

The Interrelatedness of Affective Factors in EFL Learning: An Examination of Motivational Patterns in Relation to Anxiety in China

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Abstract

This study examines the motivational pattern in relation to the anxiety of Chinese learners of English. Based on a survey consisting of an anxiety questionnaire and a motivation questionnaire, the findings revealed an unbalanced pattern of two types of motivation clusters that resembled the integrative-instrumental duality, with the level of instrumental motivation significantly higher than that of integrative motivation. Although anxiety and motivation overall were not significantly correlated, integrative motivation was found to be a predictor of low anxiety. The school requirement was the only motivation for English learning that was significantly positively correlated with anxiety. This study suggests a context-specific approach to understanding the interrelatedness of affective factors in English learning; it provides implications for policy making in EFL settings like China where learners have limited exposure to the target language instruction is examination oriented and English is mostly emphasized as a tool for attaining instrumental goals.

Introduction

Second language researchers have long been aware that second language learning is often associated with affective factors, among which the constructs of anxiety and motivation have been recognized as important predictors of second language performance. Existing work has generated context-specific findings with respect to the identification and formulation of foreign language anxiety and motivation, and the assessment of their impact on the learning experience (Clément, Dörnyei & Noels, 1994; Gardner, Day & MacIntyre, 1992; Horwitz, Horwitz & Cope, 1986; MacIntyre & Gardner, 1991; Phillips, 1992; Yan, 1998; Young, 1991). However, little empirical evidence is available to understand motivational patterns in China, a typical foreign language learning setting, where learners use Chinese in most areas of social life. Several authors (for example, Noels, Clément & Pelletier, 1999; Yan, 1998) have suggested a possible negative relationship between anxiety and motivation in view of the opposing effects of these two constructs. However, no formal studies have been

conducted to examine in-depth the connection between the two factors. Therefore, the purpose of this study is to examine the anxiety and motivational patterns of Chinese college learners of English and consider how motivational patterns are related to anxiety in language learning.

Literature Review

Anxiety

A substantial amount of research has suggested that anxiety has a great effect on second language acquisition. Although essentially anxious foreign language learners share feelings and symptoms of "uneasiness, frustration, self-doubt, apprehension, or worry" similar to any other specific anxieties (Scovel, 1978, p. 134), language learning contexts appear to be particularly prone to anxiety arousal. Many learners claim that they have a mental block against learning a foreign language in contrast to other subjects (Horwitz et al., 1986). Since the mid-1980s, there has been a considerable amount of research providing supporting evidence for the treatment of the construct of anxiety as conceptually specific to the language acquisition context. In particular, Horwitz et al. (1986) define foreign language 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). MacIntyre and Gardner (1991) also advocate the treatment of language anxiety as a separate concept as they found performance in the second language was negatively correlated with language anxiety but not with more general types of anxiety. This distinction between language anxiety and other forms of anxiety has now been recognized as a key issue in the understanding of the role of anxiety in language learning and allows for a more focused conceptual basis for future research (MacIntyre, 1995).

The identification of language learning anxiety has attracted sizeable attention from researchers. Students may manifest various anxiety-related behaviors particular to the foreign language classroom setting, such as trying to avoid difficult linguistic structures and express difficult or personal messages in the foreign language, getting nervous in role-play activities, not volunteering answers and participating in oral activities, coming unprepared to class, delaying taking the foreign language until very late, avoiding speaking in the foreign language in class, being less willing to communicate and express themselves compared to more relaxed students, etc. (Horwitz et al., 1986; MacIntyre, 1995; MacIntyre, et al., 1997). Gregersen's (2004) work provides more nonverbal clues for the detection of anxiety, that is, limited facial activity, less eye contact and less active illustrative and regulatory gestures. These "symptoms" suggest that language anxiety has a pervasive impact on the language learning experience. Horwitz et al. (1986) made a unique contribution to the identification of the scope of foreign language anxiety by developing a systematic instrument--the 33-item Foreign Language Classroom Anxiety Scale (FLCAS). Their study suggests that "significant foreign language anxiety is experienced by many students in response to at least some aspects of foreign language learning" (p. 130). This construct has been examined and used by several other studies (for example, Aida, 1994; Cheng, 1998; Liu, 2006; Saito, Garza & Horwitz, 1999; Yan, 1998) and the FLCAS has been shown repeatedly to be a reliable instrument in identifying students' anxiety experience in language learning.

Second language scholars have identified a wide range of factors that are related to foreign language anxiety. Bailey (1983) notices that foreign language anxiety is related to overcompetitiveness in the foreign language classroom. Students tend to have a desire to outperform other classmates and gain positive feedback from the teacher. Some authors (see, for example, Saito et al., 1999; Sparks & Ganschow, 1991) regard affective factors as behavioral manifestations of a deeper problem--language-processing deficiencies. They argue that anxiety reactions are caused by real difficulties resulting from subtle cognitive operations when students are processing input and production in language. This claim seems to have been supported to some extent by a survey study of Levine (2003), which shows a negative relationship between anxiety and amounts of target language use; it is also in accordance with Chen and Chang (2004) who found that language learning difficulties could predict anxiety best in foreign language learning settings. However, it cannot be fully justified as those studies fail to explain why advanced and highly successful students also report anxiety reactions. Horwitz et al. (1986) and MacIntyre (1995) contend that second language communication is prone to anxiety arousal probably because it can challenge an individual's self-concept as a competent communicator because of the limited proficiency in the second language relative to the first. Young (1991) identifies six potential interrelated sources of language anxiety which may be partly attributed to the classroom environment: personal and interpersonal anxieties, which could be related to communication apprehension; learner beliefs about language learning; instructor beliefs about language teaching; instructor-learner interactions; classroom procedures; language testing. Gregersen and Horwitz's (2002) examination reveals a connection between language anxiety and perfectionism. The extensive variety of the types of anxiety-related factors indicates that foreign language anxiety cannot be fully understood without considering that it is not an isolated affective construct.

Therefore, the pervasive impact of anxiety on the language learning process makes the identification of language anxiety an important component of second language research. On the other hand, being a complex, multidimensional phenomenon, language anxiety manifests itself in students differently, almost unavoidably, intricately intertwined with other factors, among which motivation might be one.

Motivation

The study of motivation as a predictor of second language learning performance was initiated by Robert Gardner and his Canadian colleagues. Their integrative-instrumental duality soon became widely accepted and became a classical model. Instrumental motivation refers to "acquiring language as a means for attaining instrumental goals" (Brown, 2000, p. 162), while integrative motivation "stems from a desire to understand the language and culture of another group for the purpose of interaction" (Gardner et al., 1992, p. 198). Although Gardner and MacIntyre (1991) noted later that "the old characterization of motivation in terms of integrative vs. instrumental orientation is too static and restricted" (p. 62), Ely (1986) showed that their dichotomy is indeed useful for characterizing motivational configurations. His study based on the categorization of the 184 reasons for learning Spanish indicated the existence of two types of motivation clusters that resembled integrative and instrumental orientations, which confirmed the validity and fundamental importance of Gardner's social psychological model.

The early 1990s witnessed a considerable amount of scholarship working towards other motivational paradigms. For example, Dörnyei (1990) proposed a motivational framework consisting of four subsystems: integrative motivation; instrumental motivation; the need for achievement; attritions about past failures. One of the well-known formulations is the distinction between intrinsic and extrinsic motivation. Extrinsically motivated behaviors are the ones that the individual performs to "receive some extrinsic award" (for example, good grades) or to avoid punishment; while intrinsically motivated behaviors are internal rewards (for example, the joy of doing a particular activity or satisfying one's curiosity)" (Dörnyei, 1994, p. 275). This model was upheld by Clément and Kruidenier (1983) and Noels et al. (2000) who extended it by adding "amotivation" to the framework and dividing intrinsic motivation into knowledge, mastery and stimulation, and extrinsic motivations into external, introjected and identified regulation. Manolopoulou-Sergi (2004) suggests that motivation be related to different stages of information processing: input, central processing and output. However, the applicability of these frameworks remains to be verified by extensive empirical evidence. In addition, as pointed out by Noels, et al. (2000), "These models are not meant to replace the integrative-instrumental distinction, but rather to complement it" (p. 60). The validity of such a distinction has been repeatedly justified by empirical evidence. For example, Shedivy (2004) in a recent investigation with some college students managed to classify the five major factors (namely, the spark, blending in, desire to immerse, pragmatic orientations, and political awareness) that motivate students to study foreign language beyond high school into an integrative-instrumental dichotomy.

Although both instrumental and integrative motivations have been established as important predictors of language learning, previous work has provided different findings as to which of the two types of motivation is more essential. Gardner and his colleagues conducted several studies on French learning in Canada which indicated that both monetary rewards and integrative desires were positively related to various aspects of second language learning, such as length of learning, effectiveness of learning, behaviors in the classroom, and willingness to interact with members of that community (Gardner & MacIntyre, 1991; Gardner et al., 1992). However, Clément and Kruidnier (1983), based on a comparative study of learners from unicultural and multicultural backgrounds, argue that "the integrative orientation appeared only in multicultural contexts among members of a clearly dominant group" (p. 72). Dörnyei (1994) contributed to the discussion by drawing our attention to social milieus. He is particularly concerned about the distinction between second language acquisition (SLA) and foreign language acquisition (FLA), pointing out that the studies of Gardner and his colleagues were mainly conducted in SLA contexts characterized by direct exposure or frequent interaction with the target-language community, while FLA contexts involve the target language being taught in school as an academic subject and "a great proportion of the variance in language attainment" (p. 49). He claims that in FLA settings, although integrative motivation affects language learning to some extent, instrumental motivation may be particularly important. A major finding of Csizer and Dörnyei's (2005) study with Hungarian learners is that integrativeness is the primary factor in the overall motivational disposition of second language learners.

Existing evidence points to the fact that contexts have a profound impact on the way instrumental and integrative motivations relate to language learning. "The nature

and effect of certain motivation components might vary as a function of the environment in which the learning takes place" (Dörnyei, 1990, p. 48). In an overview of his theory, Gardner (1988) also admitted that it would be too simplistic just to assume that the role of motivation should be consistent and universal in language learning in different settings. He and MacIntyre (1991) later emphasized that "the important point is that motivation itself is dynamic" (p. 62). Therefore, the inclusion of contexts as a variable is essential to our understanding of motivation in relation to language learning.

Anxiety and motivation

Although previous findings on anxiety and motivation vary greatly, the possible opposing effects of anxiety and motivation on behaviors in language learning have drawn the interest of several authors. For example, Gardner et al. (1992) noticed that integratively motivated students are less anxious in second language contexts; these authors therefore hypothesized that perhaps anxiety and motivation are opposite ends of the same dimension. Noels et al. (1999) also believe that "the more students feel unmotivated, the less effort they will expend and the more anxiety they will feel" (p. 31). Some other investigations suggest in a more explicit manner a possible negative relationship between anxiety and motivation in relation to language learning. For example, Yan (1998) suggested that the strength of student motivation in general and anxiety were negatively correlated and a lack of motivation could result in anxious behaviors. These authors all call for the creation of a favorable, less anxiety-producing atmosphere, one that instills a positive attitude and offers motivation for language learning. However, most previous thoughts on the relationship between language anxiety and motivation are based on observations, rather than empirical evidence. No existing work has examined in-depth and systematically the way the two constructs are related to each other.

EFL learners in mainland China

English functions as a foreign language in China. It is not used extensively outside the classroom in educational settings to serve people's daily needs; neither does it have administrative status. Mandarin is predominantly used throughout the country. Overall, the use of English is quite limited to international, not intranational communication. Nevertheless, English affects the lives of a huge number of people as it has been widely accepted as almost an indispensable tool in achieving academic and career advancement. As a result, China has the largest English-learning population in the world. It is estimated that more than 200 million school children, about 20% of the total in the world, and 13 million college students are learning English (Jiang, 2003). The Chinese government has instituted an English requirement nationwide beginning as early as the third grade. There are pro-English policies at all levels of learning. At college, non-English majors are required to take various English courses as well as the national College English Tests. Meanwhile, the increasing awareness of communicative competence, and the washback effect of adding speaking and listening tests to major national English exams have been expected to contribute to a significant improvement of English performance. Despite this national endeavor of English learning and the pro-English policies, a large proportion of the learners have not achieved the desirable proficiency to communicate adequately with the language, which has frustrated both learners and teachers. For example, Pang, Zhou and Fu

(2002) found from their survey study in corporate settings in Zhejiang Province that "the listening and speaking skills of the employees fall considerably below job requirement" (p. 7).

Liao (1996) reports that the causes of the communicative incompetence of English learners in China, which mainly include a neglect of education in the target culture, lack of communicative activities, limited English input outside the classroom, and exposure primarily to written as opposed to oral English within the classroom, which are characteristic of foreign language learning settings. She points out that Chinese students tend to be motivated more instrumentally than integratively. She's concerned about this imbalance and makes a point of the need for increasing cultural awareness, stimulation of students' motivation as well as creation of a low-anxiety learning environment. However, the claims are mostly personal opinions; furthermore, these observations were made ten years ago; empirical studies are needed in order to obtain an updated picture of English education in China.

Yan's (1998) study is among the few attempts investigating the influence of affective factors in mainland China. She used the data collected from the FLCAS designed by Horwitz et al. (1986) and interviews for a combination of quantitative and qualitative analysis to examine the sources and effects of foreign language anxiety in a Chinese university. She found that the FLCAS was valid as a predictor of general language achievement. She also asked the participants to rate their level of overall motivation for English learning on a five-point ordinal scale and found that the strength of motivation in general and anxiety were negatively correlated. However, she did not take into account the fact that motivation by itself is a complex construct; examinations of motivation patterns and the strength of specific motivation types in relation to anxiety could probably reveal more about the way these two constructs are connected with each other.

As discussed above, language-learning contexts in general appear to be particularly prone to the intricate effect of anxiety and motivation, which, as suggested by existing evidence, might be related to each other in some way. However, there has been no systematic investigation in this regard. Moreover, the effect of motivation on the process of foreign language learning has been somewhat neglected in the English education of China; little empirical data is available for us to understand the motivational patterns of the Chinese learners. These issues are addressed in the present study in order to provide some implications for today's proficiency-oriented classrooms in an effort to alleviate obstacles that prevent learners from gaining linguistic competence and enhance language-learning effectiveness in foreign language settings like China.

The Study

Research questions

The study examines the anxiety level and motivational patterns of Chinese college-level English learners, and probes the possible relationship between anxiety and motivation of the learners. More specifically, the study seeks answers to the following questions:

1. What is the level of anxiety in Chinese college English classrooms?
2. What are the motivational patterns for English learning of Chinese college students? Which motivations are stronger?
3. Are there relationships between learners' proficiency and their motivation and anxiety?
4. Is there a relationship between English anxiety level and motivational patterns of Chinese college students?

Method

Participants

A total of 57 Chinese students enrolled in English classes participated in the study. They were in the second year of an undergraduate environmental science program at a university in Beijing. Second-year students were selected as being more representative of the target population; during the first year of college students mostly try to make transitions from high school life to college life. Additionally, English taught in the third year is related more to students' own field of study; finally, it is not required nor offered in the fourth year. Male and female participants composed 48% (n = 28) and 52% (n = 29) of the sample, respectively. Their age ranged from 18 to 21, with a mean of 19.1. The years of English learning ranged from 6 to 12, with a mean of 8.27. The participants had already taken two semesters of English classes in the first year of study at the university.

Instruments for data collection

Three instruments were used for this study: an anxiety questionnaire, a motivation questionnaire, and a background questionnaire. The background questionnaire contained questions about the participants' age, gender, and field of study; questions about their self-rated proficiency, and some six-point interval scale questions eliciting their opinions on the difficulty of various English skills, as well as their levels of interest in acquiring those skills, were also asked for subsequent studies. The 33-item Foreign Language Classroom Anxiety Scale (FLCAS) designed by Horwitz et al. (1986) was used to assess second language learning anxiety. I changed the original five-point ordinal Likert scale into a six-point interval scale in order to avoid clustered responses toward the middle of the scale. In this way, the data could provide more valuable information for statistical analyses. Responses ranged from 1 ("strongly disagree") to 6 ("strongly agree"), with the intermediate levels unlabeled. Items 5, 8, 11, 14, 18, 22, 32 were inversely coded to make the scale reflect the degree of anxiety in ascending order. The modified FLCAS, as measured by Cronbach's alpha, showed an internal consistency of .90 in this study.

The motivation questionnaire was carefully adapted from the motivation surveys administered in foreign language settings by Clément and Kruidenier (1983), Clément et al. (1994) and Ely (1986) in such a way that the items were deemed concise, explicit and characteristic of the Chinese setting. Items 3, 4, 5, 6, 8, 9, 11, 12 were adapted from Ely (1986), with "Spanish" replaced by "English". Items 1, 2, 5, 7, 10, 16 were adapted from Clément and Kruidenier (1983), with "French" changed into "English". Items 13, 14, 15 were adopted from Clément, Dörnyei, and Noels (1994). The respondents were asked to rate each of the 16 statements about the reasons for

English learning on the same 6-point interval scale as used for the FLCAS in terms of their agreement with the statement in descending order. The motivation scale, as measured by Cronbach's alpha, showed an internal consistency of .88.

All of the three sections were translated into Chinese. The Chinese version of the FLCAS was adapted from Yan's study (1998). In order to examine the accuracy of the translation, the Chinese version of the instrument was evaluated by two Mandarin-speaking graduate students from mainland China who made suggestions regarding comprehensibility and clarity. Then it was compared to the original English version so that the meanings could be as close as possible to the English version.

Data collection procedures

An electronic version of the instrument was sent to the participant's English professor. The instrument, requiring about 15 minutes to complete, was printed then administered in the students' regular English class. Students were informed that their participation was voluntary and were given consent forms to fill in if they chose to participate in the study. Written instructions accompanying the instrument were repeated orally. When filling out the questionnaires, students were asked to give their opinions as frankly as they could, which was crucial to the success of this investigation.

Data analysis procedures

The data for the 57 questionnaires were coded for statistical analysis to answer the research questions indicated above. The Statistical Package for the Social Sciences (SPSS, version 11.0) was used to analyze the data. Descriptive statistical analysis (for example, frequencies, percentages, means, standard deviations, etc.) was used to obtain aggregate views of the demographic information from the background questionnaire, as well as overall levels of anxiety and motivation. Maximum likelihood factor analysis was used to identify motivational patterns. A paired-samples t-test was then conducted to compare the means of the specific motivational patterns identified by the factor analysis. Pearson's correlations were computed to evaluate the relationship between overall anxiety level and motivation level, and between overall anxiety level and the specific motivational patterns, as well as the learners' self-rated proficiency and their anxiety level and motivation level respectively.

Results

Overall anxiety level

Descriptive statistics for the FLCAS showed that the participants demonstrated a wide range of average anxiety levels, ranging from 1.88 to 5.18. The overall mean was 3.42 (SD = .71), which indicated an overall moderate rating of anxiety levels. The rating levels of each of the statement in descending order are presented in Table 1. The top five anxiety statements, which all had mean values exceeding 4, were: "I often feel like not going to my English class"; "I feel confident when I speak in English class"; "It wouldn't bother me at all to take more English classes"; "I worry about the

consequences of failing my English class"; "During English class, I find myself thinking about things that have nothing to do with the course." These items seemed to reflect a generally negative and passive attitude towards the English course.

Table 1 Overall Anxiety Levels in Descending Order

	M	SD		M	SD
I often feel like not going to my English class.	4.20	1.57	I get nervous when I don't understand every word the English teacher says.	3.31	1.51
I feel confident when I speak in English class.	4.20	1.26	I feel very self-conscious about speaking English in front of other students.	3.29	1.55
It wouldn't bother me at all to take more English classes.	4.17	1.49	I get nervous and confused when I am speaking in my English class.	3.28	1.47
I worry about the consequences of failing my English class.	4.13	1.67	I don't worry about making mistakes in English class.	3.22	1.60
During English class, I find myself thinking about things that have nothing to do with the course.	4.09	1.50	It embarrasses me to volunteer answers in my English class.	3.21	1.44
I start to panic when I have to speak without preparation in English class.	3.93	1.40	I always feel that the other students speak English better than I do.	3.19	1.62
I don't understand why some people get so upset over English classes.	3.86	1.35	I tremble when I know that I'm going to be called in English class.	3.12	1.49
I never feel quite sure of myself when I am speaking in my English class.	3.79	1.51	I don't feel pressure to prepare very well for English class.	3.10	1.46
I get upset when I don't understand what the teacher is correcting.	3.79	1.32	It frightens me when I don't understand what the teacher is saying in English.	3.10	1.5
I get nervous when the English teacher asks questions I haven't prepared in advance.	3.79	1.36	When I'm on my way to English class, I feel very sure and relaxed.	3.05	1.38
I am usually at ease during tests in my English class.	3.69	1.48	Even if I am well prepared for English	2.97	1.57

			class, I feel anxious about it.		
I can feel my heart pounding when I'm going to be called on in English classes.	3.66	1.60	I am afraid that the other students will laugh at me when I speak English.	2.90	1.52
I would not be nervous speaking in English class.	3.45	1.48	I feel overwhelmed by the number of rules I have to learn to speak English.	2.83	1.31
I would probably feel comfortable around native speakers of English.	3.38	1.39	In English class, I can get so nervous that I forget things I know.	2.65	1.54
I feel more tense and nervous in my English class than in my other classes.	3.38	1.72	The more I study for an English test, the more confused I get.	2.45	1.48
I keep thinking that the other students are better in English than I am.	3.34	1.60	I am afraid that my English teacher is ready to correct every mistake I make.	2.41	1.17
Language class moves so quickly that I worry about getting left behind.	3.33	1.44			

Overall motivation level

Descriptive statistics for the motivation scale indicated that the participants varied in their overall ratings, which ranged from 1.75 to 5.81. The overall mean was 4.45 (SD = .88). The average ratings for the 16 motivation statements ranged from 3.41 to 5.25 (See Table 2). The results also showed that the top three reasons for learning English were: "It will be helpful for my future career"; "It may make me a more qualified job candidate"; "I may need it to be admitted to a higher school". The bottom three reasons were: "I need it for study abroad"; "It helps me understand English-speaking people and their way of life"; "I am interested in English culture, history or literature." These top and bottom items suggested that there were patterns in the way the respondents were motivated, as the top three looked instrumental while the bottom three appeared integrative.

Table 2 Overall Motivation Levels

	M	SD		M	SD
It will be helpful for my future career.	5.19	1.28	I feel English is an important language in the world.	4.45	1.65
It may make me a more qualified job candidate.	5.02	1.38	I need it to fulfill the university foreign language requirement.	4.05	1.58

I may need it to be admitted to a higher school.	4.95	1.34	I feel it is mentally challenging.	4.02	1.54
I want to understand English films/videos, pop music or books/magazines.	4.83	1.43	I can get pleasure from learning English.	3.98	1.89
I want to be able to use it with English-speaking people.	4.78	1.49	I need it for study abroad.	3.93	1.51
I have to take the State Language Exam.	4.67	1.50	It helps me understand English-speaking people and their way of life.	3.86	1.41
I want to acquire new ideas and broaden my outlook.	4.48	1.16	I am interested in English culture, history or literature.	3.40	1.65
I would like to travel to an English-speaking area.	4.48	1.55	I feel English is an important language in the world.	4.45	1.65

Motivational patterns

The dimensionality of the 16 items on the motivation scale was analyzed using maximum likelihood factor analysis in order to identify the patterns of motivation. Two criteria were used to determine the number of factors to rotate: the scree test, and the interpretability of the factor solution. Based on the scree plot, two factors were rotated using a Varimax rotation procedure. The rotated solution (see Table 3) yielded two interpretable factors. Factor 1 accounted for 33.1% of the item variance, and Factor 2 accounted for 20.7% of the item variance. The two factors accounted for a total of 53.8% of the variance ($\chi^2 = 127.85$; $df = 84$; $p < .05$).

Table 3 *Correlations between the motivation items and the motivation factors*

Items	Factors	
	<i>Instrumental</i>	<i>Integrative</i>
Instrumental items		
I want to be able to use it with English-speaking people.	.71	.42
It will be helpful for my future career.	.87	.30
I may need it to be admitted to a higher school.	.72	.31
I need it to fulfill the university foreign language requirement.	.58	-.50
It may make me a more qualified job candidate.	.85	.13
It is part of being educated.	.67	-.46

I have to take the State Language Exam.	.81	-.18
I want to understand English films/videos, pop music or books/magazines.	.65	.29
Integrative items	<i>Instrumental</i>	<i>Integrative</i>
I would like to travel to an English-speaking area.	.44	.61
I am interested in English culture, history or literature.	-.16	.79
It helps me understand English-speaking people and their way of life.	.20	.62
I need it for study abroad.	.24	.54
I can get pleasure from learning English.	.18	.57
Complexly Determined Item	<i>Instrumental</i>	<i>Integrative</i>
I feel it is mentally challenging.	.40	.52
I want to acquire new ideas and broaden my outlook.	.53	.46
I feel English is an important language in the world.	.45	.30

Factor 1 receives appreciable loadings from 8 orientations (items 1, 5, 7, 9, 11, 13, 14, 15). Six of the seven variables clearly relate learning English to advancement in studies and work. The fact that "I want to understand English films/videos, pop music, or books/magazines" also bears more loading with Factor 1 is interesting in that it shows that the students were interested in the cultural products per se; they did not necessarily want to learn more about the cultural elements entailed in these products. This dimension therefore reflects an instrumental orientation, with English being an important tool for pragmatic attainment. It seems appropriate to label this factor as an instrumental dimension.

Factor 2 receives appreciable loadings from 5 variables (items 2, 3, 4, 6, 16). This factor seems to reflect an integrative dimension. "I need it for study abroad" looks more like an instrumental orientation, but this orientation may have been to some extent triggered by a desire to get integrated into the target culture or recognition of the target culture. Therefore, what seems to characterize this particular cluster of items is the willingness to learn more about the target language group and culture. It is labeled as an integrative dimension.

An examination of the factor structure also indicated that there were some crossloadings. Three items (8, 10, 15) loaded on both Factor 1 and Factor 2. However, in general these two factors support the distinctiveness of each of the subscales. The Cronbach alpha index of internal consistency was acceptable for both categories: alpha = .89 for instrumental dimension; alpha = .78 for integrative dimension.

A paired-samples t test was conducted to evaluate whether the participants were more instrumentally motivated or integratively motivated. The results indicated that the mean instrumental motivation ($M = 4.80$, $SD = 1.03$) was significantly higher than the mean integrative motivation [$(M = 3.97$, $SD = 1.16)$, $t(56) = 4.74$, $.05$]. Therefore, the participants were motivated more instrumentally than integratively.

This corresponds to the phenomenon that the top three items on the motivation scale all fell into the category of instrumental motivation while the bottom three items belonged to the category of integrative motivation.

Correlation between proficiency and anxiety

A Pearson correlation coefficient was computed between the participants' self-reported proficiency level and their mean anxiety level as measured by the FLCAS. The results of the correlational analyses showed a significant negative correlation ($r = -.561$; $p < .05$). The same procedure was applied to each of the statement on the FLCAS, which suggested that there were significant relationships between the proficiency rating and 22 out of the 33 items (see Table 4). Therefore, overall there was a significant relationship between how anxious the learners were about learning English and their self-rated English proficiency. It is possible that the more anxious they were, the less effective their learning was.

Table 4. Correlations between Proficiency and Anxiety

	Pearson's Correlations with Anxiety		Pearson's Correlations with Anxiety
I never feel quite sure of myself when I am speaking in my English class.	.520*	I feel confident when I speak in English class.	.276*
I don't worry about making mistakes in English class.	.229	I am afraid that my English teacher is ready to correct every mistake I make.	.107
I tremble when I know that I'm going to be called in English class.	.320*	I can feel my heart pounding when I'm going to be called on in English classes.	.073
It frightens me when I don't understand what the teacher is saying in English.	.364*	The more I study for a English test, the more confused I get.	.126
It wouldn't bother me at all to take more English classes.	.326*	I don't feel pressure to prepare very well for English class.	.263*
During English class, I find myself thinking about things that have nothing to do with the course.	.260	I always feel that the other students speak English better than I do.	.506*
I keep thinking that the other students are better in English than I am.	.493*	I feel very self-conscious about speaking English in	.234

		front of other students.	
I am usually at ease during tests in my English class.	.516*	Language class moves so quickly I worry about getting left behind.	.490*
I start to panic when I have to speak without preparation in English class.	.279*	I feel more tense and nervous in my English class than in my other classes.	.382*
I worry about the consequences of failing my English class.	.469*	I get nervous and confused when I am speaking in my English class.	.388*
I don't understand why some people get so upset over English classes.	.228	When I'm on my way to English class, I feel very sure and relaxed.	.423*
In English class, I can get so nervous I forget things I know.	.338	I feel overwhelmed by the number of rules you have to learn to speak English.	.364*
It embarrasses me to volunteer answers in my English class.	.218*	I get nervous when I don't understand every word the English teacher says.	.294*
I would not be nervous speaking English with native speakers.	.170	I am afraid that the other students will laugh at me when I speak English.	.360*
I get upset when I don't understand what the teacher is correcting.	.374*	I would probably feel comfortable around native speakers of English.	.113*
Even if I am well prepared for English class, I feel anxious about it.	.124*	I get nervous when the English teacher asks questions I haven't prepared in advance.	.297*
I often feel like not going to my English class.	.288*		

* $p < .05$

Correlation between proficiency and motivation

To examine how the learners' self-reported proficiency was related to their motivation levels, Pearson correlation coefficients were computed between the proficiency rating and the overall average motivation level, the means of instrumental

motivation and integrative motivation respectively. No significant relationship was found between any of the above three pairs. However, further Pearson correlation coefficients did reveal one motivation statement which was significantly negatively related to the participants' proficiency rating: "I need it to fulfill the university foreign language requirement", $r = -.273$, $p < .05$. This seems to indicate that the implementation of foreign language requirement did not have a positive effect on the participant's English learning.

Correlation between anxiety and motivation

To evaluate the relationship between Chinese college students' mean anxiety level and their mean motivation level in general as measured by this survey, a Pearson correlation coefficient was computed between the mean results of the FLCAS and the motivation scale. The results of the correlational analyses indicated an insignificant negative correlation ($r = -.145$; $p > .05$). In general, the results suggested that there was no statistically significant relationship between how anxious students were about English learning and the degree of their motivation in general. This might be due to the possibility that different types of motivation had different effect on the students.

To address the question of whether anxiety is negatively correlated with each of the two motivation types, Pearson correlations were also conducted between the mean results of the FLCAS and both the instrumental motivation scale and integrative motivation scale respectively.

The results of the correlational analysis with instrumental motivation and anxiety level were not significant $r = -.02$, $p > .05$ (see Table 5). Nevertheless, the correlations between "I need to fulfill the university foreign language requirement" and "I may need it to be admitted to a higher school" and anxiety level were found to be significant, with the former moderately positively related with anxiety level, $r = .37$, $p < .05$, and the latter weakly negatively related with anxiety level, $r = -.28$, $p < .05$. This seems to indicate that whether the students had self-chosen need for the language was closely connected with the degree of anxiety.

Table 5. Correlations between the means of the instrumental motivation items and anxiety

Motivation	Pearson's Correlations with Anxiety
I want to be able to use it with English-speaking people.	-.183
It will be helpful for my future career.	-.111
I may need it to be admitted to a higher school.	-.280*
I need it to fulfill the university foreign language requirement.	.372*
It may make me a more qualified job candidate.	-.002
It is part of being educated.	-.008

I have to take the State Language Exam.	.184
I want to understand English films/videos, pop music, or books/magazines	-.149
Overall	-.02

* $p < .05$

However, the results of the correlational analysis with integrative motivation were significant, $r = -.33$, $p < .05$, which indicated that there was a moderately weak negative relationship between integrative motivation and anxiety level (see Table 6). The effect size, $r^2 = .11$, suggested that 11% of the variation in anxiety could be predicted from integrative motivation level. Specifically, two individual items were found to be significantly negatively correlated with anxiety: "I would like to travel to an English-speaking area" ($r = .32$, $p < .05$); "I need it for study abroad" ($r = .30$, $p < .05$). Thus, the stronger the desire for opportunities to experience the target culture, the less anxiety the students were likely to feel.

Table 6 Correlations between the means of the integrative motivation items and anxiety

Motivation	Pearson's Correlations with Anxiety
I would like to travel to an English-speaking area.	-.317*
I am interested in English culture, history or literature.	-.250
It helps me understand English-speaking people and their way of life.	-.162
I need it for study abroad.	-.298*
I can get pleasure from learning English.	-.200
Overall	.33*

$p < .05$

Discussion

The anxiety level as shown in this study is consistent with that of Yan (1998), who found a moderate level of anxiety among her Chinese business major participants, although the participants for this study were drawn from a different field of study. This is in accordance with what Horwitz et al. (1986) claim: many learners experience anxiety "in response to at least some aspects of foreign language learning" (p. 129). What is worth noting is the general negative attitude towards English classes as shown by the top-rated anxiety statements: students do not feel like going to English classes and taking more English classes; they are generally not confident in English classes; and they are anxious about the consequences of failing the English class. As Yan's (1998) study does not present statistical details regarding

ratings of specific items on the anxiety scale of her business major students, it is unknown whether the anxiety pattern shown in this study could be partly attributed to the major of the participants, which might affect the overall attitude towards English learning. Nevertheless, the boredom and anxiety students feel are noteworthy and alarming since involvement in the learning process conducted in classrooms is crucial to learning effectiveness in foreign language settings. The endorsement of the FLCAS items by the participants of this study probably indicates that anxious students are common in college English classrooms.

The motivation level as shown by the analyses was generally high, which was probably due to a combination of the following factors: the attachment of importance on the part of the government to English learning; the growing exposure of learners to the cultures of English-speaking countries; and the increasing awareness on the part of learners of the potential differences a good command of English can make to their life.

A closer examination of the motivation scale indeed revealed a motivational dichotomy: instrumental motivation vs. integrative motivation, which is consistent with the motivation clusters found in Ely (1986). Interestingly, although "I want to understand English films/videos, pop music, or books/magazines" appeared integrative, it was more instrumental by nature, as suggested by the factor analysis. It is likely that students want to improve their English for entertainment, not integrative purposes. On the other hand, the factor analysis also led to another noteworthy result: as a reason for English learning, "I need it for study abroad" was integrative, rather than instrumental; this indicates that study abroad entails a desire to get involved in the target culture. Therefore, there is not a single way to categorize integrative motivation and instrumental motivation; the understanding of the distinction should be adjusted to specific contexts. However, this does not necessarily invalidate the integrative-instrumental model. As explained by Dörnyei (1990), "Instrumentality and especially integrativeness are broad tendencies or subsystems rather than straightforward universals, comprising context-specific clusters of loosely related components" (p. 70).

Instrumental motivation appeared significantly more prominent than integrative motivation in this study. These learners were more concerned about the role English played in their academic and career advancement; school requirement was an important factor propelling them to learn English. This corresponds to the observation made by Dörnyei (1994):

Instrumental motivation, intellectual, and sociocultural motives, and/or other motivational factors . . . may acquire a special importance, although affective factors that are normally part of integrative motivation in SLA contexts do play a role in FLL . . . that differs from those emerging in SLA contexts. (p. 49)

On the other hand, the lower rating of integrative items in general and the result that four of the five integrative motivation items were ranked at the bottom of the motivation scale indicate that students are relatively less integratively motivated.

Not surprisingly, the analyses in the above section reveal a significant negative relationship between anxiety and self-reported proficiency. The more anxious

learners are, the less likely they are to have confidence in themselves and to achieve good learning results. However, the findings do not confirm previous assumptions of Gardner et al. (1992), Noels et al. (1999), and Yan (1998) about a general negative correlation between anxiety and motivation. Nor do they indicate that motivation can result in better learning achievement. Greater motivation alone does not necessarily contribute to less anxiety in foreign language classrooms, since language learning is an extremely intricate task, interacting with a complex network of variables. This does not mean that motivation has little to do with the anxiety students feel in foreign language classrooms, but that we need to examine their relationship in more depth.

The two types of motivation (instrumental and integrative) are different in the extent that they affect anxiety level. Integrative motivation, not instrumental motivation, seems to be able to predict anxiety level of learners to some extent. This is consistent with Noels et al. (1999) who suggest:

Learning a language for material rewards or because of some pressure does not support sustained effort or eventual competence. Language learners who have valued goals for learning, particularly the goal of self-development and enjoyment in learning, tend to be more involved and successful in that learning experience. (p. 31)

If students learn English for reasons not of their own choice, these reasons are not very likely to have a positive effect on the learning process. For example, learning a language because of school requirements stood out as a factor negatively related not only to learners' anxiety level but also their proficiency. This motivation might not help alleviate anxiety in foreign language classrooms; the effect is in fact the inverse. This corresponds closely to the high test anxiety reported by the participants on the FCLAS in the statement "I worry about the consequences of failing my English class."

On the other hand, it seems that the more students feel that English learning is a matter of choice (for example, when they want to be admitted to a higher school) or enjoyable for them, the more likely they are to be willing to be actively involved in the learning experience, which will result in less anxiety in the classroom (Gardner et al., 1992; Noels et al., 1999). Particularly, when students have a strong desire to go to English-speaking countries for travel or study, their anxiety levels are relatively low. Therefore, Gardner's classical emphasis on integrative motivation as a facilitating force for language acquisition also appears valid in foreign language learning settings like China.

Although Dörnyei (1994) makes an important point in claiming that instrumental motivation plays a significant role for foreign language learning, overemphasis on studying for pragmatic gains does not seem to have a generally positive impact on the learning process. Moreover, the conflict between the negative correlation between integrative motivation and anxiety level and the relatively lower rating of integrative motivation reminds us that measures need to be taken to instill into students genuine interest in the cultural content involved in the learning experience in order to create a low-anxiety, proficiency-oriented classroom.

It should be noted that this exploratory study is context-specific, as the sample was drawn from a single field of study. A larger sample with more diverse backgrounds would be desirable in order to generate more generalizable findings. Furthermore, as

with other survey studies, the data for the study were based on self reports of the participants; the extent to which self reports reflect reality is always a question. Also, further studies with consideration of a wide range of factors such as policy making, curriculum design, language planning and other sociocultural-socioinstitutional issues, are needed in order to fully explore the interrelatedness of anxiety and motivation. However, as part of a discussion on the complex impact of affective factors on English learning in EFL contexts, it is hoped that this attempt can provide some useful insights for more extensive and thorough investigations in the field.

Conclusion

This study aimed at understanding the extent that anxiety and motivation affect English learning at China's institutions of higher learning. Overall, the results indicated a moderate anxiety level and a moderately high motivation level, the former being negatively related with the participants' proficiency. The respondents demonstrated two prominent factors on the motivation scale: instrumentality and integrativeness, and validated the context-specific approach to the understanding of this model. The analysis also suggested that the learners were motivated more instrumentally than integratively. No significant relationship was found between anxiety and motivation in general. However, there were differences in the degree of the impact of the two types of motivation on anxiety: instrumental motivation in general did not affect how anxious the students were in foreign language classrooms, except for school requirements which were found to be negatively correlated with anxiety and admission to a higher school which was positively correlated with anxiety. School requirements were also found to have a negative effect on the students' proficiency. On the other hand, integrative motivation, particularly the desire to get involved in the target culture, could predict anxiety level to a significant extent.

The generally negative attitude towards English courses may greatly influence the incentives desirable for maintaining sustainable effort in English learning. As Phillips (1992) warns, "In today's proficiency-oriented classroom, teachers must continue to view foreign language anxiety as a serious problem to be confronted in the effort to encourage students to further their education in foreign languages" (p. 22). The more desire students feel to learn about the target language and culture, the more effort they tend to make in their English learning, and the less anxious they are in the classroom. Learning English simply for pragmatic concerns does not necessarily contribute to the development of a positive attitude towards English courses, while integrative orientations facilitate the reduction of anxiety learners feel in language classrooms. This is particularly important for foreign language settings, where learners have no sufficient exposure to the target language and English teachers tend to attach excessive importance to acquiring English either as a requirement or as a tool for attaining instrumental goals.

Second language learning is a complex process. Affective factors are interrelated and may in part be a result of environments at both micro and macro levels: classroom environment and policymaking. Classrooms should be places where motivation can be boosted rather than weakened. Policymaking should promote positive attitudes of learners towards English learning so as to reduce the debilitating effect of anxiety and to instill genuine interest and motivation. As pointed out by Clément and Kuidenier

(1983), variations in orientations are determined by the combined effect of structural factors characterizing the learning situation. Consideration of specific contexts is crucial to our understanding of the constructs of language anxiety and motivation.

The conflict between the negative relationship between integrative motivation and anxiety level and the relatively lower rating of integrative motivation also informs us that effort should be made in the teaching practice to enhance genuine interest in the target language and culture in foreign language learning settings. Specifically, it brings two instructional implications to the foreground. First, foreign language curricula should be designed in a way that enhances both types of motivation; in particular, more culturally related materials need to be incorporated. Second, the implementation of language requirements needs to be reevaluated more thoroughly and carefully as to their actual effect on the learning process. Overall, in the effort of promoting a greater commitment to language learning, affective factors can be tapped in such a way that they encourage less anxious, more confident, motivated, and capable learners.

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