

University of Groningen

Foreign language classroom anxiety

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Document Version

Publisher's PDF, also known as Version of record

Publication date:

2016

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Jin, Y. (2016). *Foreign language classroom anxiety: A study of Chinese university students of Japanese and English over time*. University of Groningen.

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Chapter 2

Factors associated with foreign language anxiety: A study of Chinese university learners of Japanese and English¹

This chapter reports a study that investigates and compares the effects of foreign language proficiency, social status of a learner's family, self-esteem, and competitiveness on foreign language anxiety. Chinese university students ($N=146$), who were learning Japanese and English, participated in this study. Social status data were collected once with the Social Status Scale. Other variables were measured twice over a two-month interval, using the Competitiveness Index, the Self-esteem Scale, the English/Japanese Classroom Anxiety Scale, and the English/Japanese Proficiency Scale. Results showed that foreign language proficiency, competitiveness, and self-esteem all significantly and negatively predicted foreign language anxiety levels. Foreign language proficiency was the best predictor, followed by self-esteem, then competitiveness. Social status was not related to foreign language anxiety, either directly or indirectly.

¹ This chapter is based on Jin, Y. X., De Bot, K., & Keijzer, M. (2015b). Factors associated with foreign language anxiety: A study of Chinese university learners of Japanese and English. *Dutch Journal of Applied Linguistics*, 4, 67-85.

2.1. Introduction

Since the mid-1980s, there has been a burgeoning interest in foreign language (FL) anxiety among second language researchers. It is now widely accepted that FL anxiety impairs FL learning (e.g., Horwitz, 2001; MacIntyre & Gardner, 1994b; Woodrow, 2006). The consequences of FL anxiety even extend beyond the classroom, affecting the continuous use of a second language after leaving school (Dewaele, 2007b). Hence, measures should be taken to lessen learners' anxiety and the identification of the factors underlying FL anxiety has therefore formed a key issue in past work (Ellis, 2008).

FL anxiety has been found to be linked to FL proficiency (e.g., Hewitt & Stephenson, 2012; Zhang, 2013). Other variables which have been associated with FL anxiety include learners' personality traits (Dewaele, 2013). Among them, low self-esteem has been established as a source of FL anxiety (e.g., MacIntyre, 1999; Zare & Riasati, 2012). In contrast, much less well understood is the role that another personality trait, i.e., competitiveness, plays in FL anxiety, though competitiveness has been singled out by Young (1991) as a crucial factor underlying FL anxiety (the other is low self-esteem), as past studies have produced mixed results. The contribution of competitiveness to FL anxiety thus needs to be further examined. Similarly, a learner's family's social status has been mentioned as a predictor of FL anxiety, but not investigated in detail. In short, this factor too necessitates further studies, also in line with Yan and Horwitz's (2008) suggestion that FL anxiety studies should take sociocultural factors into account.

In this study, we examined the roles of the family's social status and competitiveness in FL anxiety in a sample of 146 Chinese university students learning English and Japanese, in order to extend our understanding of the factors underlying FL anxiety. Furthermore, we also introduced the two much more elaborately assessed factors of FL proficiency and self-esteem, with a view to exploring whether FL anxiety is more linked to FL proficiency,

self-esteem, competitiveness, or a learner's family's social background. Such a comparison has not been attempted before, but is vital, because it helps to deepen our understanding of the nature of FL anxiety by identifying the significant predictors of FL anxiety, especially those indicating a stronger predictive power. Besides, previous research has typically looked at anxiety-provoking factors at a single time point. In this study, the 146 participants were tested at two different time points in both English and Japanese learning contexts. Thus with multiple data points from two learning contexts, more accurate conclusions in relation to the construct of FL anxiety can be reached.

2.2. Literature Review

In the mid-1980s, a unique type of anxiety specific to learning and/or using a foreign or second language was identified and subsequently labeled foreign language (FL) anxiety (Horwitz, Horwitz, & Cope, 1986). Earlier, psychologists had distinguished three types of anxiety, i.e., trait anxiety, state anxiety, and situation-specific anxiety. Trait anxiety is "a more permanent predisposition to be anxious" (Scovel, 1978, p. 137). State anxiety is a palpable apprehensive reaction to a particular anxiety-provoking stimulus, for example an interview (Spielberger, 1983). Situation-specific anxiety is provoked by a particular type of situation or event, such as public speaking (MacIntyre & Gardner, 1994a). FL anxiety is thus a situation-specific anxiety (Dewaele, 2007b; Horwitz, 2001). Several researchers have attempted to define FL anxiety (Horwitz et al., 1986; MacIntyre, 1999; Williams, 1991). The most extensively quoted definition is the one formulated by Horwitz et al. (1986), who conceive of FL anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p. 128). Horwitz et al. (1986) also developed the Foreign Language Classroom Anxiety Scale (FLCAS) to measure the degree of FL anxiety. Horwitz et al.'s definition and

subsequent construction of the FLCAS has been a milestone in anxiety studies. Not only does it help to understand the nature of anxiety related to FL learning and distinguish this type of anxiety from personality anxiety and other academic anxiety forms, but it can also help to get a firm grip on past work in this area, as FL anxiety studies can now be better grouped and compared (Horwitz, 2001). The FLCAS as a standard instrument makes the identification of anxious learners more feasible, irrespective of whether these learners show explicit clinical anxiety symptoms.

To date, studies on FL anxiety have spanned diverse topics within the realm of second language studies, such as the effects of FL anxiety on FL learning, the sources and stability of FL anxiety, and the relationships of FL anxiety to other learner variables. The identification of the sources of anxiety in particular has been viewed as one of the key issues (Ellis, 2008). Many studies documented a negative correlation between FL anxiety and FL proficiency as actually tested or elicited via self-reports (e.g., Hewitt & Stephenson, 2012; Liu & Jackson, 2008; Zhang, 2013), suggesting the likely reciprocal effects between FL anxiety and proficiency variables.

In addition, FL anxiety is also linked to learners' personality traits. Young (1991) claims that low self-esteem is a significant anxiety source. FL specialists like Krashen, Hadley, Terrell, and Rardin have also agreed with the role of this personal characteristic in FL anxiety (Young, 1992), which has been endorsed by quantitative studies. Liu and Zhang's (2008) study of 934 first-year non-English majors from three Chinese universities, for one, found that three FLCAS factors, namely fear of negative evaluation, communication apprehension, and test anxiety, showed a significantly negative correlation with self-esteem as measured by Rosenberg's (1965) Self-esteem Scale (SES). The entire FLCAS scores were also significantly negatively related to the SES scores. In Zare and Riasati (2012), self-esteem was strongly linked with the FLCAS scores, $r(106)=-.74, p<.001$. However, the relationship

between self-worth and FL anxiety was weak in Onwuegbuzie, Bailey, and Daley (1999), $r(208)=-.26, p<.001$. In a subsequent setwise regression analysis, self-worth explained 5% of variation in FL anxiety. Onwuegbuzie et al. (1999) thus concluded that “both self-esteem and self-concept play a role in determining levels of foreign language anxiety” (p. 229).

Another personality trait Young (1991) has singled out as one crucial source of FL anxiety is competitiveness. Ellis (2008) and Tóth (2007) have also suggested that learners’ competitive nature can lead to their FL anxiety. However, the function of competitiveness in FL anxiety is rather vague, despite these claims, which largely draw on Bailey’s (1983) work. Retrospecting her own diary entries and others’, Bailey (1983) found anxiety to arise when learners competitively compare themselves to others or to their own expectations. Bailey’s (1983) observation suggested that a competitive personality could cause FL anxiety, as competitive self-comparison may result from such a personality trait. Nevertheless, it is premature to draw a definite conclusion. This is because a competitive nature may not be the sole cause of competitive comparison. Other factors likely include a competitive classroom environment. There are explicit clues about the existence of classroom competition in the diaries. As a consequence, competitive comparison may stem from a competitive personality, from environment-related behavior, or constitutes the interaction of both. The conclusion that competitiveness is a source of FL anxiety may be due to the misinterpretation of the word *competitiveness* that indeed refers to competitive comparison in Bailey (1983), rather than a personality trait (K. M. Bailey, personal communication, March 23, 2014).

To determine the role of competitive personality in FL anxiety, quantitative studies are needed. Diary studies are ideally suited for a “hypothesis-generating, not hypothesis-testing, undertaking” (Long, 1980, p. 27). Unfortunately, few quantitative studies have addressed this issue and the studies that are available lead to additional confusion. For example, Onwuegbuzie et al. (1999) reported a non-significant correlation of FL anxiety with

competitiveness, measured by the Competitive Subscale of the Social Interdependence Scale (Johnson & Norem-Hebeisen, 1979). By contrast, the competitiveness-FL anxiety relationship in Tóth (2007) was significant and positive. Competitiveness was established as a significant predictor of FL anxiety in an ensuing multiple regression analysis with backward strategy, $\beta=.26$, $p<.001$ in Tóth (2007).

Furthermore, FL anxiety has been shown to be related to the family's social status as a societal variable, rather than just to FL proficiency and personality traits. In Dewaele's (2002) study of 100 pupils (98 native speakers of Dutch) in their last year of secondary school, the family's social class -indexed by the highest educational level attained by the parents- was negatively associated with communicative anxiety in French. The subsequent regression analysis identified social status as a significant negative predictor of communicative anxiety in French. Noteworthy is that Dewaele's (2002) study has -to our knowledge- been the only one to investigate the relationship between FL anxiety and the family's social status. The great lack of empirical studies endorses the necessity to further look at this societal factor before affirming its role in FL anxiety. Yan and Horwitz (2008) also suggested that studies of language anxiety should direct clear attention to the sociocultural factors.

In sum, more research is needed into the sources of FL anxiety, as the relationships between FL anxiety and a number of potential anxiety contributors, like the family's social status and competitiveness, remain to be further clarified. Studies that compare the effects of different variables on FL anxiety should continue. This is because FL anxiety arises from a complex of factors (Rodríguez & Abreu, 2003; Young, 1991). Teachers are thus faced with great difficulties in dealing with all anxiety-provoking factors. Hence, it is practical and effective to focus on the more prominent factors that can be established by studies comparing variables in terms of their effects on FL anxiety. In addition, our understanding of the nature of FL anxiety can be enhanced by identifying the more prominent factors. In the current study

involving 146 Chinese university students, we aim to contribute to the field of FL anxiety by investigating and comparing the effects of four factors: FL proficiency, the family's social status, self-esteem, and competitiveness on FL anxiety. Such a comparison has not been done before. In particular, this study aims to answer two questions:

1. Do FL proficiency, the family's social status, competitiveness, and self-esteem significantly predict FL anxiety?

2. What is the weighted contribution of each significant predictor variable in terms of the predictive power it exerts?

2.3. Methodology

2.3.1. Design of the Study

In this study, Chinese students learning English and Japanese were surveyed twice, using questionnaires, in mid-March and May of 2013 respectively. We investigated and compared the effects of parents' social status, FL proficiency, self-esteem, and competitiveness on FL anxiety within English and Japanese learning contexts and at two time points. It should be noted that two self-report instruments were used to elicit the participants' English and Japanese proficiency, rather than objective proficiency tests. This approach was chosen because in the project to which this study belongs, we administered many questionnaires containing quite a number of items to the participants at each time, with a view to answering several FL anxiety-related questions. If proficiency had been assessed with objective tests, the students may have been greatly discouraged due to the heavy workload and may not have cooperated fully in the data collection phase. The details of participants, instruments, and data collection procedures for this study are elaborated below.

2.3.2. Participants

Participants constituted 146 Japanese majors recruited from six Japanese classes at three Chinese universities (125 females and 21 males), who were also learning English. Their ages ranged from 17 to 23 ($M=19.57$, $SD=1.00$). The students were all native speakers of Chinese. They were attending more than one Japanese course and Japanese teachers were not identical for different classes within the same university. However, the students from each university were taking a compulsory English course as a group, taught by one and the same teacher. In fact, the 146 students came from three English classes. They had learned English for 4.5 to 13.5 years up to Time 1 ($M=9.05$, $SD=1.88$), but virtually none of the students ($n=145$) had had any prior experience in learning Japanese before university enrollment.

2.3.3. Instruments

Seven questionnaires were administered: the Demographic Information Index (DIQ), the Social Status Scale (SSS), the Competitiveness Index (CI) (Houston, Harris, McIntire, & Francis, 2002), the Self-esteem Scale (SES) (Rosenberg, 1965), the Foreign Language Classroom Anxiety Scale (FLCAS) (Horwitz et al., 1986), the English Proficiency Scale (EPS), and the Japanese Proficiency Scale (JPS). The DIQ, the SSS, the EPS, and the JPS were developed in Chinese by the current researchers. The CI, the SES, and the FLCAS that are originally in English were translated into Chinese, so that the participants could understand all items well. The translation procedure was as follows: the Chinese researcher in this study translated the questionnaires into Chinese (Guo and Wu [2008] was referred to in the process of translating the FLCAS. In addition, the online translation was also referred to when translating the FLCAS and the SES, i.e., <http://wenku.baidu.com/view/d0e7b0260722192e4536f6f7.html> for the FLCAS and <http://wenku.baidu.com/view/3bfce85377232f60ddcca192.html?from=search&isbtn=2> for the SES) and the translations were carefully

cross-checked by a senior university student enrolled in a Chinese program, who had a good command of English. The two translators discussed minor discrepancies until these were resolved. The resulting Chinese translations were pretested as part of a pilot procedure for validation purposes, as indicated in the procedures section.

2.3.3.1. The Demographic Information Questionnaire and the Social Status Scale

The DIQ has eight items pertaining to each participant's name, age, gender, residential location, the duration of Japanese and English learning, and parental education. Those for residential location (one item) and parental education (two items for mother and father, respectively) constitute the SSS. Both residential location and parental education have four response options: 1=*village*, 2=*township*, 3=*county*, 4= *prefecture city or above*; 1=*primary school*, 2=*junior school*, 3=*senior school*, 4=*college*. As response options to the SSS items are not identical, the participants' scores on each item were standardized into *z*-scores when estimating the internal reliability of the SSS. The aggregated *z*-scores on the three items index a family's social status. Higher values indicate a higher social status.

2.3.3.2. The Competitiveness Index

The CI has two subscales: the Enjoyment of Competition and the Contentiousness subscales. In total, the CI contains 14 items, all following a 5-point Likert format (1=*strongly disagree*, 2=*disagree*, 3=*neither agree nor disagree*, 4=*agree*, 5=*strongly agree*). The minimum obtainable score on the CI is 14 and the maximum is 70. Higher scores represent more intense competitiveness. Sample items include *I like competition* and *I will do almost anything to avoid an argument*.

2.3.3.3. The Self-esteem Scale

The original SES consists of 10 items, all using a 4-point Likert format. In this study, the 4-point Likert format was altered to a 5-point Likert format (1=*strongly disagree*, 2=*disagree*, 3=*neither agree nor disagree*, 4=*agree*, 5=*strongly agree*) by inserting a neutral option, to be consistent with the CI and to increase the sensitivity of the scale. The minimum score on the resulting scale is 10 and the maximum is 50. High scores suggest higher levels of self-esteem. Two sample items include: *I feel that I am a person of worth, at least on an equal basis with others* and *All in all, I am inclined to feel that I am a failure*.

2.3.3.4. The Foreign Language Classroom Anxiety Scale

The FLCAS contains 33 items, all based on five Likert-type responses (1=*strongly disagree*, 2=*disagree*, 3=*neither agree nor disagree*, 4=*agree*, 5=*strongly agree*). The score range spans from 33 to 165, with higher scores indicating higher levels of FL anxiety. In this study, the FLCAS was used to measure anxiety in the English and Japanese classroom, so *foreign language* in the FLCAS was replaced with *Japanese* and *English*. The scales for the English and Japanese classroom were respectively labeled ECAS (English Classroom Anxiety Scale) and JCAS (Japanese Classroom Anxiety Scale). Two exemplar items from the ECAS and the JCAS are: *I always feel that the other students speak English better than I do* and *I get nervous when my Japanese teacher asks questions which I haven't prepared in advance*.

2.3.3.5. The English Proficiency Scale and the Japanese Proficiency Scale

The EPS and the JPS are self-assessments of English and Japanese proficiency, and consist of four subscales for listening, speaking, reading, and writing proficiency. The two FL proficiency scales comprise 20 items (5 items for each subscale), all following a 4-point Likert format (1=*almost impossible*, 2=*difficult*, 3=*a bit difficult*, 4=*easy*). The scores range

from 20 to 80. Higher scores represent higher English or Japanese proficiency. Sample items from the EPS and the JPS include: *I can deliver a 2-minute speech in Japanese on a familiar topic after a short preparation* and *I can understand different viewpoints and attitudes in the English comments on current affairs*. The EPS was constructed based on the *Curriculum Standard for Senior High School English (Experimental)* (MOE, 2003) and furthermore is a test of intermediate level of English. The JPS was developed according to the *Curriculum Standard for Japanese Majors at Elementary Level in Higher Education* (MOE, 2001) and is a measure of elementary level of Japanese (two items were adapted from Xu [2010]). The two scales were validated against teachers' ratings of students' proficiency on a 5-point Likert scale (1=*poor*, 2=*fair*, 3=*good*, 4=*very good*, 5=*excellent*), as introduced in the Procedures section. The score range for teachers' ratings is between 4 and 20. The results of this validation are reported below together with the reliability levels of the EPS and the JPS.

2.3.4. Procedures

Data collection proceeded in three steps. Step 1 was a pilot study conducted during regular class hours, which itself comprised two parts. In Part 1, two intact classes containing 41 first-year students of Japanese at a university in West China's Shaan'xi Province were tested. The students were also taking a compulsory English course, similar to those in the full surveys. A few Chinese words in the scales, except the SSS, were adjusted after being tested in Class 1, and the resultant scales were then retested in Class 2. It should be noted that no student in Class 2 reported difficulties in understanding the items in the scales. In addition, as the JCAS and the ECAS differ only in the wording of *Japanese* or *English*, only the JCAS was tested in the pilot study. In Part 2 of the pilot study, the two proficiency scales that had shown satisfactory internal consistency in the test for Class 2 were administered to 27 freshmen of Japanese in a class at a university in East China's Shandong Province, which

more closely resembles -in terms of level- the universities from which the 146 participants were recruited. Obtaining valid results in this context would thus better indicate the effective use of the scales in the full surveys. Teachers' ratings of the students' Japanese and English listening, speaking, reading, and writing proficiency were also collected (one teacher for each language). There were 26 valid self-evaluations for the JPS and the EPS that hence were validated by correlating these 26 valid self-reports and the teacher's ratings. In short, the result of pilot study (checking internal reliability) of the SSS was based on the samples in Class 1 in Part 1; those of the JCAS, the CI, the SES, the EPS, and the JPS were based on Class 2.

Step 2 of this study's design involved two full surveys, administered to the 146 participants at two time points across two months in an out-of-class session with no teacher present, using the same scales and following the same procedures. At each time, the participants from the same university completed the full set of questionnaires in a classroom at the same time, with the questionnaires following a set order: the DIQ (the SSS included), the CI, the SES, the JPS, the EPS, the JCAS, and the ECAS (the DIQ was excluded at Time 2). Questionnaires were immediately checked after being collected at each time for unanswered items. When missing items were found, those subjects would be traced to obtain their answers. Step 3 of this study's design was data registration during which the negatively-worded items in all scales were reverse-scored.

2.4. Results

2.4.1. Reliability Estimates of the Scales

Table 2.1 shows the reliability levels of the various scales used in this study.

Table 2.1 Reliability Levels of the Scales (N=146)

Measure	Internal Reliability (α)			External Reliability (r)
	Pilot Study	Time 1	Time 2	
SSS	.68	.74	N/A	N/A
CI	.94	.88	.90	.70 ^{***}
SES	.90	.84	.88	.72 ^{***}
ECAS	N/A	.92	.92	.72 ^{***}
JCAS	.95	.93	.94	.81 ^{***}
E-LS	.86	.79	.78	.59 ^{**}
E-SS	.90	.83	.83	.64 ^{**}
E-RS	.86	.72	.73	.60 ^{**}
E-WS	.82	.84	.83	.59 ^{**}
Overall EPS	.95	.92	.92	.68 ^{**}
J-LS	.76	.76	.80	.63 ^{**}
J-SS	.69	.79	.79	.57 ^{**}
J-RS	.77	.80	.75	.57 ^{**}
J-WS	.79	.83	.81	.62 ^{**}
Overall JPS	.91	.92	.92	.68 ^{**}

Note. N/A=not available; (J)E-LS/SS/RS/WS=(Japanese)English Listening/Speaking/Reading /Writing Scale; ^{***} $p < .001$; ^{**} $p < .01$

Table 2.1 shows that the scales used in this study achieved satisfactory reliability levels. As the participants' sociodemographic backgrounds were stable over the two-month interval, the SSS was only administered at Time 1. As a result, a test-retest coefficient is not available. To further check the convergence of two social status indexes, i.e., residential location and parental education, a simple correlation analysis was performed after observing scatterplots. Results indicated that the two indexes were highly correlated, $r(144) = .59$, $p < .001$.

Furthermore, the results for the CI, SES, and the FLCAS based on the current samples were in line with those obtained in prior studies, particularly their internal reliability. For instance, the CI attained an internal reliability coefficient of .87 in Houston et al. (2002). Its test-retest reliability was .85 as reported by Harris and Houston (2010) in which the test interval ranged from 18 to 34 days and 91% of the participants returned to retest after 4-5

weeks. Fleming and Courtney (1984) found that internal reliability was .88 and that the test-retest reliability was .82 over a 1-week interval for the SES. The internal reliability of the FLCAS has typically been high in previous studies, such as .94 in Aida (1994), and Park and French (2013). As for its test-retest reliability, Horwitz (1986) obtained a coefficient of .83 on the basis of 78 samples across an 8-week interval.

In addition, the results of the EPS and the JPS validation by correlating students' self-reports and teachers' ratings were also satisfactory. Correlation was .71 for Japanese proficiency and .63 for English proficiency, suggesting that the two scales can effectively measure language proficiency.

2.4.2. The Results of Descriptive Analyses

Table 2.2 presents the descriptive results of measurements, including mean scores and standard deviations.

Table 2.2 Means with Standard Deviations of Personality Traits, Language Proficiency, and Language Anxiety (N=146)

Measurements	Means (Standard Deviations)	
	Time 1	Time 2
Residential Location	1.91 (1.21)	N/A
Father's Education	2.38 (.87)	N/A
Mother's Education	2.19 (.91)	N/A
Competitiveness	45.12 (9.06)	44.93 (8.52)
Self-esteem	35.69 (5.76)	36.54 (5.79)
English Anxiety	91.46 (17.54)	91.60 (16.26)
Japanese Anxiety	94.23 (18.41)	91.58 (18.34)
English Proficiency	66.45 (8.96)	66.93 (8.28)
Japanese Proficiency	61.08 (9.94)	63.23 (9.33)

As can be seen, the participants -on average- came from less developed areas (home location: 1=*village*, 2=*township*, 3=*county*, 4=*prefecture city or above*). Their parents had not received much education (parental education: 1=*primary school*, 2=*junior school*, 3=*senior school*, 4=*college*), though fathers overall had a higher educational background than mothers. Generally speaking, these students came from families of relatively low social status.

In addition, the samples showed moderate competitiveness and self-esteem at the two time points (maximum score: 70 for the CI and 50 for the SES), as well as a moderate level of English and Japanese anxiety (165 for the FLCAS). These students generally rated their English and Japanese proficiency highly (80 for the EPS and JPS).

2.4.3. The Results of Correlation Analyses

In this section, the results of correlation analyses conducted among competitiveness, self-esteem, English/Japanese proficiency, and English/Japanese anxiety are reported (see Tables 2.3 and 2.4). The variable of the family's social status is not included in the tables, because it clearly showed no relation with all the other variables investigated in this study, as suggested by the correlation analyses which were carried out after observing scatterplots. As a result, social status was excluded from the ensuing regression analyses as well.

Table 2.3 Correlations between Personality Traits, English Proficiency, and English Anxiety at Two Tests (N=146)

	Time 1				Time 2			
	1	2	3	4	1	2	3	4
1	1.00				1.00			
2	.36***	1.00			.38***	1.00		
3	.24**	.24**	1.00		.26**	.38***	1.00	
4	-.33***	-.37***	-.57***	1.00	-.28**	-.42***	-.55***	1.00

Note. 1=Competitiveness; 2=Self-esteem; 3=English Proficiency; 4=English Anxiety; *** $p < .001$; ** $p < .005$

Table 2.4 Correlations between Personality Traits, Japanese Proficiency, and Japanese Anxiety at Two Tests (N=146)

	Time 1				Time 2			
	1	2	3	4	1	2	3	4
1	1.00				1.00			
2	.36***	1.00			.38***	1.00		
3	.22*	.23*	1.00		.21*	.35***	1.00	
4	-.34***	-.34***	-.57***	1.00	-.42***	-.49***	-.50***	1.00

Note. 1=Competitiveness; 2=Self-esteem; 3=Japanese Proficiency; 4=Japanese Anxiety; *** $p < .001$; * $p < .05$

As can be seen from Tables 2.3 and 2.4, self-esteem and competitiveness were positively associated, which in their turn were positively correlated with English and

Japanese proficiency, but negatively with English and Japanese anxiety. FL proficiency and FL anxiety were negatively related to each other, indicating a stronger relationship than that between self-esteem and FL anxiety, or competitiveness and FL anxiety.

2.4.4. Prediction of English Anxiety

The predictive power of self-esteem, competitiveness, English proficiency for English anxiety was investigated, using a standard multiple regression procedure¹. Following the regression analysis, a check was done to see whether there were cases that had standardized residual values that fell out of the range -3 to 3, but no outliers were identified. The assumptions of normality, linearity, homoscedasticity, and independence of residuals were not violated in any of the computations. Multicollinearity was not attested either. The regression results are reported in Tables 2.5 and 2.6.

Table 2.5 Regression Results for English Anxiety at Time 1 (N=146)

Variables	<i>B</i>	<i>SE B</i>	β
English proficiency	-.95	.13	-.49***
Self-esteem	-.62	.22	-.20**
Competitiveness	-.27	.14	-.14*

Note. $R^2=.394$; Adjusted $R^2=.381$; $F(3, 142)=30.75$, $p<.001$; *** $p<.001$; ** $p<.01$; * $p<.05$

As can be seen in Table 2.5, the model including English proficiency, competitiveness, and self-esteem was highly significant and explained 38.1% of the English anxiety variance. In addition, English proficiency, competitiveness, and self-esteem all significantly negatively predicted English anxiety. In other words, students with a high level of English proficiency or with a strong self-esteem showed a lower level of English anxiety. Competitive learners tended to experience less English anxiety than their non-competitive counterparts. English proficiency was shown to be the most prominent predictor, followed by self-esteem and, lastly, competitiveness.

Table 2.6 Regression Results for English Anxiety at Time 2 (N=146)

Variables	<i>B</i>	<i>SE B</i>	β
English proficiency	-.87	.14	-.44***
Self-esteem	-.62	.22	-.22**
Competitiveness	-.16	.14	-.08

Note. $R^2=.358$; Adjusted $R^2=.345$; $F(3, 142)=26.42$, $p<.001$; *** $p<.001$; ** $p<.01$

Table 2.6 shows that the regression of English proficiency, self-esteem, and competitiveness at Time 2 was significant and 34.5% of the English anxiety variance was explained by the overall model. English proficiency and self-esteem were found to be significant and negative predictors of English anxiety. English proficiency contributed more to English anxiety than self-esteem. Competitiveness did not significantly predict English anxiety anymore.

2.4.5. Prediction of Japanese Anxiety

The predictive power of self-esteem, competitiveness, and Japanese proficiency for Japanese anxiety was also investigated using standard regression analyses. For the regression analysis, no outliers were identified on the basis of the same method as reported for English anxiety: it was checked whether some cases had standardized residual values above 3 or below -3. Moreover, the assumptions of normality, linearity, homoscedasticity, and independence of residuals were not found to be violated. Multicollinearity was not found either. The results are reported in Tables 2.7 and 2.8.

Table 2.7 Regression Results for Japanese Anxiety at Time 1 (N=146)

Variables	<i>B</i>	<i>SE B</i>	β
Japanese proficiency	-.92	.13	-.50***
Competitiveness	-.35	.14	-.18*
Self-esteem	-.53	.23	-.17*

Note. $R^2=.398$; Adjusted $R^2=.385$; $F(3, 142)=31.25$, $p<.001$; *** $p<.001$; * $p<.05$

Table 2.7 shows that the regression of Japanese proficiency, self-esteem, and competitiveness at Time 1 was highly significant and the model explained 38.5% of the Japanese anxiety variance. Japanese proficiency, competitiveness, and self-esteem were all

significant and negative predictors of Japanese anxiety. Among them, Japanese proficiency was the most prominent predictor. Contrary to the findings for English anxiety, competitiveness predicted Japanese anxiety slightly better than self-esteem.

Table 2.8 Regression Results for Japanese Anxiety at Time 2 (N=146)

Variables	<i>B</i>	<i>SE B</i>	β
Japanese proficiency	-.69	.14	-.35***
Self-esteem	-.86	.23	-.27***
Competitiveness	-.52	.15	-.24**

Note. $R^2=.405$; Adjusted $R^2=.392$; $F(3, 142)=32.20$, $p<.001$; *** $p<.001$; ** $p<.01$

In Table 2.8, the results of the regression analysis for Japanese anxiety at Time 2 are presented. As shown, 39.2% of the variance in Japanese anxiety was explained by the model including Japanese proficiency, self-esteem, and competitiveness, which all significantly and negatively predicted Japanese anxiety. As opposed to Time 1, however, competitiveness was no longer a better predictor than self-esteem. As in all the previous tests, FL proficiency was the most prominent predictor.

2.5. Discussion and Implication

This study aimed to explore the roles that competitiveness and the family's social status play in FL anxiety and compare the contributions of FL proficiency, the family's social status, self-esteem, and competitiveness to FL anxiety. Some findings warrant an elaboration.

The participants indicated a moderate level of competitiveness at each time, in line with what Houston, Harris, Moore, and Brummett (2005) reported on the basis of 61 Chinese undergraduates ($M=45.10$). China is commonly believed to be at the collectivism end of the individualism-collectivism continuum and the Chinese are often labeled collectivists. One of the personality traits usually not treated as a collectivist's dimensions is competitiveness (Grimm, Church, Katigbak, & Reyes, 1999). However, the Chinese students in this study tend to compete, rather than maintain a social harmony, with others². This finding bears out Green, Deschamps, and Páez's (2005) conclusion that competitiveness is related to both

individualism and collectivism.

The mean EPS scores showed little fluctuation over time, but the JPS mean indicated a striking increase. Japanese proficiency thus showed a clear development among students, but English proficiency did not³. The participants were Japanese majors who devoted many more hours to Japanese than to English learning. Being more fossilized learners of English due to a prolonged exposure to English learning, they needed to log considerably more hours to advance to the next stage of English proficiency. The unbalanced time and energy devoted to Japanese and English learning can partly explain the different development in English and Japanese proficiency.

FL proficiency was identified to be a negative and the most prominent predictor of FL anxiety in each regression analysis, further substantiating that FL anxiety is closely related to FL learning achievement. Social status was not found to relate to FL anxiety, either directly or indirectly. Nonetheless, it does not automatically follow that the family's social status does not contribute to FL anxiety at all. The participants had studied in their universities for around six months when data collection took place. They had adjusted relatively well to campus life and, more importantly, FL classes. If the surveys had been administered earlier, perhaps a closer relationship would have been found between the societal and affective variables. Moreover, the family's social status may be interconnected with other psychological or situational factors through which learners' levels of anxiety are affected. As it is, research into the relationship between the family's social status and FL anxiety is only in its infancy. More studies are needed to clarify the effects of parents' social status on learners' anxiety reactions. In addition, a non-significant relationship between social status, and competitiveness and self-esteem should not be interpreted as parents' social status not affecting their children's personality. The family's social status as an element of societal context may have already contributed to the personality formation at an early age, of the now adult learners. As Dörnyei

(2005) put forward, “It is evident that the potential determinants of an adult’s personality include both environmental factors related to the nature of the home in which the person was raised as a child, and biological factors related to hereditary factors associated with the genetic make-up” (p. 14).

In most regression analyses, competitiveness negatively predicted FL anxiety, in contrast to the non-significant correlation between competitiveness and FL anxiety in Onwuegbuzie et al. (1999) and the establishment of competitiveness as a positive predictor of FL anxiety in Tóth (2007). Young (1991), Ellis (2008), and Tóth’s (2007) assumption that competitiveness is a source of FL anxiety was thus not supported by this study. Rather than an anxiety-inducing factor, competitiveness was identified as an alleviator of learners’ anxiety across the two time points and learning contexts. Nevertheless, it should be pointed out that this study -to our knowledge- is the first to use Houston et al.’s (2002) Competitiveness Index to assess competitiveness when examining the competitiveness-FL anxiety relationship. Hence, further studies are needed to corroborate its findings. In addition, it is possible that the differences in study design led to the contradictory results for the competitiveness-anxiety relationship between Onwuegbuzie et al. (1999), Tóth (2007), and our study, for instance differences in the background of participants and sample size. The other explanation is that the competitiveness-anxiety relationship may be subject to the interference of a third variable not measured, for instance classroom variables, and consequently indicated different directions in these studies.

Self-esteem was also found to be a negative predictor of FL anxiety. In other words, students who value themselves more highly were shown to experience less FL anxiety. The findings for self-esteem endorsed those reported by Liu and Zhang (2008), and Zare and Riasati (2012). Of the two personality attributes addressed in the current study, self-esteem was a better predictor of FL anxiety than competitiveness, as evidenced by the larger

standardized coefficients and the consistently significant effects.

Noteworthy is that this study found significant interconnections among FL proficiency, self-esteem, and competitiveness, as shown in the section of correlation analysis, suggestive of the possible interplay between these variables. Thus, it means that each of the three variables may impose an influence on learners' anxiety levels through the other two, although a direct effect also existed. The interconnections further point to the complexity of FL anxiety-related factors.

The findings of this study have some pedagogical implications. We call on teachers to have a working knowledge of their students' personal characteristics, particularly learners' degree of self-esteem and competitiveness. This study found self-esteem and competitiveness to negatively predict FL anxiety, suggesting that learners with low competitiveness and self-esteem are the likeliest candidates to exhibit a higher level of FL anxiety. FL anxiety has been widely accepted as an interfering variable in FL learning, which has made it crucial for teachers to identify the self-deprecatory or less competitive learners and take measures to alleviate these learners' anxiety, if necessary.

Notes

1. Before we carried out regression analyses, the ECAS and the JCAS scores were compared across classes at two times. Comparisons were performed among six classes for Japanese anxiety, but three classes for English anxiety, as the participants in six Japanese classes were actually from three English classes, as mentioned the Methodology section. A Kruskal-Wallis test was conducted for Japanese anxiety, but a one-way ANOVA was used for English anxiety, after checking the assumptions of normality and homogeneity of variances. Results showed that Japanese anxiety did not significantly differ across six classes at the two moments in time: $\chi^2(5, n=146)=4.12, p=.52$ at Time 1 and $\chi^2(5, n=146)=3.89, p=.57$ at Time 2. Similar

results were rendered for English anxiety: $F(2, 143)=.30, p=.74$ at Time 1 and $F(2, 143)=.41, p=.66$ at Time 2. As a consequence of these results, the class variable was not entered into the multiple regression analyses.

2. The scores of the CI range from 14 to 70. At the two time points, there were only 18 (Time 1) and 21 (Time 2) students obtaining scores below 35, further supporting the conclusion elicited by the mean scores that these Chinese students tend to compete.

3. There were 86, 12, and 48 students who respectively indicated increase, no change, and decrease in Japanese proficiency across two time points. The numbers were 71, 15, and 60 respectively for English proficiency. The findings suggest a clear pattern of increase in Japanese proficiency among the samples, but English proficiency did not show a similar improvement. Moreover, inferential analysis showed that the increase in Japanese proficiency was significant, $t(145)=-3.39, p<.005, d=.28$, but no significance level was found in English proficiency, $t(145)=-.84, p=.40$.