# Foreign Language Anxiety in Young Learners: How It Relates to Multiple Intelligences, Learner Attitudes, and Perceived Competence

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Abstract—This study explores language anxiety in young EFL students and how it relates to two other major learner variables, multiple intelligences (MI) and learner attitudes. Participants included 216 fifth and sixth graders from two elementary schools, and the findings indicate that the subjects experienced a fair amount of language anxiety. An analysis of student responses revealed that their top five worries were: (1) failing English courses, (2) feeling that other students have a better English speaking ability, (3) feeling that other classmates have better English performance, (4) being called on in English class, and (5) not being prepared in advance when the teacher asks questions. The results illustrate two major components of foreign language anxiety: general worry over language class performance and little confidence in speaking ability. Further, language anxiety was found to be significantly and negatively related to all variables studied. In order of decreasing association, these variables included: perceived English ability, learning attitude, years of taking extracurricular English lessons, length of studying the language, and MI. Out of the three major learner variables, language anxiety appeared to have a much stronger link with learning attitude than with MI. A more in-depth statistical analysis revealed that the anxiety of students classified as having low- and mid-level positive attitudes (lowest 25% and middle 50%, respectively) did not differ significantly. Nevertheless, students with high-level positive attitudes (top 25%) had significantly lower language anxiety than their counterparts. The implications of these results are discussed in this study.

Index Terms—language anxiety, multiple intelligences, learning attitude

#### I. Introduction

Due to a limited amount of exposure to English and native English speakers in Taiwan, for many students, opportunities to practice their foreign language skills, particularly speaking skills, only take place in the classroom. It would not be surprising if some learners admit that they only learn the language to complete their school requirements. Liu (2010) established that foreign language anxiety was prevalent among Taiwanese university students. Similarly, Chan and Wu (2004) reported that a certain amount of language anxiety existed among Taiwanese elementary school children. Various situations, such as taking English tests (Young, 1991), speaking in front of their classmates (Williams & Andrade, 2008), and being unable to understand questions from the instructors (Awan, Azher, Anwar, & Naz, 2010), may all evoke anxiety. As Chen and Wu (2004) indicated, "to ensure the success of English education in primary school, foreign language anxiety is a significant issue which cannot be ignored" (p. 289). Therefore, this study aims to provide a wider range of insights into this affective variable by examining how it is related to multiple intelligences, learning attitudes, and self-perceived ability.

# II. LITERATURE REVIEW

#### A. Language Anxiety

MacIntyre and Gardner (1991a) indentified three types of anxiety: trait anxiety (a personality trait), state anxiety (an emotional state), and situation specific anxiety (anxiety in a well-defined situation); foreign language anxiety refers to the third type. The results of language anxiety have been more consistently reported in literature since Horwitz, Horwitz, and Cope (1986) developed the internationally well-recognized Foreign Language Classroom Anxiety Scale (FLCAS) to assess anxiety in the language classroom. In Horwitz et al.'s study, subjects included students enrolled in an introductory Spanish course at an American university. The findings indicated that foreign language anxiety consisted of three subcomponents: communication apprehension, test anxiety, and fear of negative evaluation. Student responses to some of the items, e.g., whether they felt more tense or nervous in language class than in other classes, led Horwitz et al. to conclude that foreign language anxiety is "a distinct set of beliefs, perceptions, and feelings in response to foreign language learning in the classroom" (p. 130).

Over the last few decades, the deleterious impact of language anxiety on student learning has been revealed in a number of studies (Awan et al., 2010; Aydin, 2008; MacIntyre & Gardner, 1989, 1991b; Onwuegbuzie, Bailey, & Daley, 1999; Sánchez-Herrero & Sánchez, 1992; Zhao, 2007; Wei, 2007). MacIntyre and Gardner (1994) employed a three-stage model to describe the effects of anxiety on the three stages of language learning: input, processing, and output. Results showed that the influence of anxiety is "pervasive" and it can impair language performance at all three stages (p. 301). However, it should be noted that anxiety may negatively affect the language learning process in one stage, but not necessarily in the others. Aida (1994) found a moderate negative correlation coefficient (-.38) between the language anxiety measured by FLCAS and student grades. Analyzing the underlying structure of the 33 items among learners enrolled in a Japanese course at an American university showed that the first factor, "speech anxiety and fear of negative evaluation," alone accounted for 37.9% of the total variance (Aida, 1994, p. 159). The second and third major factors were fear of failing the language class and comfortableness in speaking with native target-language speakers. Inconsistent with the results of Horwitz. et al.'s (1986) study, the existence of test anxiety was not supported by Aida's findings. In general, the researcher found that "a fair amount of anxiety" existed in the language classroom (p. 162).

According to Young (1991), various potential sources of language anxiety can be classified into the following categories. First, personal and interpersonal anxiety may result from problems such as low self-esteem, competitiveness, communication apprehension, lack of group membership, and self-perceived low ability level (Horwitz et al., 1986; MacIntyre, 1999; Yan & Horwitz, 2008; Young, 1990, 1999). Second, certain unrealistic learner beliefs, such as that one can become a fluent speaker in a certain period of time, can be a major source of language anxiety (Horwitz et al., 1986; MacIntyre, 1999; Young, 1990). Third, instructors' incorrect beliefs can also lead to frustration and apprehension; an example of an incorrect belief is that instructors should constantly correct student errors. Fourth, the interaction between instructors and learners can cause anxiety as well. For instance, correcting student errors in front of the whole class can be very anxiety provoking. Finally, classroom procedures and methods of testing can all be related to language anxiety. Out of these various factors, MacIntyre (1999) concluded that the "single most important source" of anxiety is related to the fear of speaking a foreign language in front of peers (p. 33).

## B. Multiple Intelligences

Going against the traditional view of intelligence, Gardner (1983) redefined it by proposing multiple intelligences (MI), which include bodily-kinesthetic, verbal/linguistic, logical/mathematical, musical/rhythmic, interpersonal/social, intrapersonal/introspective, visual/spatial, and naturalist. For example, linguistic intelligence refers to the ability to use words to explain complex meanings effectively. Interpersonal/social intelligence is the ability to communicate, interact, and understand others. Visual/spatial intelligence means the ability to perceive visual information accurately and to recreate images. Instead of conceptualizing intelligence as inherited and unitary, Gardner considered MI as eight distinct intelligences that may develop throughout a lifetime.

Over the past few decades, the theory of MI has had some profound effects on teachers and schools and has been applied in the classroom to satisfy the varied needs of students. According to Campbell, Campbell and Dickinson (1999), MI can be employed for problem-solving by learners in class. Nolen (2003) advised that school teachers instruct their students in a way that can engage the MI theory in classroom lessons. When school teachers pay more attention to learners' individual needs, students are more likely to develop to their full potential in class. The goal of applying MI in the classroom is to help students become more active and successful learners.

Tai (2001) explored the effects of employing MI in English instruction at a junior high school where the participants included two classes of students. The researcher provided lesson plans based on the MI theory and examined student reactions to varied activities and learning materials in English class. The findings reported that with the integration of MI, student motivation to learn English was enhanced; students enjoyed the activities more in an MI-based classroom.

Similarly, researchers such as Bas (2008), Haley (2004), and Teele (1994) incorporated MI theory into the language classroom in their studies. Bas (2008) suggested that the MI theory focused on cooperation during the learning process rather than on competition among peers. In addition, school teachers can provide activities using storybooks, songs, vocabulary, drama, and games to help students practice in the classroom and enhance their MI at the same time. With the participation of 23 teachers and 650 students from three countries, Haley (2004) concluded that teaching with MI made instruction more learner-centered and students in the experimental groups became more "enthusiastic" about learning (p. 171). One reason was due to the use of a wider variety of classroom activities by the teachers who practiced the MI theory in their instruction. In a qualitative study, Teele (1994) found a strong link between MI and the instructional process; receiving MI-based instruction enables students to become more involved in classroom activities and have greater opportunities to develop their potential. Teele (1994) considered the MI theory to be "the key to providing quality instruction" (p. 141). Based on this theory, teachers may seek out individual ways of helping learners in accordance with their dominant intelligences. Furthermore, MI was also found to be significantly and positively related to the self-efficacy (Shore, 2001) and learning strategy use of language learners (Akbari & Hosseini, 2008).

# C. Research Questions

Although the negative impact of language anxiety on academic performance has been supported by a number of studies (Chen & Chang, 2004; Cheng, 2005; MacIntyre & Gardner, 1991a; MacIntyre, Noels, & Clément, 1997; Saito & Samimy, 1996; Sparks & Ganschow, 2001), little has been done to understand the link between this construct and two

other important learner variables—MI and learning attitude. The purpose of this study is therefore twofold: to gain more insight into the extent to which language anxiety affects young English learners and to explore the relations between language anxiety and other important learner variables, including MI and learning attitude. Statistical analyses are performed to ascertain (1) the extent to which foreign language anxiety is experienced by EFL elementary school children, (2) which of the three learner variables, MI, learning attitude, or perceived English ability, has a stronger association with language anxiety, (3) whether language learning experience variables, such as years of taking extracurricular English lessons outside of school and length of learning English, are also significantly related to language anxiety, MI, and learning attitudes, and (4) whether students with varying degrees of positive attitudes toward learning English have significantly different levels of language anxiety.

#### III. METHOD

# A. Participants

The subjects of this study consisted of 216 elementary school students, 55.6% being male and 44.4% being female, from two different schools in central Taiwan. Three classes of fifth graders and four classes of sixth graders were included. About 78% of the students had taken extracurricular English lessons outside of school, whereas 22% had not. Table 1 shows the percentages of (1) the young children with various extracurricular English learning experiences and (2) the varied lengths of English study of the full sample.

 ${\it Table 1}$  Percentages of Students with Various English Learning Experiences

	Years of Taking Extracurricular English Lessons	Length of English Study		
Less than two years	21.3	17.1		
2 – 4 years	50.0	27.3		
5 – 7 years	19.9	38.0		
Over 7 years	8.8	17.6		

### B. Instrument

The instrument used to assess learner foreign language anxiety was adapted from Horwitz, Horwitz, and Cope's (1986) Foreign Language Classroom Anxiety Scale (FLCAS). The scale was revised and translated into a 29-item Chinese version to be more appropriate for use with young Taiwanese EFL students. Four original FLCAS items were excluded from the revised version as they might cause confusion for the 5th or 6th graders. For example, one item asks the respondents whether they feel nervous when speaking English with native speakers. However, some children, e.g., those whose parents cannot afford to send them to cram schools, may never have had the opportunity to talk with a native speaker. Ratings for all of the items were made on a 6-point Likert scale. The Cronbach's alpha coefficient for the scale was .94.

The instrument adapted by Hsieh (2001), which was based on Gardner's (1983, 1995) MI theory, was modified and used in the present study to assess learner MI. The scale included five of the total nine subscales from the original instrument: logical/mathematical, verbal/linguistic, interpersonal/social, intrapersonal/introspective, and visual/spatial. The five MI subcategories were selected because they are more related to language learning and thus can be more appropriately used to suit the purpose of the study. The questionnaire consisted of 39 items, each of which was scored on a six-point Likert scale and had a reliability of .93.

Student attitude towards learning English was rated by an instrument based on the scale developed by Chen (2005). The current study modified it by deleting and adding some items in the original version, making it more appropriate for elementary school participants. Student responses to all of the 18 items were scored on a 6-point Liker-type scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The reliability for the attitude scale was .90.

## IV. RESULTS AND DISCUSSION

To ascertain whether the young English learners experienced a certain level of anxiety, the percentages and means of student responses to each FLCAS item were first analyzed, the results being displayed in Table 2. It should be noted that all positively worded items (2, 5, 8, 16, 20, and 26) were reverse scored before any of the statistical analyses were conducted. The results showed that all of the anxiety items were validated by a third or more of the participants. About 50% or more of the subjects responded to half of the scale items reflecting a certain level of language anxiety. Compared with Horwitz, et al.'s (1986) study, there seemed to be stronger evidence signifying a sense of language anxiety in the EFL classroom. Furthermore, the mean scores of the FLCAS items also indicated various degrees of anxiety. As shown in Table 2, all the means were above 3; any item with a mean score above 3 indicates some level of anxiety, as the questionnaire was built on a six-point Likert scale. These findings strongly support Chang and Wu's (2004) conclusion that language anxiety is prevalent among elementary school EFL learners.

TABLE 2. Fotal Percentages and Means of Student Responses to Individual Items about Language Anxiety

Item	1	2	3	4	5	6	Negative	Positive	Mean
1	23.1	12.0	11.1	21.3	14.8	17.6	46.3	53.7	3.45
2	21.8	10.2	10.6	18.1	15.3	24.1	42.6	57.4	3.67
3	20.4	8.3	14.4	19.4	17.1	20.4	43.1	56.9	3.66
4	23.1	13.4	17.1	17.6	10.2	18.5	53.7	46.3	3.34
5	23.6	11.6	12.5	17.1	11.6	23.6	47.7	52.3	3.52
6	28.7	13.4	11.6	15.7	9.3	21.3	53.7	46.3	3.27
7	15.7	10.2	9.7	17.6	16.7	30.1	35.6	64.4	4.00
8	25.5	19.0	17.6	13.0	8.3	16.7	62.0	38.0	3.10
9	19.9	8.8	16.2	19.9	13.4	21.8	44.9	55.1	3.63
10	22.7	6.0	5.1	14.4	14.8	37.0	33.8	66.2	4.04
11	31.5	13.0	14.4	17.6	9.3	14.4	58.8	41.2	3.03
12	24.5	12.5	11.1	18.1	13.0	20.8	48.1	51.9	3.45
13	27.3	12.5	19.9	17.6	10.2	12.5	59.7	40.3	3.08
14	19.9	14.4	11.6	23.6	13.9	16.7	45.8	54.2	3.47
15	28.2	13.9	15.7	13.9	12.0	16.2	57.9	42.1	3.16
16	26.4	9.3	15.3	20.8	10.2	18.1	50.9	49.1	3.33
17	28.2	9.7	17.1	17.6	11.6	15.7	55.1	44.9	3.22
18	18.1	9.3	6.0	19.4	20.8	26.4	33.3	66.7	3.95
19	29.2	11.6	15.7	16.7	10.2	16.7	56.5	43.5	3.17
20	30.6	10.6	14.4	13.9	12.0	18.5	55.6	44.4	3.22
21	17.6	8.8	7.9	18.1	13.4	34.3	34.3	65.7	4.04
22	24.1	12.5	15.3	13.9	13.9	20.4	51.9	48.1	3.42
23	25.9	12.0	13.0	17.1	13.4	18.5	50.9	49.1	3.36
24	29.2	14.4	15.7	12.0	11.6	17.1	59.3	40.7	3.14
25	27.8	12.0	13.4	19.0	12.5	15.3	53.2	46.8	3.22
26	24.5	14.8	17.6	17.1	8.8	17.1	56.9	43.1	3.22
27	21.3	11.6	15.7	19.4	13.0	19.0	48.6	51.4	3.48
28	28.2	13.9	12.0	17.6	9.7	18.5	54.2	45.8	3.22
29	22.2	6.9	12.5	15.3	18.5	24.5	41.7	58.3	3.75

Note. 1 = Strongly Disagree; 2 = Disagree; 3 = Slightly Disagree; 4 = Slightly Agree; 5 = Agree; 6 = Strongly Agree; Negative = total percentage of responses indicating disagreement with the anxiety items; Positive = total percentage of responses indicating agreement with the anxiety items

Table 3 presents the five most anxiety-provoking situations for the elementary school learners according to the ranking of the individual item mean scores. The results suggested that the young EFL students tended to be most anxious about (1) failing their English course and (2) being a less competent English speaker than their peers, with 37% and 34.3% of the subjects selecting "strongly agree" for the two anxiety items 10 and 21, respectively. Both items had an average score of 4.04. Items 10, 18, and 29 were more likely to reflect learner anxiety about general English classroom performance, whereas items 7 and 21 were indicative of low self-confidence and worry over negative evaluation from others (Cheng, Horwitz, & Schallert, 1999; Horwitz et al., 1986).

TABLE 3
THE FIVE MOST ANXIETY-PROVOKING SITUATIONS FOR ELEMENTARY SCHOOL LEARNERS

Rank Order	Ite m		Mean	SD
1	10	I worry that I will fail my English course.	4.04	2.00
1	21	I always feel that the other students speak English better than I do.	4.04	1.88
3	7	I always think that my classmates are better at English than I am.	4.00	1.82
4	18	I can feel my heart pounding when I am called on in English class.	3.95	1.83
5	29	I get nervous when my English teacher asks me questions that I am not able to prepare for in advance.	3.75	1.88

To gain more insight into the relation between foreign language anxiety and other language learning related variables, Pearson correlations were computed and the results are reported in Table 4. The studied variables included MI, learning attitudes, self-perceived English ability, and two variables regarding student learning experience: length of taking extracurricular English lessons outside of school and length of English study. It is not uncommon for Taiwanese elementary school children to go to cram schools for extracurricular English lessons as there are limited opportunities to practice the target language in the regular classroom or in daily activities. Therefore, there tends to be a large variation in student English learning experience and English proficiency, and consequently, in self-perceived English ability. The results in Table 4 revealed that foreign language anxiety had a negative and significant relationship with all variables investigated, perceived ability having the strongest correlation (-.56), followed by learning attitude (-.49), length of taking extracurricular English lessons (-.24), length of learning English (-.18), and MI (-.15). The findings regarding the link between anxiety and self-perceived ability are consistent with those by Onwuegbuzie, Bailey, and Daley (1999) and Kitano (2001). Among all of the variables, the highest correlation was identified between the two learning experience variables (.68), followed by that between perceived ability and learning attitude (.61). The only non-significant correlations were found between MI and the two learning experience variables. It is noteworthy that among the three

major learner variables, language anxiety, MI, and learning attitude, learning attitude had a much stronger association with language anxiety than MI did.

TABLE 4.
PEARSON CORRELATIONS BETWEEN LANGUAGE ANXIETY, MI, AND LEARNING ATTITUDE

Variable	MI	Attitude	Anxiety	Perceived	Length1	Length2
MI		.397**	149*	.354**	.103	.059
Attitude	.397**	_	486**	.614**	.300**	.260**
Anxiety	149*	486**	_	562**	237**	177**
Perceived	.354**	.614**	562**	_	.386**	.308**
Length1	.103	.300**	237**	.386**	_	.680**
Length2	.059	.260**	177**	.308**	.680**	_

Note. Perceived = Perceived English ability; Lengh1 = Length of taking extracurricular English lessons outside of school; Length2 = length of English study

In order to further analyze the relation between learning attitude and language anxiety, ANOVA was performed on the data, with student anxiety scores as the dependent variables and levels of positive learning attitude as the independent variable (see Table 5). Before the statistical analysis was conducted, the elementary school children were classified into three levels based on their attitude scores. The findings indicated that students with low- and mid-level positive attitudes (lowest 25% and middle 50%, respectively) did not differ significantly in their anxiety level. Students with high-level positive attitudes (top 25%), however, had significantly lower foreign language anxiety than their counterparts. There is little doubt that students with the most positive attitudes toward learning are likely to develop higher interest and motivation than their peers. As Yan and Horwitz (2008) noted, when students feel more interest and higher motivation for learning, they may experience a lower anxiety level in the EFL classroom.

TABLE 5.

ANALYSIS OF VARIANCE RESULTS FOR ANXIETY SCORES OF STUDENTS WITH DIFFERENT DEGREES OF POSITIVE LEARNING ATTITUDES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	49417.18	2	24708.59	30.92	.000 **
Within Groups	170189.92	213	799.01		
Total	219607.11	215			

<sup>\*\*</sup> p<.01

## V. CONCLUSION AND IMPLICATIONS

As revealed in a significant number of previous studies, foreign language learning is often accompanied by a specific type of anxiety (Chan & Wu, 2004; Cheng, Horwitz, & Schallert, 1999; Liu, 2006; Rodr guez & Abreu, 2003; Wei, 2007; Wu, 2011; Yan & Horwitz, 2008). The findings of the present study further established that foreign language anxiety begins among young children over the course of language acquisition. Certain implications of these results should be noted.

First, low self-perceived ability level can become a potent source of anxiety among foreign language learners. Kitano (2001) suggested that students may have stronger feelings of anxiety as their self-perceptions of ability levels are lower. Likewise, MacIntyre, Noels, and Clément (1997) found that students who are susceptible to anxiety in the language classroom are more likely to underestimate their ability level, causing a discrepancy between their self-perceived and actual language performance. Before the relations between these variables can become a vicious cycle, it is imperative that language teachers make greater efforts to increase students' self-confidence in their own academic competence and to help them set more realistic goals about their own learning achievement.

Second, learning attitude is shown to have a relatively strong and significant association with language anxiety. As various sources may inflict anxiety (Awan et al., 2010; Young, 1991), a multitude of factors, e.g., incorrect learner beliefs about language learning and instructional procedures, can affect student attitude during the process of learning a language. To decrease learner anxiety, instructors need to help students build positive attitudes toward learning a language. To achieve this teaching goal, instructors can try a variety of activities or techniques in the classroom. For example, they can make learning a more positive experience by increasing student involvement with group activities. Teachers should also be more understanding and sensitive to students' apprehension when they make mistakes in front of their peers.

Finally, the various factors that exhibit significant correlations with language anxiety may have mutual effects on one another. In order to reduce language anxiety to a minimum level, any sources that will potentially cause debilitating effects on language acquisition should be identified, and more efforts should be made to meet the affective needs of the

<sup>\*</sup> p< .05; \*\* p<.01

learners. It should be noted that EFL students prone to anxiety need constant encouragement and positive feedback from instructors, as the language classroom may be more anxiety-producing than others (Horwitz et al., 1986; Young, 1992). In order for students to become more actively involved in the language acquisition process, maintaining a non-threatening environment is essential.

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