taken as the low anxiety group.

In order to explore the relationship between foreign language classroom anxiety and English achievement, the researcher utilized Pearson product-moment correlation coefficients to determine whether statistically significant relationship existed between language anxiety and achievement. Furthermore, an analysis of variance (ANOVA) was conducted in order to ascertain whether there were any differences in students' mean English test scores of anxiety groups (low anxiety,  $n = 47$ ; moderate anxiety,  $n = 128$ ; high anxiety,  $n = 64$ ), depending on their levels of language anxiety.

#### 4. Results

The analysis revealed that 26.8% of the participants belonged to the high anxiety group, 53.6% to the moderate anxiety, and 19.7% to the low anxiety group. The results of the groupings of the participants based on their scores on the FLCAS are shown in Table 1.

Table 1. Distribution of Participants According to Their Anxiety Levels

Foreign Language Classroom Anxiety	f	%
High Anxiety Group	64	26.8%
Moderate Anxiety Group	128	53.6%
Low Anxiety Group	47	19.7%
Total	239	100

The results from Pearson product-moment correlation coefficients between FLCAS scores and English scores are illustrated in Table 2.

The total FLCAS scores had a significantly moderate negative correlation ( $r = -.35$ ,  $p < .01$ ) with the total English scores. It meant that the respondents with lower foreign language anxiety were likely to have higher English scores. In addition, significantly negative relationship was also found among the total English score and the three-subscale FLCAS scores. Among them, the correlation coefficients of the English score had much higher correlations with the subscales of test anxiety ( $r = -.39$ ,  $p < .01$ ) and communication apprehension ( $r = -.28$ ,  $p < .01$ ) than with the subscale of fear of negative evaluation ( $r = -.18$ ,  $p < .01$ ). It suggested that students with lower English scores tended to have higher test anxiety and communication apprehension than fear of being negatively evaluated by the teacher and other students.

As expected, the FLCAS subscale scores had much higher correlations with the FLCAS total scores. Rather, the three FLCAS subscales had high correlations (.87, .90, .81, respectively,  $p < .01$ ) with the FLCAS scores. Namely, the quantitative data indicated that all the foreign language anxiety subscales were significantly correlated with English achievement.

Table 2. Correlations Between FLCAS Scores and English Scores

	English	FLCAS	Communication	Test	Fear of negative
English Score	1				
FLCAS	-.35**	1			
Communication	-.28**	.87**	1		
Text Anxiety	-.39**	.90**	.64**	1	

Fear of Negative Evaluation	-.18**	.81**	.64**	.60**	1
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\*\*Correlation is significant at the .01 level (2-tailed).

Table 3 displays the analysis of variance for the test scores. This analysis of variance revealed statistically significant differences among test grades for participants in the three anxiety groups ( $F = 15.380$ ,  $df = 2$ ,  $p = .000$ ). A Scheffe post hoc analysis showed that the high-anxiety group received significantly lower mean grades in their test than both the moderate-anxiety group, and the low-anxiety group. The mean English test score for the low-anxiety group was 12.54. The mean score for the moderate-anxiety group was 10.69. The mean score for the high-anxiety group was 8.10, nearly 2 points below the mean English score of the sample (10.36).

Table 3. Results of ANOVA for Three Anxiety Groups Conducted on English Scores

Source	Sum of Squares	df	Mean Square	F	Sig.
Inter-Group Anxiety Level	562.12	2	281.06	15.38	.000
Intra-Group Anxiety Level	4312.71	236	18.27		
Total	4874.83	238			

## 5. Discussion

These results were consistent with the findings in previous studies by a great number of researchers including Horwitz (1986), MacIntyre and Gardner (1989), Aida (1994), Chang (1996), Horwitz, et al. (1986), Liao (1999), Chan and Wu (2004), and Ghorbandordinejad, et al. (2011).

Chan and Wu (2004), for example, investigated foreign language anxiety of EFL elementary school students in Taiwan. In their study, as to the correlation between foreign language anxiety level and English learning achievement, the correlation coefficient was  $r = -.27$  ( $p < .01$ ). The result showed that there was a significant negative correlation between the score of the FLCAS and the final score. That is, the higher the learners' anxiety level was, the lower the English learning achievement would be.

Similarly, Aida (1994), on examining Horwitz et al.'s (1986) construct of FLCA in second-year students of Japanese, used final course grades in percentages as a measure of language proficiency. Links between anxiety and language performance as measured of language proficiency. Links between anxiety and language performance as measured by course grade were investigated, Pearson Product Moment correlational analysis yielding a negative and statistically significant result:  $r = -.38$ ,  $p < .01$ . Results of analyses of variance indicated that participants who were more highly anxious were more likely to obtain a "grade B or lower", and that those who were more relaxed were "more likely to get an A". Aida (1994) also discovered that the high-anxiety group fared significantly worse on

the exam, high-anxiety students scoring on average 85.6 and the low-anxiety learners scoring on average 89.8.

## **6. Conclusion**

The present study was aimed to investigate the relationship between foreign language classroom anxiety and English academic achievement among high school third-graders. The data were collected through the participants' responses to the questionnaires and their scores on final English exam. The study indicated that students who have lower levels of foreign language anxiety perform better than those with high levels of anxiety. Generally speaking, EFL learning is a very sophisticated process and a number of variables, including personal variables, affect this process. Language anxiety, as a major learner's variable, influences the learning process in a very subtle way. Teachers may have already seen or sensed in their students many or all of the indications discussed in the present study and considered in the FLCAS. Teachers should keep in mind that anxiety is responsible for the students' habitual behaviors in class and also an influential factor in their achievement in English tests and their performance in English classroom.

Foreign language anxiety was found to be negatively related to English achievement among high school third-graders in the current study, therefore teachers are expected to find the sources of this anxiety in their classrooms and to take remedial actions accordingly. However, it is not enough only for the teachers to make such efforts to promote students learning process. Experts should be also asked to provide help for anxious students, especially for those highly anxious ones. In this case, some specific psychological techniques shall be applied.

Above all, it is important for students to remember the value of controlling their emotional state and remaining calm when they are in an English language context, more specifically English classroom. Also, they should be aware that setting goals higher than their capabilities would lead to a feeling of failure and anxiety. They need to learn that setting high standards is good, but not unrealistic and unachievable ones.

A few limitations of the study need to be stated. The first limitation of the study is to use a self-report questionnaire as measure of FLCA. A structured interview would be a better instrument to avoid the subjective perception of the subject in answering the self-report questionnaire, but it would be also more time consuming for the researcher. The second limitation is that only third-grade high school students constitute the sample of the study. Therefore, the findings can hardly be generalized to

the students of other grades in high schools. Nonetheless, the researcher believes the findings can still be beneficial for high school teachers since there is not much difference between the third-grade students and those at the other grades regarding the textbook and the English language learning environment. In spite of these limitations, the researcher believes this study should provide some helpful insights for educators, teachers and students as how influential such personal variables as anxiety will be on learners' English achievement.

In view of the limitations of this study, the following suggestions for future studies are recommended. Firstly, the participants in this study are limited to a sample of 239 high school third-graders. Therefore, a replication of this study involving a larger sample of students in Iran would provide further support for the generalizability of the findings. Secondly, the data were collected only by questionnaires. Qualitative research, including classroom observations and interviews with students and teachers, can provide further layers of analysis. That is, qualitative studies might also provide more detailed insight as researchers seek to explain how learner's levels of foreign language anxiety would relate to their language achievement. Thirdly, the results of multiple regression analysis revealed that FLA is only related to some extent to English achievement (about 12%). In the future, it is necessary to explore other potential factors which would influence English language achievement, namely teacher's instruction, language proficiency of the students, environmental and situational factors, academic major, socio-economic backgrounds, exam format and instructions, etc.

## References

- Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *Modern Language Journal*, 78, 155-168.
- Brown, H. D. (1994). *Principles of language learning and teaching*. Englewood Cliffs, NJ: Prentice Hall.
- Chan, D. Y., Wu, G. (2004). A study of foreign language anxiety of EFL elementary school students in Taipei Country. *Journal of National Taipei Teachers College*, 17(2), 287-320.
- Chang, G. B. Y. (1996). A study of anxiety in Chinese EFL learners. *Teaching and Research*, 18, 67-90.
- Chastain, K. (1975). Affective and ability factors in second language acquisition. *Language learning*, 25, 153-161.
- Chen, L. (2007). *A study of the relationship between EFL reading anxiety and reading strategy use* (Master's dissertation). Retrieved from

- <http://pc01.lib.ntust.edu.tw/ETD-db/ETD-search-c/getfile?URN=etd-0710107-001842&filename=etd-0710107-001842.pdf>
- Coulombe, D. (2000). *Anxiety and beliefs of French-as-a-second-language learners at the university level*. Unpublished Ph.D. Dissertation, University of Laval, Quebec, Canada.
- Ellis, R. (1985). *Understanding Second Language Acquisition*. Oxford: Oxford University press.
- Farhady, H., Ja'farpur, A., & Birjandi, P. (2006). *Testing language skills: From theory to practice*. Tehran: SAMT.
- Gardner, R. C., & MacIntyre, P. D. (1993). *On the measurement of affective variables in second language learning*. *Language learning*, 43(2), 157-194.
- Gass, S. & Selinker, L. (1994). *Second language acquisition: An introductory course*. Hillsdale, N.J.: Lawrence Erlbaum.
- Ghorbandordinejad, F., Hakimi, H., Ashouri, M., Dehghani, M., Zeinali, Z., Sadegh, M., Bahrami, N. (2011). On the relationship between test anxiety and academic performance. *Procedia Social and Behavioral Sciences*, 15, 3774-3778.
- Glikzman, L., Gardner, R. C., & Padric, C. S. (1982). The role of the integrative motive on students' participation in the French classroom. *Canadian Modern Language Review*, 38, 625-647.
- Hambleton, R. K. (1994). Guidelines for adapting educational and psychological tests: A progress report. *European Journal of Psychological Assessment*, 10, 229-244.
- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20, 559-562.
- Horwitz, E. K. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112-126.
- Horwitz, E. K., & Young, D. J. (1991). *Language anxiety: From theory and research to classroom implications*. Upper Saddle River, NJ: Prentice Hall.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, 70(2), 125-132.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (1991). Foreign language classroom anxiety. In E. K. Horwitz and D. J. Young, *Language anxiety: From theory and research to classroom implications* (pp. 27-36). Englewood Cliffs, NJ: Prentice- Hall Inc.
- Horwitz, E. K. (1991). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. In E. K. Horwitz & D. J. Young

- (Eds.). *Language Anxiety: From Theory and Research to Classroom Implications* (pp. 37-40). Englewood Cliffs, NJ: Prentice Hall.
- Kim, S. Y. (1998). *Affective experiences of Korean college students in different instructional contexts: Anxiety and motivation in reading and conversation courses*. Unpublished PH.D. Dissertation, The University of Texas, Austin.
- Larsen-Freeman, D & M. Long. (1991). *An introduction to second language acquisition research*. London: Longman.
- Liao, Y. F. (1999). The effects of anxiety on Taiwanese EFL learners. The proceedings of the Eighth international symposium on English teaching (pp. 453-63). Taipei: Crane.
- MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *The Modern Language Journal*, 79, 90-99.
- MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second language learning: Toward a theoretical clarification. *Language learning*, 39(2), 251-275.
- MacIntyre, P. D., & Gardner, R. C. (1991). Methods and results in the study of foreign language anxiety: A review of the literature. *Language learning*, 41, 85-117.
- Morris, L., Davis, D. & Hutchings, C. (1981). Cognitive and Emotional Components of Anxiety: Literature Review and Revised Worry-Emotionally Scale. *Journal of Educational Psychology*, 73, 541-555.
- Rodriguez, M. (1995). Foreign language classroom anxiety and students' success in EFL classes. *Revista Venezolana de Linguística Aplicada*, 1, 23-32.
- Saito, Y., & Samimy, K. (1996). Foreign language anxiety and language performance: A study of learner anxiety in beginning, intermediate, and advanced-level college students of Japanese. *Foreign Language Annals*, 29, 239-251.
- Saito, Y., Garza, T., Horwitz, E., 1999. Foreign language reading anxiety. *Modern Language Journal*, 83, 202-218.
- Sarason, I. G. (1978). The test anxiety scale: Concept and research. In C. D. Spielberger & I. G. Sarason (Eds.), *Stress and anxiety* (Vol. 5) (pp. 193-216). Washington, DC: Hemisphere.
- Scovel, T. (1978). The effect of affect in foreign language learning: A review of the anxiety research. *Language Learning*, 28(1), 129-142.
- Skehan, P. (1989). *Individual differences in second language learning*. London: Arnold.

- Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory (Form Y)*. Palo Alto, CA: Mind Garden.
- Spitalli, E. J. (2000). *The relationship between foreign language anxiety and attitudes toward multiculturalism in high-school students (Master's dissertation)*, Benedictine University, Lisle, IL.
- Spolsky, B. (1989). *Conditions for second second language learning*. Oxford: Oxford University Press.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: what does the language anxiety research suggest? *Modern Language Journal*, 75 (4), 426-437.