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Shyness and EFL Learning in Taiwan: A Study of Shy and Non-shy College Students' Use of Strategies, Foreign Language Anxiety, Motivation, and Willingness to Communicate

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by

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This dissertation is dedicated to my parents

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Shyness and EFL Learning in Taiwan: A Study of Shy and Non-shy College Students' Use of Strategies, Foreign Language Anxiety, Motivation, and Willingness to Communicate

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In the Western view, shyness has long been perceived as an undesirable personality trait that may interfere with one's interpersonal interactions and adversely affect life satisfaction. However, shyness is viewed differently in Chinese cultures. In Chinese society, individuals are encouraged to restrain personal desires in the interest and well-being of the greater good. Given the cultural endorsement of internalized self-control, shy children in Chinese culture are favored for their seeming social competence and self-discipline; they are well-liked by their peers and teachers, and considered socially fit.

Among the variables that influence L2 strategy choice and use, personality type and motivation are two critical predictors, whereas foreign language anxiety and willingness to communicate often influence learners' performance in L2 communication.

This study examined the interrelationship among shyness, L2 learning strategy use, L2 learning motivation, foreign language anxiety, and willingness to communicate.

Participants were 364 students enrolled in either Freshman English or Sophomore English courses in a private university in Taipei. They were asked to fill out self-report questionnaires about their global shyness, strategy use and motivation regarding their English studies, the degree of foreign language anxiety they experienced in their current English class, and their willingness to communicate in both Chinese and English contexts.

Results indicated that non-shy students reported using strategies more often across all strategy types than their shy counterparts, with *compensation strategies* being used the most often, and *social strategies* the least often. In addition, results from a series of hierarchical multiple regressions showed that *intrinsic motivation to know* appears to be the most important predictor among all motivation regulations for all students' use of most of the strategies. Results also indicated that shyness, foreign language anxiety, and willingness to communicate in both Chinese and English were correlated. Students who reported experiencing more foreign language anxiety in their English class showed less willingness to communicate in both Chinese and English. Moreover, shyness and foreign language anxiety had a moderate positive correlation. Implications for research and practice are discussed.

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Chapter 1

Introduction

The experience of learning a foreign language, for most learners, is not only a process that is cognitively demanding, but also emotion-laden. Most second or foreign languages are learned in classroom settings, where there is constant performance evaluation by the instructor and peers. Such a situation is exactly the kind of scenario that can be daunting for most learners, especially those who are shy, due to their fear of negative evaluation and desire for approval from others. In 1986, Horwitz and her colleagues (Horwitz, Horwitz, & Cope, 1986) postulated the concept of *foreign language anxiety*, which taps into three pertinent constructs: communication apprehension, fear of negative evaluation, and test anxiety. The first two aspects seem particularly related to the construct of shyness.

In an English-as-a-foreign-language (EFL) class, especially a class that emphasizes the components of speaking and listening, shy students seem to be at a great disadvantage in that their tendency is not to draw attention to themselves, either by outperforming or underperforming their peers via volunteering answers in class, or simply by avoiding opportunities to hone their oral communication knowledge and skills with their peers. In fact, some research has argued that extroverts excel in formal situations or interpersonal encounters when compared to their introverted counterparts (Dewaele & Furnham, 2000). Nonetheless, there are examples of shy EFL learners past the age of 15 becoming proficient regardless of their timidity in language classes (Anthony, 1963; Entwistle, 1972; Morris, 1979). One possibility is that such individuals

draw upon particularly effective second language learning strategies. Ehrman and Oxford (1990) reported that, depending on personality type, students showed preferences in their use of strategies while learning a second language. They found that individuals high in extroversion reported using many more indirect strategies, especially social and to some extent metacognitive strategies, whereas introverts reported using metacognitive strategies extensively. In this study, I investigated how shy learners, who likely are low in extroversion, manage their language learning tasks, drawing on the literatures on foreign language anxiety, strategy use, motivation, and willingness to communicate.

The nature of shyness has been widely researched and discussed in the literature (e.g., Buss, 1980; Cheek & Buss, 1981; Crozier, 1979; Jones & Russell, 1982; Leary & Schlenker, 1981; Pilkonis, 1977a; Zimbardo, 1977). Shyness has often been associated with other types of social anxiety such as communication apprehension and stage fright. Much of what makes up the experience of feeling shy may be a universal experience that most of us share; however, the frequency and the magnitude of feelings of shyness may vary vastly. Individuals who are painfully shy may pass up opportunities to meet others who are like-minded and form intimate relationships with peers or the opposite sex (Caspi, Elder, & Bem, 1988), to let themselves be heard by their teachers or professors at school (Friedman, 1980), or even to show their employers their efforts and concerns while at work. In other words, for them shyness permeates all aspects of life. Findings from the Berlin Relationship Study indicated that shy college students had more problems initiating new relationships, including romantic attachments. Compared to their non-shy counterparts, shy individuals relied on their pre-college friendships more; it took shy

students up to one year to attain a social network of the size reached by non-shy students in three months. Consequently, shy students were more likely to suffer from chronic loneliness (Asendorph, 2000).

Other than personality type, moreover, second language (L2) learning strategies have been shown to be correlated with a number of variables, such as learner beliefs (Wenden, 1986; Yang, 1999), motivation (Gardner, Tremblay, & Masgoret, 1997; Oxford & Nyikos, 1989;), language proficiency (Bedell & Oxford, 1996; Cohen, 1998; O'Malley & Chamot, 1990), and language tasks (Chamot, 1987; O'Malley, Chamot, Stewner-Manzanares, Kupper, & Russo, 1985; Robbins, 1996), to name a few. Among the variables mentioned above, motivation was one of the strongest predictors (e.g., Ehrman & Oxford, 1989; Oxford, & Nyikos, 1989) of L2 learners' choice of strategy use. In addition, gender differences on strategy use were reported in several studies: compared to men, women were found to be more frequent users of strategies (Ehrman & Oxford, 1988; Green & Oxford, 1995; Noguchi, 1991; Oxford, 1993b; Oxford, Nyikos, & Ehrman, 1988; Yang, 1992). Moreover, women reported more frequent use of metacognitive, affective, and social strategies than men (Ehrman & Oxford, 1995).

The work on motivation in language learning began with the *Socio-Educational Model* that Gardner (1985) proposed. He introduced the notions of *instrumental* and *integrative* motivation to illustrate the utilitarian and holistic motives a L2 learner can hold. In recent years, researchers in both the field of psychology and second language learning have begun to utilize cognitive motivation theories such as *Self-Determination Theory* (Deci & Ryan, 1985, 2002) to explicate the motivation of L2 learners.

It is not difficult to imagine that in order to learn a foreign language well, the experience may be somewhat rewarding for the learner to sustain the motivation to forge on, given that the process is often lengthy and complicated. Language learning requires intensive working memory involvement, and the effectiveness of the management of attentional resources is crucial for maintaining and enhancing one's progress. However, for a learner who is highly anxious whenever attempting language tasks (especially speaking and listening), the anxiety can distract the learner and prevent him or her from retrieving the information needed to perform a task (Liao, 1999). That is to say, when a L2 learner focuses largely on his or her physiological or emotional cues, little cognitive capacity is left over to engage the use of learning strategies to help maximize learning and even make the process less overwhelming. When this situation is paired up with extreme shyness, it can lead to breakdowns in automatic processing and therefore can seriously impede L2 fluency (Dewaele, 2002).

Purposes of the Study

One purpose of the study was to explore how shy Taiwanese students manage and cope with the EFL classroom. In a society that has strong Confucian influence as Taiwan does, at a very young age, students are taught to respect their teachers by listening attentively and sitting acquiescently in class; participation in class is not particularly stressed. In such a setting, shy students can easily thrive and prosper without much interaction with their instructor or peers, as long as they exert effort on their individual studies and strive for academic excellence. It is not uncommon for shy students to receive

leadership and honor positions (Chen et al., 1998): their reserved nature can be seen as an embodiment of self-reflection and maturity, and is perceived as an asset by instructors and peers. However, in a foreign language class, where students are required to speak or respond in the target language, at least some of the time, submissive participation in class may not be desirable and can hold back a learner's progress in perfecting the language skills and knowledge he or she is acquiring. Therefore, to be equally successful in a foreign language class, as opposed to a class that is taught in the learner's native language, a shy individual may need to adapt to the communicative nature and demands of the course by possibly altering his or her learning strategies.

A second purpose of the proposed study was to investigate the differences and possible overlaps among shyness, foreign language anxiety, and willingness to communicate. The first two constructs seem to have overlapping properties, namely, communication apprehension and fear of negative evaluation. There have not been studies examining the connection between the two. Along the same line, students who report shyness and foreign language anxiety may be unwilling to communicate in their English classroom for the same set of reasons. Therefore, I was interested in the relationship among the three constructs.

In addition, I was interested in finding out students' motivation to learn English in a required English course and whether their motivation regulation would influence their strategy use and interact with the affective variables mentioned above, namely, shyness, foreign language anxiety, and willingness to communicate.

In view of the aforementioned purposes, the study was an attempt to find answers

to the following questions:

1. Are shyness and foreign language anxiety related? In other words, does degree of shyness accompany level of anxiety in foreign language class?
2. What is the difference between shy and non-shy students on their strategy use? Does gender make a difference in strategy use for shy and non-shy students?
3. Do shy and non-shy students report having different types of motivation in EFL learning? Does gender make a difference on motivation for shy and non-shy students?
4. When predicting strategy use from different kinds of motivation, do different motivation scores emerge as significant predictors for shy and non-shy students?
5. What is the relationship between shyness and willingness to communicate in Mandarin Chinese and English respectively?
6. What is the relationship between foreign language anxiety and willingness to communicate in both Chinese and English?

Learning English as a Foreign Language in Taiwan

EFL Learning at the School Level

For years in Taiwan, English has been part of the curriculum in junior high and senior high, and it is one of the subjects tested in the entrance examinations to senior high and college, respectively. However, the trend to begin learning English at a younger age seems to have been eagerly accepted by Taiwanese educators and parents. According to the yearbook published by the Government Information Office in 2006, as of the year

2001, English has been implemented in the curriculum at the fifth and sixth grades in elementary school, and at the third and fourth grades in the year 2005. To meet the demand of English teachers needed at the elementary school level, the Ministry of Education (MOE) has developed a certification program to ensure the quality of native Taiwanese teachers who want to be certified to teach English. The MOE has also actively recruited native English speakers overseas who would be willing to come to Taiwan and teach at the elementary and junior high levels. Some zealous parents have even sent their toddlers to Chinese-English bilingual preschools or hired private tutors, just so their children can have a head start and stay at the top in the highly competitive game of academic pursuits.

As a whole, English education in junior high and senior high is extremely test-oriented, with grammar-translation pedagogy as the mainstream, to prepare students for the entrance examinations to senior high school and college. Other than the regular English classes and tests they have at school, students at the age of junior high or senior high are likely to receive extra help by going to after-school cram schools (i.e., "bushibans" in Chinese), where the instructors drill on grammar and vocabulary building intensively and frequently give quizzes. Consequently, students use repetition and memorization as the main strategies to cope with what is being asked of them. Having coursework and practice with heavy emphasis on reading and test-oriented writing skills, many of these students, once they enter college, tend to feel the accumulative "fatigue" of learning English and are often reluctant to continue their English studies outside of school. Nonetheless, most departments require the ability to read English texts. To lighten

their course load, as a result, some students try to obtain Chinese translations of the texts required for their classes, if there are any, and read the Chinese versions instead. Although understandable, in so doing, students may not receive the benefits of reading the original English texts and are not able to see how ideas are organized and presented for the particular subject matter. Thus, when it comes to writing English essays (especially for assignments and exams) that call for outlining the important course contents and taking a stand on a particular issue, students often feel resentful and have trouble putting their thoughts into fluent English.

Taiwanese college students take at least four credit hours of English classes in the first two years. The freshman English course in most colleges focuses on reading, with some listening and speaking components. Placement tests are often administered in the beginning of the freshman year to divide the students into smaller groups for instructional purposes. In spite of this effort, with the size of the class at 30 or more students, and the class meeting two hours per week, students have limited exposure to the English language and English materials, if they depend on their instructor and the course as the only resource for their English learning. Yet, in recent years, to echo the advocacy of the government's policy of making English a second language (Ko & Yeh, 2002) and to attract more foreign students to study in Taiwan, there has been a rapid growth in the number of content-based courses that are taught in English in almost every college. Despite the good intentions of the government and school authorities, Taiwanese college students still find it challenging to sit through those classes, taking in knowledge that is new to them, and at the same time, listening to lecture in English, trying to understand

and take notes, for they have never been trained to think in English, but merely to reproduce what was being presented in their class and readings.

EFL Learning at the Societal Level

After students graduate from college, the pressure to learn English well is not yet lessened. With the increasing number of U.S.-based and Europe-based companies investing and setting up business establishments in Taiwan and its neighboring countries in East Asia, more English-speaking professionals travel to Taiwan and have frequent interactions with the locals, either on a professional or personal level. Other than serving as a means of boosting economic development and enhancing inter-cultural understanding, Taiwanese people also believe that mastery of the English language grants an individual competitiveness in the job market and career advancement. To promote lifelong learning of English and its proficiency among the Taiwanese people, in the year 2000, the Ministry of Education commissioned the Language Training and Testing Center (LTTC) in Taiwan to develop the General English Proficiency Test (GEPT) for EFL learners, in addition to the long-standing administration of the Test of English as a Foreign Language (TOEFL) and the Test of English for International Communication (TOEIC), to promote the use of and proficiency in English in the general public. In turn, English courses for students at all levels and for all purposes are readily available on demand, and English schools continue to prosper.

In line with the unremitting enthusiasm to learn English well, in the last decade, the number of Taiwanese students who study in English-speaking countries (e.g., the

United States, Canada, the United Kingdom, Australia, and New Zealand) has increased from 25,227 in the year 1997 to 31,501 as of 2006, while the number of Taiwanese students who study in non-English speaking countries, namely, France, Germany and Japan, has grown from 2,400 to 3,310 (Ministry of Education, 2006). These statistics indicate that Taiwanese do have a preference for going to English-speaking countries for education, possibly because of the familiarity with the language and the advantage of English on the global scene.

Conclusion

With at least seven years of English education (from junior high to the freshman year in college) and an abundant supply of opportunities to be exposed to the English language and its speakers these days, may it be in real life or online, it is sensible to think that Taiwanese college graduates should have an adequate command of English. However, the English training provided in the educational system often proves to be ineffective and limited in real life, especially when it comes to interpersonal encounters with native English speakers. In particular, students who have experience studying in North America lament their incompetence in English and often wish they had had more preparation, both for academic demands and everyday survival, prior to their departure from Taiwan. Therefore, I set out to investigate students' motivation, strategy use, anxiety about learning English, and willingness to communicate in English at the college level in order to shed some light on the predicaments and future direction of EFL learning and teaching in Taiwan.

Significance of the Study

The findings of this study may have both theoretical and pedagogical significance. From a theoretical viewpoint, results regarding the properties of shyness, foreign language anxiety, and willingness to communicate, along with their correlation can lead to a better understanding of the complex nature of all three constructs. Also, the potential conceptual overlap and distinctiveness of the three constructs may be revealed and corroborated through the use for the first time of the Cheek and Buss Shyness Scale (RCBS) along with the Foreign Language Classroom Anxiety Scale (FLCAS) and the Willingness to Communicate Scale (WTC) on EFL students. Furthermore, the information obtained from the RCBS on Taiwanese college students and how shyness is perceived as a culturally endorsed trait can add to the existing shyness literature an empirical account of the reliability and validity of the Chinese version of the RCBS.

In terms of pedagogical implications, results about whether shy and non-shy Taiwanese students use different strategies to tackle their English-learning tasks and their preference can help teachers to understand better students' knowledge of strategies available and possibly introduce some strategies that Taiwanese college students are not familiar with and to realize the connection between students' personality traits and their strategy use in how they go about accomplishing their English-learning tasks, and the pros and cons of having preferences in strategy use because of differences in temperament. Additionally, teachers may come to be aware of the type of motivation students have toward EFL learning and be able to identify strategies that match students' study needs, in order to make modification in their instruction.

Chapter 2

Review of Literature

This chapter will review the literature on shyness, foreign language anxiety, language learning strategies, second language learning motivation theories, and willingness to communicate. The first section will describe the nature, possible causes and related constructs of shyness, along with pointing out how shyness is viewed differently in Chinese versus Western culture. The second section will detail the conceptualization of foreign language anxiety as well as how it has been shown to affect second language learning and its potential sources. The third section will examine the literature on language learning strategies, its taxonomies, variables influencing strategy choice and use, and the latest trends in the literature on strategy training and instruction. The fourth section will compare and contrast three major theories of second language learning motivation: Gardner's *Socio-Educational Model*, Deci and Ryan's *Self-Determination Theory*, and the various process models proposed in the last 10 years. The fifth section will be used to present several models that researchers have put forth in the WTC literature. In the last section, I draw connections among the five lines of research to show how they may interact with one another and led me to the study reported here.

Nature of Shyness

The nature of shyness has been widely researched and discussed in the literature. There seems to be quite a discrepancy among the views of researchers: some think it is a form of social anxiety (Buss, 1980; Leary & Schlenker, 1981; Zimbardo, 1977), others

presume it to be a pattern of avoidant, reticent, and inhibited behavior (Phillips, 1980; Pilkonis, 1977a), still others view it as both, a manifestation of feelings of anxiety along with inhibited or avoidant behavior (Cheek & Buss, 1981; Crozier, 1979; Jones & Russell, 1982). In addition, shyness has often been associated with other types of social anxiety, to name a few, communication apprehension, dating anxiety, stage fright, embarrassment, and shame. In an effort to differentiate shyness from other types of social anxiety, Buss (1980) put forth a four-way categorization for shyness, along with audience anxiety, embarrassment and shame, in that embarrassment and shame occur when one has failed to behave appropriately, while shyness and audience anxiety are triggered by dread of interpersonal evaluation by others. Later, Schlenker and Leary (1981, 1982) proposed a taxonomy for social anxiety that dichotomized social encounters into those that are contingent and those that are noncontingent. In their view, during contingent interactions, an individual's reaction depends on others' actions or contextual cues, heightening the possibility of response uncertainty. It is in a contingent interaction that an individual can experience shyness, accompanied with other types of interpersonal anxiety. Most of us experience shyness one way or another in our daily lives. In a study that was conducted by Zimbardo, Pilkonis and Norwood (1974), 42% of the 817 high school and college students identified themselves as being dispositionally shy, and of the respondents who had ever considered themselves shy (past, present, or both), 86% did not like being shy and 63% called shyness a real "problem." The reported 40% statistic had increased by about 10% in a recent partial replication by Carducci and Clark (1997) at Indiana University Southwest where 1642 students were surveyed between 1979 and 1991. It

seems that people have become more likely rather than less to report that they feel shy, at least some of the time.

Indeed, for some painfully shy individuals, their shyness poses a constraint on their interpersonal relationships (Jones & Carpenter, 1986; Prisbell, 1991) and leads them to feel less satisfied with their social lives (Neto, 1993). In comparison with their less-shy peers, shy adults take longer to produce their first utterance in conversation with a stranger, are slower to break silence in conversation and speak for a smaller portion of the time (Bruch et al., 1989; Cheek & Buss, 1981; Pilkonis, 1977b). In the same vein, in interpersonal encounters, shy individuals disclose themselves less than their non-shy counterparts; also, the information they reveal tends to be superficial (DePaulo, Epstein, & LeMay, 1990; Leary, Knight, & Johnson, 1987; Snell, 1989). Moreover, shy individuals are less likely to show warmth and empathy with other people and view themselves as having poorer interpersonal skills (Prisbell, 1991); they tend to believe that they are less liked and accepted by other people than people who are not shy (Jones & Carpenter, 1986; Leary, Kowalski, & Campbell, 1988; Pozo, Carver, Wellens, & Scheier, 1991). One of the strongest predictors of shyness is a high desire for social approval and a fear of disapproval. Scores on measures of shyness and social anxiety correlate highly with both approval motivation and fear of negative evaluation (Jackson, Towson, & Narduzzi, 1997; Jones, Briggs, & Smith, 1986; Leary & Kowalski, 1993; Pilkonis, 1977b; Watson & Friend, 1969). Along the same line, shyness also correlates positively with the degree to which people desire social acceptance and fear rejection (Leary et al., 2000; Miller, 1995). To follow this logic, it is easy to imagine that shy individuals may not be as

adventurous. In a study that used the Cheek and Buss Shyness Scale to differentiate students' level of shyness, Addison and Schmidt (1999) found that shy undergraduate women were more risk-aversive than their non-shy counterparts during a non-social gambling task.

Consequently, for those who regard their shyness as a social deficit that needs to be attended to, books, workshops, intervention programs (cf. Carducci, 1999; Henderson, 1994), and online support groups are readily available, promising to help them overcome their shyness and allow them to embrace life without holding back.

Possible Causes of Shyness

The literature on shyness has shown that there are multiple causes of shyness, including strong genetic predispositions as well as powerful environmental factors resulting in a shy response style in adolescents and adults. The most well-known temperament research with infants conducted by Kagan and his colleagues (Kagan et al., 1991; Kagan & Snidman, 1999) indicated that 20% of the 462 16-week-old babies who were distressed and aroused by unfamiliar stimuli turned out to be quiet and vigilant during early childhood. Their longitudinal studies into the eighth year suggested that 75% of shy children and the same percentage of sociable children seemed to maintain behavioral styles from infancy. Moreover, a majority of shy adolescents up to the age of 14 were previously identified as "inhibited" when they were toddlers. It is interesting that the parents and grandparents of these inhibited infants also reported childhood shyness more often than the relatives of their non-shy counterparts. In the same fashion,

Rosenbaum and colleagues (1991) also found that parents with behaviorally inhibited children were likely to report having had childhood or adult anxiety disorders. In addition, children identified as behaviorally inhibited and as retaining the temperament throughout early childhood were found to be at higher risk for developing one or more anxiety disorders later in life (Biederman et al., 1993; Hirshfeld et al., 1992).

Other research with infants also demonstrated that shy babies had a stable pattern of greater brain activity in their right frontal lobes than in their left, while the "uninhibited" babies had the opposite pattern (Fox & Davidson, 1988; Fox, Schmidt, & Tasker, 2000; Scholmerich et al., 2000). Fox and colleagues theorized that the excessive activity in the right brain originates from the amygdala, which is closely involved in feelings of fear and anxiety. The amygdala of a shy child is hypersensitive and easily overwhelmed by novelty, so that the child may counteract with inhibited and withdrawn behaviors to avoid situations that seem intolerable. Furthermore, in a recent study in which researchers examined regional brain electrical activity (with EEG; electroencephalogram), heart rate, and subjective responses at rest and during the presentation of video clips designed to induce a range of emotions (e.g., sadness, anger, happiness, fear) among a sample of healthy four-year-olds, temperamentally shy children showed significantly greater relative right central EEG activation at rest and during the presentation of the fear-eliciting video clips than non-shy children. Among them, girls displayed greater relative right mid-frontal EEG activation during the presentation of the video clips than boys, suggesting that the frontal EEG activation/emotion models may be gender-specific (Theall-Honey & Schmidt, 2006). Other researchers have suggested that

certain physical features or symptoms may also play a part in the presentation of shyness, such as lighter eye color (Coplan, Coleman, & Rubin, 1998; Herberner, Kagan, & Cohen, 1989) and allergies (Kagan et al., 1991).

As individuals grow older and interact more with the world, by and large, their emotional reactivity becomes less pronounced as they are accustomed to meeting new people and acquire display rules for emotions that are likely to lead them to suppress signs of heightened emotion. Nonetheless, parenting, environment, and social opportunities may aggravate a person's reactive temperament, such as inconsistent or intrusive parenting (Rubin, Burgess, & Hastings, 2002), insecurity of attachment in the form of difficult relationships with parents, family conflicts or chaos, frequent criticism from loved ones, a dominating older sibling, or a stressful school environment (Henderson & Zimbardo, 1988)

Shyness and Related Constructs

In this section, I will distinguish shyness from related constructs that have been studied in the literature.

Shyness, social anxiety, and social phobia. Although shyness and social anxiety are often regarded as similar constructs, they each encompass different characteristics. According to Schlenker and Leary, social anxiety is defined as, "anxiety resulting from the prospect or presence of interpersonal evaluation in real or imagined social settings" (Schlenker & Leary, 1982). In other words, social anxiety is future-oriented and may occur even when other people are not present. It is the subjective feelings that one

experiences such as fear of failure and negative evaluation from others, in anticipation of a future social interaction. On the other hand, people who are shy not only experience social anxiety but display behavioral inhibition, such as reticence, gaze aversion, timidity, and frequent fidgeting, in response to feelings of not wishing to make an undesirable impression on others (Cheek & Buss, 1981; Leary & Schlenker, 1981; Schlenker & Leary, 1982).

If we put shyness and social anxiety on a continuum, social phobia would be on the far end (Chavira et al., 2002). Similar to shyness and social anxiety, people who suffer from social phobia are also concerned with others' scrutiny and undergo the emotional discomfort that shy individuals do, and both experience heightened autonomic arousal in social situations (e.g., increased heart rate, blushing, and sweating) (Beidel, Turner, & Dancu, 1985; Henderson, 1992; Pilkonis, 1977a). However, compared with individuals with shyness, individuals with social phobia are in a more severe and chronic form of negative emotional discomfort that requires medical treatments or counseling (Heiser, 2005). According to the DSM-IV-TR classification, one of the distinct diagnostic criteria for social phobia is that one has excessive or unreasonable fear of one or more social or performance situations in which he or she is exposed to unfamiliar people or to possible scrutiny by others, and being in that situation will inevitably trigger panic attacks for that person.

Shyness and self-consciousness. Similarly, shyness is also very closely related to the notion of public self-consciousness that Buss proposed in 1980. Buss divided self-consciousness into two categories: private self-consciousness and public self-

consciousness. Private self-consciousness refers to times when individuals attend to aspects only that they can observe, such as their state of mind, affects, and trains of thought, whereas public self-consciousness pertains to times when people focus their attention upon aspects of themselves that are easily perceived by others, for instance, their outward behavior. An individual who is publicly self-focused tends to be highly conscious of how his or her public self is being perceived and evaluated by others and, as a result, is more likely to monitor and control the images conveyed in interpersonal encounters (Leary, 1983). Unlike boys and men who have a high level of public self-consciousness, girls and women are more concerned with being shunned by other individuals, more likely to wear makeup, and put more emphasis on clothing. Several studies reported a significant correlation between scores on the public Self-Consciousness Scale and measures of dispositional shyness, including the social anxiety subscale of the Self-Consciousness Scale (Buss, 1980; Fenigstein, 1979; Fenigstein et al., 1975; Pilkonis, 1977a; Turner, 1977), the Interaction Anxiousness and Audience Anxiousness Scales (Leary, 1983), the Shyness Scale (Cheek & Buss, 1981), and the Social Reticence Scale (Jones & Russell, 1982). As a result, public self-consciousness may be a necessary pre-condition for an individual to experience social anxiety (Fenigstein, 1975).

Nevertheless, shyness is not the same construct as self-consciousness as it does not correlate with private self-consciousness and correlates with public self-consciousness but only for men (Pilkonis, 1976). In 1979, Cheek and Buss duplicated Pilkonis' study with nearly 1500 students, using the Shyness Scale they had developed and found that shyness correlated nearly zero with private consciousness and .26 with

public self-consciousness. There were only trivial gender differences, but the .26 correlation duplicated the .27 correlation between shyness and public self-consciousness obtained by Pilkonis.

Shyness and self-esteem. People with low self-esteem who lack confidence, are uncertain of how they are going to be perceived and may even expect to be ignored and rejected when they try to engage in social interactions. The causes of their lack of confidence may relate to a physical handicap, appearance, or intellectual capabilities. They are afraid that their goodwill will not be reciprocated when they express their friendliness and liking toward others. With that negative mindset, it is safer for them to hide behind their façade of timidity and reticence and not to initiate interactions in social settings. Cheek and Buss (1979) found a correlation of -.51 between shyness and self-esteem for the same 1500 subjects mentioned above. However, because correlation does not indicate the direction of the causation, it is possible that shyness may cause low self-esteem just as much as low self-esteem may cause shyness, or a third factor may be implicated in both. Because shy people tend to be uncomfortable in social contacts and appear to be awkward and unapproachable, it is likely that others may get the wrong impression and steer clear. In turn, shy individuals may belittle their own worth and think others are not interested in what they have to offer. Inevitably, shyness and low self-esteem impact on each other and are amplified.

Shyness and sociability. When describing shy individuals, most often, we think of individuals who tend to be quiet and awkward in a crowd. Yet, some shy individuals may very well prefer to initiate conversations with strangers and mingle with others. Although

it is generally true that people who feel nervous in social settings show a tendency to become reticent, inhibited, and avoidant, a person may feel quite anxious without displaying any of these behaviors. There is no definite relationship between subjective feelings of shyness and overt patterns of avoidant or inhibited behavior. In other words, individuals who are shy do not necessarily find interacting with others, especially with strangers, aversive, and do not necessarily shy away from the situation when it arises (Buss, 1980; Eysenck & Eysenck, 1969; Leary, 1982; Lewinsky, 1941; McCroskey, 1977), and those who appear to be eloquent and socially adaptive in public could be found to be reserved and maladroit when interacting with others on a one-on-one basis. Consequently, shyness and sociability are not flip sides of a coin: sociability refers to a need for affiliation, a preference for being gregarious rather than remaining alone, whereas shyness becomes potent when others are in sight. A person who is high in sociability and low in shyness is likely to be labeled an *extrovert*, who enjoys the company of others, and would be particularly unhappy if unable to make social contacts over an extended period of time (Cheek & Buss, 1981); by contrast, an *introvert* is someone who has low sociability but is not necessarily shy. Introverts are quiet and unassuming, often cautious and reflective, and they find solitary activities rewarding. For introverts, solitude can serve as an escape or retreat from excessive social contact and responsibility (Leary, Herbst, & McCrary, 2003). In his classic masterpiece, *Walden*, the renowned writer and transcendentalist, Henry David Thoreau, recounted his two years of life by the Walden Pond in Concord, Massachusetts, and expressed his joy of simple and solitary living with the following note:

> *I find it wholesome to be alone the greater part of the time. To be in company, even with the best, is soon wearisome and dissipating. I love to be alone. I never found the companion that was so companionable as solitude. We are for the most part more lonely when we go abroad among men than when we stay in our chambers. (Walden, p. 133)*

Nonetheless, in some instances, introverted lifestyles may derive from a tendency to become socially anxious in interpersonal encounters. It is not surprising that individuals who are often shy in social settings will prefer doing activities that do not involve others to avoid the discomfort. Therefore, it is likely that a reciprocal cycle occurs: if shyness is enhanced by low sociability, the greater shyness becomes, the less desire one has to be with others. This view is supported by research showing that people who enjoy solitude tend to have a lower tolerance for environmental stimulation and stress (Geen, 1997; Leary, Herbst, & McCrary, 2003). On the other hand, introverts who have a strong need for social acceptance tend to have a greater fear of negative evaluation and a greater desire to be perceived positively (Leary et al., 2000).

Recent research on shyness. In an age of technology, computer-mediated communication is being widely used in the form of email, chat rooms, online forums, blogs (originally known as weblogs, online diaries or personal chronological logs of thoughts published on a web page), just to name a few. Even though Internet phones and web conferencing are also available, the majority of computer-mediated communication (CMC) is still text based, and a significant feature of CMC is the absence of immediate, face-to-face evaluative feedback (McKenna, Green, & Gleason, 2002). Instead, CMC usually involves interactions between two or more parties based on textual messages

delivered by computer (Walther & Tidwell, 1996). Therefore, it has been speculated that this form of communication is much less threatening than conventional social interactions for some individuals, especially for the shy, in that the online environment provides a haven to overcome communication barriers, get social support, and seek advice on important personal issues. Shy individuals may find it easier to meet with like-minded individuals whom they otherwise would rarely meet under normal circumstances. Moreover, there is evidence that CMC enhances self-disclosure: shy individuals have reported they reached deeper levels of disclosure earlier in online interactions than in face-to-face interactions, and as a result, were able to form relationships online much more quickly than they normally would in face-to-face interactions (Joinson, 1998). Along the same line, in a study of shyness and CMC (Stritzke, Nguyen, & Durkin, 2004), shy participants "experienced lower levels of rejection sensitivity and a greater sense of interpersonal competence with respect to initiating relationships and ease of self-disclosure" (p.15).

Nonetheless, some researchers regard the reduction in face-to-face interaction resulting from technological advancements such as CMC as one of the reasons for an increased prevalence of shyness in real-life interactions (Henderson & Zimbardo, 1998), a decrease in social involvement, and an increase in loneliness (Kraut et al., 1998, 2002), and as an inadequate venue for relationship development (Ebeling-Witte, Frank, & Lester, 2007; Lea & Spears, 1995; Stoll, 1996).

Shyness as a strategy. Despite the debilitating facets of shyness that I have mentioned above, some authors have pointed out that there are positive aspects to being

shy. Shy people are often perceived as modest, self-controlled, discreet, and not as aggressive, bossy, egotistical, and loud. Although quiet, they may appear to be attentive and agreeable, showing interest in other people, all of which are desirable characteristics in pleasant companionship. In fact, research showed that positive features of shyness, such as modesty and tact, bore little relationship to others' evaluation of the shy individuals, but the negative traits of shyness, such as anxiety and awkwardness, were negatively correlated with the degree to which the person was liked by other people (Gough & Thorne, 1986). Interestingly, shyness can be employed as an interpersonal strategy to help the shy make the best out of a difficult social situation, a "protective self-presentational style" (Arkin, 1981). By behaving in a shy manner, individuals may reduce the risks that they will be rejected and potentially gain points by being quietly attentive (Leary & Buckley, 2000).

On a different note, shyness could serve as a self-handicapping strategy in an evaluative setting, to "discount the self-relevant implication of poor performance and augment the self-relevant implications of success" (Snyder & Smith, 1982), and protect one's self-esteem. For instance, in their experiment in which participants thought their social intelligence was being evaluated and they were helping develop local norms for the test, Snyder and his colleagues (Snyder, Smith, Augelli, & Ingram, 1985) found that male participants reported more anxiety symptoms as a strategy to control attributions made about their performances. Female participants, however, did not demonstrate this tendency toward the strategic use of shyness, which shows an interesting gender difference.

Shyness and culture. In western individualistic culture, children are encouraged to be assertive, self-reliant, and autonomous. Behavioral inhibition, which reflects anxiety, is considered an incompetence to express oneself, a lack of confidence, and is often portrayed as psychologically maladaptive (Fox et al., 2005; Rubin & Asendorpf, 1993). Mothers of shy children tend to feel concerned, disappointed, guilty, or even embarrassed (Chen et al., 1998). Over the years, these children may develop negative self-perceptions and affects such as depression, partly due to the negative social feedback they have received and their awareness of interpersonal difficulties (Rubin et al., 2006).

By contrast, studies on Asian children and shyness have consistently shown that Chinese, Indonesian, Korean, and Thai children exhibited more anxious, passive, sensitive, reticent, and socially withdrawn behaviors in novel situations than did their North American counterparts (Chan & Eysenck, 1981; Farver & Howes, 1988; Kagan, Kearsley, & Zelazo, 1978; Tieszen, 1979; Weisz, Suwanlert, Chaiyasit, & Walter, 1987), perhaps due to different parental attitudes in child-rearing and social values. For instance, in Chinese society, both in the past and at present, achieving and maintaining social order and interpersonal harmony have been the foremost concerns. Individuals are encouraged to restrain personal desires for the interest and well-being of the greater good. Generally speaking, in both Confucian and Taoist philosophies, self-restraints and behavioral inhibition are regarded as the culmination of social maturity, personal achievement, and mastery (Feng, 1962; King & Bond, 1985). The manifestation of striving for personal gains and autonomous behavior is considered conceited and can be socially condemnable (Ho, 1986). Children who are sensitive, cautious, vigilant, and behaviorally restrained are

either called *guai,* which means "good" or "well-behaved" in Chinese, or *dong-shi* (understanding), both favorite words used to praise children (Chen et al., 1998). Given the cultural endorsement on internalized self-control, shy-anxious children in Chinese culture are favored for their seeming social competence and self-discipline; they are well-liked by their peers and teachers, often given honored and leadership roles at school, and considered socially fit (Chen, Rubin, & Li, 1995; Chen, Rubin, & Sun, 1992; Chen, Wang, & DeSouza, 2006). In turn, shy Chinese children perceive themselves positively and hardly suffer from negative emotional consequences (Chen et al., 1995; Chen et al., 2004).

As for the ratio of shyness prevalent in the Asian versus Western population, in Zimbardo's (1977) early review of shyness surveys, he concluded that higher self-reported shyness was found in Asian samples (about 60%) than in Western samples (about 40%). Similar ethnic discrepancies were also reported in research of shyness and related constructs such as social anxiety, introversion, communication apprehension, and unassertiveness (e.g. Draguns, 1986; Lee, McCauley, & Draguns, 1991; Yang, 1986; Zane, Sue, Hu, & Kwon, 1991). In a more recent study on 376 East-Asian and 401 European-heritage undergraduate students in a Canadian university, Paulhus, Duncan, and Yik (2002) found that 68% of the East Asian students reported being shy, whereas only 44% of the European-heritage students reported so ($\chi^2 = 27.5$, $p < .01$). Students' degree of western acculturation was also taken into account, and the students were divided into three groups accordingly: *high* (born and raised in a Western country), *moderate* (born elsewhere but spent at least eight years in a Western country) and *low* (had been in the West less than eight years). For Asian-heritage students, their self-

reported shyness declined with acculturation, but the trend was not found among European-heritage students. Moreover, despite their level of confidence in English, 91% of the Asian-heritage students reported shyness in the classroom, when only 51% of their European-heritage peers did so. Paulhus and associates attributed this phenomenon to Asian students' fear of being wrong, because failures pose a greater threat to self-esteem for them than for North Americans (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). By contrast, European-heritage students might regard classroom participation as an opportunity for potential rewards.

Consequently, this poses an interesting juxtaposition of how shyness is perceived by adults and peers in Western versus Asian culture, based on their respective cultural idiosyncrasies and socialization goals: in one culture, it is a trait that one would likely discourage or eliminate, in another it may be encouraged and socially valued.

Foreign Language Anxiety

Language teachers have been long aware of the discomfort and worry their students experience in class. Foreign language anxiety can be defined as "the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning" (MacIntyre & Gardner, 1994, p. 283). The findings from early research on the correlation between anxiety and foreign language learning were far from conclusive (see Scovel, 1978 for a review). Although numerous studies showed that anxious language learners were less successful at language learning, still quite a few studies found no relationship between anxiety and language learning, and periodically, anxiety was found to help improve performance in language learning. Many researchers have ascribed these equivocal findings to the discrepancy of measurements used to assess second language anxiety and imprecise definitions of second language anxiety that do not take the uniqueness of second language learning into consideration (e.g., Horwitz, 1986; Horwitz, Horwitz, & Cope, 1986; MacIntyre & Gardner, 1989). Fortunately, in recent years, advances in measurement and theory have brought about a clearer picture of the nature of second language anxiety, with examples such as the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz, Horwitz, and Cope (1986) and the Anxometer (MacIntyre & Gardner, 1991). In this section, I provide an overview of the second language anxiety literature, progressing from a brief history of research on the effects of anxiety, to a discussion of the nature of second language anxiety, and finally to a discussion of potential sources of second language anxiety.

Effects of Anxiety on Second Language Learning

In general, there are two approaches to the description of second language (L2) learning anxiety. One approach regards L2 anxiety as a materialization of a more general type of anxiety, such as state or trait anxiety, test anxiety, and facilitating or debilitating anxiety. Early studies on the effects of anxiety on L2 learning mostly adopted this approach. Measures of these more general types of anxiety were used to examine the relationship of anxiety to L2 achievement or performance. The other approach treats L2 anxiety as a particular category of anxiety experienced primarily in L2 classrooms (Horwitz & Young, 1991). The latter approach has been widely applied since the development of several L2-specific anxiety scales (e.g. Horwitz et al., 1986; MacIntyre & Gardner, 1988).

State and Trait Anxiety

The distinction between state and trait anxiety put forth by Spielberger (1966) has been the most widely used theoretical framework of anxiety. As a result, most early L2 anxiety research concentrated on examining the relationship of state or trait anxiety to L2 achievement. However, conflicting findings from these studies implied that state or trait anxiety had only limited impact on L2 learning.

Efforts were made to relate trait anxiety to L2 achievement, yet the studies did not find significant associations between the two. A study conducted by Pimsleur, Sundland, and MacIntyre (1964) on junior high and senior high foreign language classes found that in the dimension of trait anxiety, under-achievers did not differ from their classmates,

using Children's Manifest Anxiety Scale (Castaneda, McCandless, & Palermo, 1956). A series of subsequent studies applied a different trait anxiety scale, the Sixteen Personality Factor Questionnaire (16PF, Cattell & Eber, 1962). For example, Brewster (1971) administered the 16PF to students of various intensive foreign language classes at the Defense Language Institute in Monterey, California. Among the sixteen personality factors, three were concerned with the construct of trait anxiety. Nevertheless, no significant relationship was found between these trait anxiety factors and L2 achievement. Also using the 16PF, Bartz (1974) did not find a significant correlation between the trait anxiety factors and high school students' written or oral communicative performance in German, though anxious students tended to score higher on the written section of the communicative competence measure that the researcher devised. Later, Keitges (1986) also discovered that trait anxiety, when measured by the 16PF, bore no relationship with Japanese students' English proficiency. However, the validity of the 16PF was questioned (Young, 1985). Phillips (1990) then used Spielberger's Trait-Anxiety Inventory and reported trait anxiety did not correlate to either course grades or oral exam grades among college students who took French classes.

Other assessments of trait anxiety have also been utilized and produced somewhat different results. Dunkel (1947) used a Rorschach test to assess personality traits, related these to college students' performance in Latin, and found that the Rorschach patterns of the underachieving group were marked by "emotionality, inner conflict, and anxiety" (p. 180). Nonetheless, the adequacy of using Rorschach patterns as a representation of trait anxiety has also been raised (Oh, 1990). In addition, Chastain (1975) examined the

correlation of trait anxiety with final course grades for college students in beginner-level French, Spanish, and German classes by administering the Taylor Manifest Anxiety Scale (Taylor, 1953). No correlation was found between trait anxiety and final course grades in the audio-lingual French class, regular French class, and regular German class. On the other hand, a small but significant positive correlation was detected between trait anxiety and final course grades in the regular Spanish class. Later, in Swain and Burnaby's (1976) study on English-speaking children in French immersion programs, trait anxiety was assessed by using a personality instrument developed by the Bilingual Education Project of the Ontario Institute for Studies in Education. A negative correlation between trait anxiety and a French reading test was reported. At the same time, however, no significant correlation was found between trait anxiety and other proficiency measures.

Findings about the relationship between state anxiety and L2 achievement have not yet painted a clearer picture. For example, Westcott's (1973) study did not find a significant correlation between state anxiety and language performance with the application of the Motivation, Attitude, Peer Influence, and Anxiety Test. Along the same line, Phillips (1990), using Spielberger's State-Anxiety Inventory, also did not obtain significance in the relationship between state anxiety and oral exam performance or course grades. By contrast, also using Spielberger's State-Anxiety Inventory, Young (1985) reported a significant negative correlation between performance in an oral interview and state anxiety. However, when language proficiency (i.e., self-rating of speaking ability) was statistically controlled, the correlation was no longer significant.

Test Anxiety

Test anxiety, a type of anxiety related to evaluation or test taking (Sieber, 1980), is one of the most researched topics in the field of psychology since Sarason and Mandler first developed their Test Anxiety Questionnaire in 1952. Individuals who suffer from test anxiety are characterized by worry and emotional arousal (Sarason & Sarason, 1990). Most researchers regard test anxiety as a handicap and a source of interference with task performance (Sarason, 1958; Sarason & Sarason, 1990). Several qualitative studies have provided evidence to support this notion. Research by Leichm (1977) and Bailey (1983) found that tests were one of the sources of anxiety in the L2 classroom. Similar negative effects of test anxiety were also reported in Phillips' (1990, 1992) studies. For instance, Phillips described how a high-achieving student's performance was adversely influenced during an oral exam when she dwelled on her setbacks and angst.

However, there are findings from studies that showed otherwise. In a study of college students in beginning L2 classes, Chastain (1975) found a negative correlation between test anxiety and course grades for the audio-lingual French class, significantly positive for the Spanish class, slightly significant for the German class, and not significant for the conventional French class. Similarly complex findings were reported in Young's (1985) study as well: with language ability (i.e., self-rating of speaking ability) controlled, no significant correlation was found between test anxiety and performance on an oral proficiency interview, despite the fact that test anxiety was initially negatively correlated with the oral proficiency ratings.

Second-Language-Learning-Specific Anxiety

The lack of consensus in the early second language learning research on how anxiety influenced learners' performance was attributed to the lack of adequate measures for second language anxiety. Since the 1980s, some scales have been developed specifically for measuring second language anxiety (e.g., Horwitz et al., 1986; MacIntyre & Gardner, 1989; 1991b). With these scales, second language anxiety was conceptualized as a special case of anxiety that learners experienced in a second language setting.

Studies about L2-specific anxiety can be generally categorized into two groups based on the focus of the research. One group of studies was conducted by researchers who cared more about general issues of attitude and motivation. Even though an L2-specific anxiety scale was included in these studies, it was often of secondary concern (e.g., Gardner et al., 1976; Gardner et al., 1977; Tucker, Hamayan, & Genesee, 1976). Despite the fact that Gardner and his colleagues (1976, 1977) focused on learners' attitude and motivation toward learning a second language, as measured by an earlier version of the Attitude/Motivation Test Battery (AMTB, Gardner et al., 1979), in both studies, they found a lower French class anxiety level associated with higher achievement in French. What is also intriguing about the findings is that anxiety increased with grade level in the 1976 study, but decreased with language proficiency level in the 1977 study. In line with the result of Gardner et al's study (1977), Tucker et al. (1976) found that participants who scored high on the standardized proficiency test reported a significantly lower level of French class anxiety.

In contrast to the preceding group of studies that emphasized models of attitudes

and motivation, other studies on L2 anxiety were mainly focused on anxiety and predominantly inspired by the development of the Foreign Language Classroom Anxiety Scale (FLCAS, Horwitz et al., 1986). According to Horwitz and her colleagues, there are three major underlying constructs making up the construct of foreign language anxiety: communication apprehension, test anxiety, and fear of negative evaluation. Communication apprehension, a subtype of social anxiety, occurs when an individual engages in interpersonal communication, may it be speaking or listening. The particular communication apprehension that takes place in foreign language learning comes from the personal knowledge that an individual will most likely have difficulty understanding others and making himself or herself understood. Possibly because of this reason, many otherwise talkative people in their native language are quiet in the foreign language class. However, learners who are usually self-conscious and inhibited in their first language may find communicating in a foreign language liberating, because they feel as if they take on a different persona while speaking a foreign language and therefore are less anxious (Horwitz et al., 1986). Also, in foreign language classrooms, there is nearly always ongoing evaluation and testing. As a result, it is not uncommon for learners who experience foreign language anxiety to suffer fear of failure and dread of constant scrutiny of others, because of the many evaluative opportunities that the foreign language classroom offers.

The FLCAS is the first measure that taps into learners' anxiety toward language learning. It has been used widely and translated into different languages. Regardless of the target language, negative correlations between the FLCAS and second language

performance have been consistently reported in quite a few studies (e.g., Aida, 1994; Cheng, 1994; Cheng, 1998; Ganschow et al., 1994; Horwitz, 1986; Phillips, 1990, 1992; Wu, 1994; Ying, 1993; Young, 1985). Most importantly, with test anxiety controlled in Horwitz's study (1986) and language ability (i.e., written exam averages) controlled in Phillips' studies (1990, 1992), second language class anxiety was still correlated significantly with second language achievement.

As far as whether students only experience anxiety in a foreign language they regard as difficult, Aida (1994) reported a significant negative correlation between FLCAS scores and final grades among American second-year Japanese students. In the same vein, Saito and Samimy (1996) reported similar findings with Japanese learners at three levels (i.e., beginning, intermediate and advanced). In addition, in Coulombe's (2000) study of Canadian university students learning French, a smaller but significant negative correlation was found between FLCAS scores and final grades in French classes ranging from beginning to advanced. Therefore, the observed negative relationship between foreign language anxiety and achievement seems to hold at different levels of proficiency as well as with various target languages.

Other than using final grades as an outcome measure, several other studies investigated the relationship between language anxiety and alternative outcome measures. Trylong (1987) reported a negative relationship between anxiety and teacher ratings of achievement, whereas MacIntyre, Noels, and Clement (1997) observed a negative relationship between anxiety and students' self-ratings of their language proficiency. In addition, Gardner and MacIntyre (1993), using measures of both classroom anxiety (e.g.,

French Class Anxiety Scale and the FLCAS) and language use anxiety, found significant negative correlations with several language production measures, such as a cloze test, a composition task, and a French proficiency measure. It is worth noting that somewhat higher negative correlations were found between anxiety scores and students' self-ratings of French competence than with their actual performance on French tests.

Cultural Differences and Foreign Language Anxiety

Language anxiety studies have shown that levels of anxiety may vary in different cultural groups. Although Horwitz (1986) and Aida (1994) found similar levels of anxiety experienced by American foreign language learners, Truitt (1995) found relatively higher levels of anxiety among Korean EFL learners. Furthermore, Kunt (1997) found somewhat lower levels in learners of English with Turkish heritage, and in two studies of pre-service Venezuelan English teachers, Rodriguez reported relatively lower levels of foreign language anxiety (Rodriguez, 1995; Rodriguez & Abreu, 2003).

Alternative Sources of Foreign Language Anxiety

Even though the relationship between foreign language anxiety and its influence on language achievement is intuitive and has been widely accepted by many practitioners and researchers, there has been a strand of research advocating that foreign language anxiety may be independent of language performance. In the effort to validate their position, Ganschow, Sparks, and their colleagues (e.g., Ganschow et al., 1994; Sparks & Ganschow, 1991; Sparks & Ganschow, 1996) proposed the Linguistic Coding Difference

Hypotheses (LCDH). They proposed that foreign language learning is based largely on one's language aptitude, and students' anxiety about foreign language learning is likely to be a consequence of, rather than a contributor, to their foreign language learning difficulties. Language learning difficulties, they claimed, are likely to be derived from the learners' capability to process language codes (e.g., phonological, syntactic, semantic, etc.) in their native language. In other words, foreign language anxiety is the end result of insufficient language learning ability. In their study, Ganschow and Sparks (1991) did find that less anxious language learners performed distinctively better on oral and written foreign language measures and on the Modern Language Aptitude Test (MLAT).

Nonetheless, MacIntyre (1995a, 1995b) and Horwitz (2000) have responded to the LCDH disputing the irrelevance between foreign language anxiety and general language learning deficits. They insisted that anxiety is one of the sources for cognitive interference in all kinds of learning, and foreign language learning should not be excluded. Furthermore, the number of learners who experience foreign language anxiety appear to be far greater than the number of people who suffer decoding disabilities in the population, and even successful language learners experience language anxiety. Most importantly, they contended that language learning is more than sound-symbol correspondence and made a case that the LCDH is an oversimplified theory of language learning.

Language Learning Strategies

Learning strategies have received much attention both in the field of educational psychology and second language learning. However, initially, the two bodies of research developed independently of each other with little cross-referencing of concepts and approaches. For one, the methodologies were different: the ones in second language learning were descriptive, while the ones in psychology were experimental and oriented toward offering strategy training to learners. Yet, there was a common ground shared between the two fields: an interest in the mental processes of experts compared with those of novices (O'Malley & Chamot, 1990). In the following sections, I will start with how learning strategies are viewed in the two fields of educational psychology and second language learning, and proceed with early studies in language learning strategies. I then report on the taxonomies of language learning strategies before moving to current trends in strategy studies.

Learning Strategies at Large

Research on learning strategies is based on the assertion that strategies begin as declarative knowledge that can become proceduralized with practice and, like complex cognitive skills, proceed through the cognitive, associative, and autonomous stages of learning (O'Malley & Chamot, 1990). According to Weinstein, Husman, and Dierking (2000), "learning strategies include any thoughts, behaviors, beliefs, or emotions that facilitate the acquisition, understanding or later transfer of new knowledge and skills" (p. 727). These authors offered three critical features of learning strategies: they are goal-

directed, intentionally invoked, and effortful cognitive actions. To distinguish further the features of learning strategies from those of motivation, Cohen (1998) added another aspect to the concept of learning strategy, the element of choice. He proposed that strategies are voluntarily employed by learners. Nonetheless, choice alone may not be enough to make the distinction between strategies and non-strategies that students use, because students make several choices, which may not be completely academically related, during their learning process, as for example, choosing their best friend as a study buddy, not because he or she is good at the subject, but because the learner feels more comfortable studying with that person. This is where Riding and Rayner's (1998) notion can be helpful: they argued that an activity becomes strategic when it is particularly appropriate for the individual learner, in contrast to general learning activities that a student may not find as helpful. This comment happens to echo what Ehrman and her collegues have stated, "A given learning strategy is neither good nor bad; it is essentially neutral until it is considered in context" (Ehrman, Leaver, & Oxford, 2003, p. 315). In this view, a strategy is useful when it relates well to the L2 task at hand and fits the particular student's learning preferences at least to some degree. Moreover, the student needs to employ the strategy effectively in orchestration with other relevant strategies.

Early Research on Strategies: The "Good Language Learner" Paradigm

The emergence of L2 learning strategy research began with the idea of what could be learned from "good language learners," in other words, what makes some individuals more successful than others when it comes to mastering a second language (e.g., Naiman

et al., 1978; Rubin, 1975; Stern, 1975; Wong-Fillmore, 1979). An interesting aspect of this approach is that it was contradictory to the mainstream linguistic notion at the time, believed by most, that successful language learners simply had a good aptitude for language learning, or were more motivated, or had extensive exposure to the second language in its natural setting (O'Malley & Chamot, 1990). This trend dominated the late 1970s and continued to influence research in the 1980s. In Rubin's (1975) pioneering study, she outlined several features of a "good language learner": willingness to guess, make mistakes, and communicate; tolerance for ambiguity; attendance to form (i.e., patterns in the language); willingness to practice; monitoring one's own and the speech of others and knowing when to read between the lines, among other strategies. Even though Rubin found fruitful results from the diary entries by sophisticated L2 learners, she also reported that observation in language classrooms did not yield useful information about strategies or communication patterns as language instructors did most of the talking. Applying Stern's (1975) initial strategy scheme, Naiman, Frohlich, Stern, and Todesco (1978) conducted retrospective interviews with 34 proficient French learners, as well as asking teachers to rate their students' performance. They found that easily observable strategies, such as self-correction, student-initiated repetition, student questioning, or student-initiated responding rarely occurred and that these strategies did not differentiate successful from unsuccessful learners. During the interviews, however, students reported using strategies primarily on vocabulary tasks but rarely on other tasks, except for the use of repetition in grammar drills and occasional creation of self-generated opportunities for oral or aural exposure.

Since the publication of Naiman et al's (1978) study, interest in sociological and anthropological aspects of second language learning has been increasing, especially in terms of socio-cultural, post-structural, and critical theories (Auerbach, 1997; Hall, 1993, 1995; Kramsch, 1993; Lantolf & Pavlenko, 1995; Pennycook, 1990; Rampton, 1995). Researchers have been concerned not only with studying individuals responding to L2 input and producing L2 output, but also with studying how L2 learners were situated in specific social, historical, and cultural contexts, and how learners resisted or accepted the positions that were imposed on them in those contexts. In a recent study, using Naiman et al.'s study as a framework, from a socio-cultural point of view, Norton and Toohey (2001) studied two female Polish immigrants whom they regarded as "good language learners," and explored how being able to gain access to the social networks of their communities enhanced their conception of themselves as second language learners. They found the girls had access to a variety of conversations in their communities, either through the workplace or school. Both were perceived as intelligent by others in their immediate environment and had community or extra-community allies to position themselves more favorably within their peer networks. In turn, they were able to claim more powerful identities as good language learners.

Undoubtedly, conceptions of good language learners have evolved with application of the new lenses from various theories and research approaches. Along the same line, the categorizations of language learning strategies have also varied depending on different researchers' approach.

Taxonomies of Language Learning Strategies

According to O'Malley and Chamot (1990), language learning strategies have been grouped into three major categories: *metacognitive*, *cognitive,* and *social/affective*, depending on the level or type of processing involved. Metacognitive strategies are high order executive skills that may entail planning for, monitoring, or evaluating the success of a learning activity (Brown et al., 1983) and are applicable not exclusively only to language learning tasks (Nisbet & Shucksmith, 1986). Cognitive strategies are used to deal with incoming information, manipulating ways that enhance learning; they can be subsumed under three broad groupings: rehearsal, organization, and elaboration processes (Weinstein & Meyer, 1986). However, they can be limited in application to a specific type of learning task. As for the social/affective strategies, they involve either interaction with another person or control over one's affect. Generally, they are considered applicable to a wide variety of learning tasks. The following is a table listing the classification of the strategies, definition, and examples of each category (Table 1).

Table 1

Classification of Strategies, Respective Examples, and Definition (O'Malley & Chamot, 1990)

Generic Strategy Classification	Representative Strategies	Definition
Metacognitive strategies	▪ Selective attention	▪ Focusing on special aspects of learning tasks, as in planning to listen for key words or phrases
	▪ Planning/Monitoring	▪ Planning for the organization of either written or spoken discourse/Reviewing attention to a task, comprehension of information that should be remembered, or

		production while it is occurring
	▪ Evaluation	▪ Checking comprehension after completion of a receptive language activity, or evaluating language production after it has taken place
Cognitive strategies	▪ Rehearsal/Organization	▪ Repeating the names of the items or objects to be remembered/Grouping and classifying words, terminology, or concepts according to their semantic or syntactic attributes
	▪ Inferencing	▪ Using information in text to guess meanings of new linguistic items, predict outcomes, or complete missing parts
	▪ Summarizing	▪ Intermittently synthesizing what one has heard to ensure the information has been retained
	▪ Deducing/Imagery	▪ Applying rules to the understanding of language/Using visual images (either generated or actual) to understand and remember new verbal information
	▪ Transfer/Elaboration	▪ Using known linguistic information to facilitate a new learning task/Linking ideas contained in new information, or integrating new ideas with known information
Social/Affective strategies	▪ Cooperation	▪ Working with peers to solve a problem, pool information, check notes, or get feedback on a learning activity
	▪ Questioning for clarification	▪ Eliciting from a teacher or peer additional explanation, rephrasing, or examples
	▪ Self-talk	▪ Using mental redirection of thinking to assure oneself that a learning activity will be successful or to reduce anxiety about a task

Another well-known taxonomy of language learning strategies was put forth by Oxford (1990), encompassing six categories: *memory strategies* (which relate to how learners memorize and retrieve language), *cognitive strategies* (which relate to how students think about their learning), *metacognitive strategies* (which relate to how student manage their learning), *compensation strategies* (which enable students to make up for limited knowledge or vocabulary), *affective strategies* (which refer to students' feelings and emotions regarding language learning), and *social strategies* (which involve learning by interaction with others).

These six categories were used by Oxford as the underlying components for the Strategy Inventory for Language Learning (SILL), and were further identified as *direct strategies* (those that directly involve the target language, such as practicing and reviewing) and *indirect strategies* (those that provide indirect support for language learning, such as directing attention, planning, and cooperating). Although Oxford's taxonomy is "perhaps the most comprehensive classification of learning strategies to date" (Ellis, 1994, p. 539), it still represents only one perspective because there are other categorizations available (e.g. Bialystok, 1978; Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Cohen, 1998; Naiman et al., 1978; Rubin, 1981; Wenden, 1991). In a recent study, Hsiao and Oxford (2002) compared three taxonomies used in L2 learning (O'Malley & Chamot, 1990; Oxford, 1990; Rubin, 1981) using confirmatory factor analysis and found that the taxonomy proposed by Oxford (1990) was superior in accounting for the variety of strategies reported by language learners.

Recent Studies of Language Learning Strategies

As research on learning strategies gained the interest of researchers in the field of educational psychology in the 1980s, the number of research studies regarding language learning strategies was also on the rise (for reviews, see Chamot, 2001; Cohen, 1998; Oxford, 1993, 1996). Recent studies of second language learning strategies can be classified into three types: (1) studies that identify specific learning strategies used by learners; (2) studies that examine the variables that influence strategy choice and use; and (3) studies that focus on strategy training and instruction. Although many studies attend to more than one of these agendas, for the convenience of discussion, the subsequent review of the studies is organized by these three types.

Studies identifying specific language learning strategies. Other than the earlier "good language learner" studies (e.g., Rubin, 1975; Stern, 1975; Naiman et al., 1975; Wong Fillmore, 1982), other studies that have attempted to investigate the relationship between language learning strategies and success in language development by L2 speakers have yielded mixed results. O'Malley et al. (1985a, 1985b) found that even though students at all levels reported extensive use of a variety of strategies, higher level students reported a greater use of metacognitive strategies. However, this result was contradicted by the findings of a study by Ehrman and Oxford (1995) who examined the correlation between end-of-course proficiency and a number of variables, including language learning strategies. They found that cognitive strategies such as reading for pleasure in the target language and looking for patterns were the only kinds of strategies that correlated significantly with success in learning a foreign language.

According to a study conducted by Green and Oxford (1995) with university students in Puerto Rico, a greater variety of language learning strategies were used more frequently by more proficient students. They also discovered a baseline group of 23 strategies used equally by students across all levels. Green and Oxford suspected that these basic strategies might not be at all unproductive, but they may not essentially contribute to helping the less proficient students to advance to higher levels of proficiency.

Griffiths (2003) also found a positive correlation between course level and reported frequency of language learning strategy use. In her study involving 348 students in a private language school in New Zealand, advanced students reported more frequent use of strategies than elementary-level students. Analyzing the patterns of language strategy use emerging from the data, the strategies that higher-level students reported using repeatedly were the ones related to interaction with others, to reading, to vocabulary, to the tolerance for ambiguity, to language systems, to the management of emotions, and to the management of learning and the utilization of available resources.

Despite the fact that most of the attention in the L2 learning field has been focused on successful language learners, there is much to be learned from unsuccessful learners, for they also provide examples of mistakes not to be made or that should be avoided. Based on her own not-so-successful experience of learning Chinese, Sinclair Bell (1995) reported negative effects of her attempts to transfer L1 strategies to L2 learning. The negative transfer of L1 strategies was also reported by O'Malley (1987).

In the same vein, Porte (1988) interviewed 15 under-achieving learners in private language schools in London and concluded that these under-achieving students used

similar strategies to those used by successful language learners. What made a difference was that the less-proficient learners lacked the sophistication and ability to choose promptly the right strategies for a particular learning task.

In a study investigating differences between successful and unsuccessful EFL students in Chinese universities, using grounded theory, Gan, Humphreys and Hamp-Lyons (2004) found that proficient and less proficient EFL learners differed in six areas: how they conceptualized learning English, their perceptions of the college English course, what strategies they used to learn and practice the language, self-management, how motivated they were, and their view of English proficiency tests. Of these six themes, the students' use of learning and practicing strategies are particularly relevant to my study. Gan et al. found that in contrast to their more competent peers, less proficient learners seemed to be trapped in a vicious cycle of rote memorization and were not able to self-test the knowledge they had learned. On the same note, Rao (1996) examined the difficulties Chinese EFL students had in developing communicative competence and found that many of the students' limitations stemmed from a traditional teacher-centered classroom and the use of rote-memory strategies.

Although the research into language learning strategies used by successful and unsuccessful language learners did provide insights about how learners operate in language learning settings, the conclusions that can be drawn from the studies is still far from clear.

Studies examining variables influencing strategy choice and use. There have been several different variables that have received attention in terms of how they were related

to strategies. Studies that have examined the relationship between gender and strategy use have had mixed conclusions. In most studies conducted by Oxford and her associates (e.g. Ehrman & Oxford, 1989; Oxford & Nyikos, 1989; Oxford, 1993), gender differences on strategy use were found: compared to men, women were more likely to use metacognitive, affective, and social strategies. Similar results were also reported in Sy's (1994) study on EFL students in China. Politzer (1983) also found that female ESL learners used more social strategies than did men. In addition, women have also been found to have better listening skills than men (Larsen-Freeman & Long, 1991). Wang (2002) investigated 301 Taiwanese senior high school EFL learners on their listening strategy use. In the study, female students reported more frequent strategy use than male students. Compared with the male students, female students planned their listening tasks, employed both top-down and bottom-up processing, took notes, and asked others for help much more frequently. Moreover, among university students who took foreign language classes, women used more formal, rule-based practice strategies and more strategies to elicit input in conversation (Oxford & Nyikos, 1989). Among the explanations provided to account for gender differences, the neurolinguistic and socialization theories appear to be most popular (see Chambers, 1995; Kimura, 1987; Tannen, 1991, for example). However, Ehrman and Oxford (1990) studied students' strategy use at the Defense Language Institute, Monterey, California, and found no gender differences on strategy use.

The effects of personality type were the focal point of a study by Ehrman and Oxford (1989) when they investigated the effects of learner variables on adult learning strategies at the Foreign Service Institute in the United States. Using the Myers-Briggs

Type Indicator (MBTI) to assess personality types, these researchers reported results that were far from straightforward. In a later study in the same setting, Ehrman and Oxford (1990) concluded that personality type appears strongly to influence strategy use among language learners. It should be noted that the term *personality type* here, is used somewhat interchangeably with modality, sensory preference, cognitive style (see Allport, 1937; Schmeck, 1988; Witkin & Goodenough, 1981), and learning style throughout the literature (Ehrman, Leaver, & Oxford, 2003). The variable of learning style has been used with personality and cognitive styles to determine ability, predict performance, and improve classroom teaching and learning (Ehrman, 2001; Ehrman & Oxford, 1995; Reiff, 1992). The models that have been used to identify learner learning styles include Hartmann's psychoanalytically-based ego boundaries approach (Hartmann, 1991), Sternberg's mental self-government model (Sternberg, 1994), and the Ehrman & Leaver (E & L) Construct (Ehrman, 2001; Ehrman & Leaver, 2002; Ehrman & Leaver 2003), just to name a few. Along with these models, personality assessments from the field of psychology have been frequently adopted, with examples like the Five Factor Personality Model (Busato et al., 1999), temperament theory (Thomas & Chess, 1977), and the MBTI (Ehrman, 1996; Leaver, 1998).

In Ko's (2002) study on Taiwanese junior high students learning English, Oxford's *Strategy Inventory for Language Learning* (SILL, 1990) and Reid's *Perceptual Learning Style Preference Questionnaire* (1987) were administered to 161 students to determine how their learning strategy choice was affected by their learning style preferences. Results showed that students with a multiple style and students with a

visual/nonverbal style had higher English achievement than students with other style preferences. The kinesthetic/tactile-style learners used significantly more memory-related, compensation, and social strategies than did other style groups, whereas the visual/nonverbal and the multiple style learners used significantly more affective strategies than other style groups. As much as it seems ideal and beneficial to match students' learning style with certain kinds of language learning strategies as a way to empower students, according to Dornyei (2005), certain pedagogical precautions need to be taken: 1) often overlapping terminology of various conceptualizations of learning style confuses classroom teachers and may discourage teachers from adopting this approach; 2) mere identification of a learner's learning style may simply be a convenient oversimplification of a more complex picture that may not be particularly helpful to a language teacher; 3) it may be unrealistic, or even unfair, for a classroom teacher to design his or her curriculum just to correspond to students' particular learning styles. Instead, what can truly help language learners in respect to knowing their own learning style is to assist them in operating outside their preferred style, an approach that is often referred to as *style stretching* (Dornyei, 2005). Cohen (2002) proposed that by encouraging students to engage in style stretching, they can incorporate approaches to learning that they have resisted in the past. Because of the complex nature of the language and what it is entailed in mastering a foreign language, it is reasonable to assume that learners who can manage a range of styles in a situation-specific and flexible manner are likely to become more effective, and even efficient learners.

The impact of motivation on language learning strategy use was demonstrated

when Oxford and Nyikos (1989) surveyed 1,200 university students taking various language courses in order to understand the types of language learning strategies students reported using. From the data, it was found that the degree of motivation was the most influential of the variables affecting strategy choice. In Taiwan, Peng (2001) explored the relationship between EFL learning motivation and strategy use on 326 senior high school students. Significant differences were found between strategy use and each motivation aspect, namely, motivation intensity, extrinsic/intrinsic motivation, and requirement motivation. Requirement motivation refers to situations when learners are forced to learn the language because of the design of the curriculum. Requirement motivation was found to be significantly negatively correlated with strategy use, as well as learners' achievement. In other words, high school students who felt the pressure to learn English used strategies much less frequently and performed more poorly, compared to those who were motivated. Another study examining the correlation between EFL learning motivation and strategy use on junior high school students in Taiwan also showed similar results. Liao (2000) used several methods to collect data: questionnaires, semi-structured interviews, and classroom observations. Three questionnaires were implemented: the Motivational Intensity Questionnaire (Gardner, 1985), the Motivational Questionnaire (Schmidt, Boraie, & Kassabgy, 1996), and the Strategy Inventory for Language Learning (SILL, Oxford, 1990). Results indicated that students generally lacked self-initiated motivation, and when motivated at all, tended to be extrinsically motivated. Students also did not report frequent use of a wide variety of strategies. Therefore, students' low ESL-learning motivation was significantly associated with their infrequent use of learning

strategies.

Learners' nationality was also investigated as a factor in language learning strategy use. Griffiths and her colleagues (Griffiths, 2003; Griffiths & Parr, 2000) found that European students reported using language learning strategies significantly more frequently than students of other nationalities, especially strategies regarding vocabulary, reading, interaction, and tolerance of ambiguity. However, a study conducted by Grainger (1997) showed that after administering the Strategy Inventory of Language Learning (SILL, Oxford, 1990) to the participants in the study, no difference was found in overall SILL scores between native English speakers, students of European backgrounds, and those of Asian backgrounds. In a study in Taiwan, Yang (1998) reported some interesting discoveries about her students' language learning strategy use, including strategies for using dictionaries. In a later study, Yang (1999) noticed that, even though her students were aware of various language learning strategies, few of them actually reported using them. From studying students' journal entries, Usuki (2000) discussed the psychological barriers to adopting effective language learning strategies by Japanese students, who are often regarded as passive learners, and recommended more cooperation between students and the teacher. In two studies on Asian students, inadequate strategy use was named as accounting for poor language achievement. Politzer and McGroarty (1985) discovered that Asian students demonstrated fewer of the strategies expected of "good" language learners than did Hispanic students, while O'Malley (1987) attributed the lack of success of Asian students to the persistence of familiar strategies.

The relationship between learners' proficiency level and their strategy use, though

well-researched, remains unclear. More proficient language learners use a greater variety and often a larger number of learning strategies (Anderson, 2005; Berne, 2004; Bruen, 2001; Chamot & El-Dinary, 1999; Green & Oxford, 1995; Griffiths, 2003; O'Malley & Chamot, 1990; Oxford & Nyikos, 1989; Park, 1997; Wharton, 2000). In addition, differences between more and less proficient learners have also been found in how the strategies are applied to the task and in the appropriateness of the strategies for the task. In these studies, students' understanding of the requirements of the task and whether they could match a strategy to meet those requirements seemed to be a vital feature of effective use of language learning strategies.

Studies focusing on strategy training and instruction. The belief that language learning strategies are teachable and that learners can benefit from scaffolding in learning strategies inspired much of the research in the field (e.g. Cook, 1991; Larsen-Freeman, 1991; Oxford, 1990). Bearing this belief in mind, many researchers have tried to incorporate strategy training into the curriculum of the language class.

Tang and Moore (1992) examined the effects of teaching cognitive and metacognitive strategies to ESL learners on reading comprehension and found that cognitive strategy instruction, such as discussing the title or teaching the vocabulary needed beforehand, improved comprehension scores. However, the improvement on students' performance did not maintain when the treatment was withdrawn. Metacognitive strategy instruction, on the other hand, entailing the teaching of self-monitoring strategies, seemed to contribute to improvements in students' comprehension that were maintained after the treatment ended. This finding corresponds with that of

O'Malley et al. (1985) that, compared to less proficient learners, more proficient learners are more capable of using metacognitive strategies to regulate their learning.

In a 12-week program designed to help students "reflect on their own learning, to develop their knowledge of, and ability to apply learning strategies, to assess their own progress, to apply their language skills beyond the classroom" (p. 3), Nunan (1995) reported results that supported the idea that language classrooms should have a dual focus, teaching both content and an awareness of language processes.

O'Malley et al. (1987) randomly assigned 75 students to one of the three instructional groups in which they received training in 1) metacognitive, cognitive and socio-affective strategies; 2) cognitive and socio-effective strategies; or 3) no special instruction in language learning strategies (control group) for vocabulary, listening and speaking skills. Counter-intuitively, it was found that the control group actually scored slightly higher than the treatment groups on vocabulary. The researchers accounted for this unexpected finding as certain students persisted on using familiar strategies (e.g., rote repetition) and were unwilling to adopt the strategies presented in training, particularly when they knew they would be tested within only a few minutes.

Although most researchers agree on the significance of explicitness in strategy instruction (Chamot et al., 1999; Cohen, 1998; Nunan, 1997; O'Malley & Chamot, 1990; Oxford & Leaver, 1996; Shen, 2003), whether it should be integrated into the curriculum or kept separated remains debatable. Although many argue that integrated instruction provides students with opportunities to practice learning strategies with authentic language learning tasks (Chamot & O' Malley, 1994; Chamot et al., 1999; Cohen, 1998;

Grenfell & Harris, 1999; Nunan, 1997; Oxford & Leaver, 1996), others viewed otherwise. For instance, Gu (1996) deemed that strategies learned in a language class are less likely to transfer to other tasks, and, from a practical viewpoint, it is easier to plan for one separate strategy course than to try to prepare all teachers to teach strategies (Vance, 1999; Weinstein & Meyer, 1986).

As for the language of instruction, most researchers believe that strategy instruction in learners' L1 is probably to their most benefit, while in the second language or foreign language settings, it would depend on students' proficiency level of the target language whether the strategy instruction should be conducted in the target language; beginning level students have not developed the L2 proficiency to understand explanations in the target language or why and how to use language strategies. Also, strategy instruction should start as early as possible, since beginners can make their language learning more successful and increase their motivation for further study (Chamot, 2004). Some recent studies on beginning level L2 students have provided learning strategy instruction in the native language. To provide strategy instruction to her students, Cunningham Florez (2000) inspected her adult ESL learners' learning strategies in Spanish as a preparation. Rybicki (2002) offered language learning strategy instruction in English to her beginning level high school English class. On a different note, other studies have used a combination of the native and target languages. In a study of strategy instruction by secondary French and German teachers in London, some of the materials were in English (particularly those used by students for planning and evaluating their own work), while description of strategies, strategy activities, and checklists were written

in the target language that was somewhat simplified (Grenfell and Harris, 1999). Additionally, in a study of female Japanese college ESL students, questionnaires, instructions for journal entries, and self-evaluation checklists were written in simpler English, yet students could respond in Japanese; actual strategy instruction and review were conducted in English (Ozeki, 2000).

Conclusion

As the research on language learning strategies has claimed, learning strategies constitute a useful toolkit for active and conscious learning, and these strategies pave the way toward greater proficiency, learner autonomy, and self-regulation (Hsiao & Oxford, 2002). From the rich body of strategy use literature both in educational psychology and second language learning, it was realized that strategic learning is far more complex than it may appear, and that simply focusing on the tactics and techniques that strategic learners actually apply is not enough. Therefore, it is sensible to look at a learner's strategy use, along with social, cultural or psychological variables that exist concurrently in his or her learning context to understand fully the synergy produced among these determinants.

Second Language Learning Motivation Theories

Motivation has long been considered a crucial predictor for the use of language learning strategies (Gardner, 2001; Oxford & Nyikos, 1999). In the following sections, I will discuss several important theories in L2 motivation, starting with Gardner's *Socio-Educational Model*, proceeding on to Deci and Ryan's *Self-Determination Theory*, and ending with several process models of L2 motivation.

The Canadian Socio-Psychological Camp

The most important work done in the area of motivation specific to language study is a series of extensive studies conducted by Robert Gardner and his colleagues (earlier with Wallace Lambert, and later with research associates at the University of Western Ontario). The original theory was derived from Mowrer's ideas (1950) on how identification with a valued person could influence one's development (cited in Skehan, 1989). Building on this idea, Gardner and Lambert (1959, 1972) considered the extent to which people regard and want to identify with not only particular individuals but also foreign people and culture, and proposed two types of motivation, *integrative* and *instrumental*, for learners who make attempts at learning a foreign language. Learners who have *integrative* orientation generally identify with the people in the target language group, have the curiosity to understand its culture, and may even want to be accepted as a member by the language community. On the other hand, learners with *instrumental* orientation are those who learn a foreign language with a utilitarian perspective, i.e., for their career advancement or survival in the society of the target language. Gardner and

Lambert (1972) hypothesized that having an *instrumental* motive is less effective for a language learner because, unlike *integrative* motivation, it is not based on the personality of a learner and therefore, more contingent on fallible external pressures. Consequently, a learner with instrumental motivation may not expend as much effort to achieve cumulative progress over time.

Following a series of studies, Gardner and Smythe (1975) put forth a prototype of the *Socio-Educational Model*. In the model, they identified possible motivational characteristics in terms of four categories, Group Specific Attitudes, Course Related Characteristics, Motivational Indices, and Generalized Attitudes. Later, Gardner (1979) proposed a modification of this model in which he distinguished four components, the Social Milieu, Individual Differences, Second Language Acquisition Contexts, and Outcomes. In addition, he presented a schematic model in which attitudes were shown to affect motivation, which in turn influenced language achievement. In addition, Gardner asserted that achievement can be manifested in both linguistic and non-linguistic outcomes, which in turn had an impact on attitudes. Therefore, the model is seen as a positive feedback cycle in which attitudes and motivation influence language achievement, which in turn has an influence on subsequent attitudes and motivation. The model has undergone a number of revisions since its first publication (see Gardner, 1985; Gardner, 2001; Gardner & MacIntyre, 1993). In the latest version, the category of External Influences replaces that of the Social Milieu of earlier versions. History (e.g., socio-cultural milieu in which the individual lives and personal background) and Motivators (e.g., the teacher's role in language learning) fall in this category. As for the

other three categories, Individual Differences (e.g., integrativeness, attitude, aptitude, and motivation), Language Acquisition Contexts (i.e., formal vs. informal), and Outcomes (e.g., language proficiency or language anxiety) stay the same.

In line with the *Socio-Educational Model*, the Attitude/Motivation Test Battery (AMTB) was developed to help assess the major affective factors involved in the learning of a second language (Gardner & Smythe, 1981). This measure was originally designed for use with English-speaking Canadians studying French as a second language. It consists of 11 subtests and can be grouped into five categories: Integrativeness, Attitudes toward the Learning Situation, Motivation, Instrumental Orientation, and Language Anxiety.

In 2001, Gardner presented some findings regarding the role of motivation in second language learning, among which he reported some studies that found integrative motivation conducive to language learning. Clement, Smythe, and Gardner (1978) found that learners who had integrative orientation for language learning were less likely to drop out and more likely to continue on with language study. Gardner and Smythe (1981) found that integrativeness, attitudes toward the learning situation, and motivation were separate but correlated concepts, and that motivation had a direct effect on second language achievement. Gardner and Lysynchuk (1990) reported that learners' motivation enhanced the retention of second language skills after classroom instruction, for motivated individuals continue to use the language subsequently.

Even though the findings reported by Gardner and colleagues seem intuitive and tie in with the experience of most language learners regarding motivation and language

achievement, several researchers (Crookes & Schmidt, 1991; Dornyei, 1994; Oxford & Shearin, 1994) have voiced the recommendation that motivation variables from the field of educational psychology be considered. To respond to this concern, Tremblay and Gardner (1995) added such motivation variables, as expectancy, self-efficacy, valence, causal attributions, and goal setting to the initial consideration of motivation constructs. They then examined the relationships among motivation variables from Gardner's (1985a) *Socio-Educational Model* with the new motivation factors. In so doing, they proposed to see how other measures of motivation, derived from the more general psychology literature, fit into the original *Socio-Educational Model*. The findings of this study indicated that many of the variables mediated the relationship between language attitudes and motivational behavior (i.e., effort, attention, and persistence). Goal salience, valence, and self-efficacy were found to be the most important mediators. The results pertinent to goal salience indicated that specific goals and frequent reference to these goals led to an increase of motivational behavior. Secondly, valence was influenced by language attitudes. The third mediator, self-efficacy, was shown to be influenced by language attitudes, and in turn, to influence motivational behavior. In spite of their efforts to include motivation variables into second language motivation research, Tremblay and Gardner did not examine the direct relationship between these variables and students' foreign language achievement.

Other than Gardner and his associates, in Canada, there is another group of researchers led by Richard Clement, who have examined the correlations between social contextual variables, attitudinal/motivational factors, self-confidence, language identity,

and second language acquisition/acculturation processes (see Clement & Gardner, 2001; Dornyei, 1999, 2001, for reviews). Among the factors studied by Clement and his colleagues, self-confidence was regarded as the most important. Clement and his associates provided evidence (Clement, 1980; Clement & Kruidenier, 1985) that in settings where different language communities live together, linguistic confidence, stemming from the quality and quantity of the contact between the members of the first and second language communities, is a major motivational factor in learning the other community's language, and shapes the learners' future desire for between-group communication and the extent of identification with the second language group. It should be noted that, in Clement's view, self-confidence is a socially defined construct, which is different from the notion associated with the related construct of self-efficacy in the motivational psychological literature. In their study, Clement, Dornyei, and Noels (1994) showed that in foreign language learning situations where there is little direct contact with members of the L2 community but considerable indirect contact with the L2 culture through the media, the functionality of the perceived L2 proficiency can influence a learner's motivation, as is the case with learning English as a foreign language in Taiwan.

It has been generally accepted that Gardener and his colleagues' perspective on L2 motivation have helped characterize and delineate the motivational patterns of the larger learning communities and to allow inferences about important issues, such as intercultural communication and affiliation and language contact. Nonetheless, these broad factors have less explanatory power when we try to understand the motivational features of actual language classrooms; they need to be replaced with motives associated

with the learners' immediate learning environment. Hence the emergence of the situated approach, in which researchers have investigated the interactions between individuals and their many social contexts, which can be facilitative, neutral, or inhibitory with respect to learners' future learning (McGroarty, 2001). The progression of putting motivation in specific learning context has been rewarding: researchers have consistently found that variables related to language courses accounted for a significant portion of variance in the learners' motivation. For instance, while analyzing unsuccessful Hungarian language learners, Nikolov (2001) found that even though her participants generally had positive attitudes toward knowing foreign languages, the main reasons that they could not achieve L2 proficiency had to do with their perceptions of the teaching pedagogy and assessment applied in the classroom. Consequently, for these learners, situation-specific motives superseded the positive attitude toward the second language. In another setting, where Israeli students were learning modern spoken Arabic, researchers found that the best predictor of the intention to continue their Arabic studies was the quality of the instructional program (Donitsa-Schmidt, Inbar, & Shohamy, 2004; Inbar, Donitsa-Schmidt, & Shohamy, 2001). This finding showed that even when the relations between language groups could be characterized by animosity and lack of consensus at the level of policy, L2 learners are aware of the quality of the language instruction and their learning experience (McGroarty, 2001). Therefore, in this case, situation-specific motives overruled a generally negative attitude toward the second language.

As a result, research on the interaction between situating L2 motivation and adopting new cognitive variables in the motivational models has become a trend; more

and more concepts from the motivational psychological literature have been included, among which, I discuss below the distinction between intrinsic and extrinsic motivation and Dornyei's (1994) model of phases of motivation.

Self-Determination Theory

Self-determination theory was put forth by Deci and Ryan (1985, 2002) and is focused on various types of intrinsic and extrinsic motives and how those motives help people meet their needs for competence, autonomy, and relatedness. Intrinsic motivation generally refers to the motivation to engage in an activity for its own sake because it is enjoyable. According to Deci and Ryan (1985), intrinsic motivation is based on one's need for competence and autonomy. They hypothesized that when people voluntarily choose to take part in an activity, they will seek interesting situations where they can take on the challenges that the activity brings forth. By trying to live up to the challenges, individuals develop a sense of competence in their ability. In recent years, Vallerand and his colleagues (Vallerand, 1997; Vallerand, Blais, Briere, & Pelletier, 1989; Vallerand et al., 1992, 1993) have presented a more fine-grained differentiation for the three subtypes of intrinsic motivation (IM). The first type is IM-Knowledge, the motivation to participate in an activity for the opportunities to explore new ideas and acquire knowledge. The second type, IM-Accomplishment, refers to the sensations pertinent to mastering a task or achieving a goal. The third type, IM-Stimulation, concerns the sensations stimulated by performing a task, such as aesthetic appreciation or excitement. The common ground for these three subtypes of intrinsic motivation is the satisfying

sensations an individual experiences during the self-initiated challenging activity.

By contrast, extrinsic motivation is a motive that prompts an individual to carry out a task simply to get a reward or to avoid punishment. This type of motivation does not necessarily imply the lack of self-determination in the behaviors performed. Instead, Deci and Ryan (1985) claimed that different types of extrinsic motivation (EM) can be categorized according to the extent to which they are internalized into the self-concept.

According to Deci and Ryan, four levels of EM can be identified: external regulation, introjected regulation, identified regulation, and integrated regulation. External regulation is defined as activities that are determined by sources external to the person, such as perceivable benefits or costs, echoing the definition of Gardner's instrumental motivation. The second type of extrinsic motivation is introjected regulation, which is more internalized into the self-concept than external regulation. It occurs when individuals undertake an activity due to some kind of pressure or beliefs that they have assimilated into their self-concept, such that they make themselves perform the activity. Although the source of the pressure comes from within, it is not self-determined because individuals are reacting to a demand rather than acting on the basis of free will. Identified regulation is considered to be more self-determined than introjected regulation. When people have this type of motivation, they choose to participate in an activity for personally relevant reasons that they value. The most autonomous form of extrinsic motivation is integrated regulation, occurring when identified regulations are fully incorporated into the self, which means they have been evaluated and come into line with other values a person has (Ryan & Deci, 2000).

With the framework of *self-determination theory*, in the 1990s, Kim Noels partnered with Luc Pelletier and Robert Vallerand, two leading experts of self-determination theory, and conducted a series of empirical research (McIntosh & Noels, 2004; Noels, 2001a, 2001b; Noels, Clement, & Pelletier, 1999, 2001; Noels, Pelletier, Clement, & Vallerand, 2000). Among the findings, Noels and her colleagues reported that identified regulation and intrinsic motivation were most strongly associated with Gardner's integrative orientation, though integrative association had modest correlations with the less self-determined orientations as well (Noels, 2001b). Instrumental orientation, on the other hand, correlated highly with external regulation. Regarding the investigation of environmental influences on learner self-determination, Noels (2001a) found that the more students perceived their teachers as controlling and as ineffective in providing constructive feedback, the less the students were intrinsically motivated. Therefore, perceptions of autonomy support and informative feedback from teachers promoted the students' feelings of intrinsic motivation. However, the learners who studied a language because it was required were less receptive to teacher influence than those who did it voluntarily. A more recent study by Wu (2003) furthered the self-determination framework proposed by Noels and her colleagues by adding a new dimension, the immediate classroom environment. In a quasi-experimental study, the author explored the influence of classroom learning environment on L2 intrinsic motivation of young English learners in China. The results showed that a predictable learning environment, moderately challenging tasks, necessary instructional support, and evaluation that emphasized self-improvement were effective approaches to enhancing learners' self-perception of L2

competence. In addition, giving students freedom in choosing the content, methods, and performance outcomes of learning, as well as providing integrative strategy training, led to enhanced perceived autonomy. Perceived competence and autonomy, in turn, gave rise to a significantly higher level of L2 intrinsic motivation.

Process Models of Second Language Learning Motivation

Motivation should not be seen as a static feature but rather a dynamic factor that undergoes fluctuation. Even during a single language class, one can be aware of the ever-changing nature of motivation, and in the context of learning a language for various durations of time. With language acquisition being a lengthy learning process, it is reasonable to look at the different phases of one's motivation for fluctuations that may occur. Williams and Burden (1997), for instance, put three stages in motivational processes along a continuum: "Reasons for doing something," "Deciding to do something," and "Sustaining the effort, or persisting." Likewise, Ushioda (1996, 2001) also noted that when it comes to learning in a classroom setting, motivation tends to be in flux rather than stable. In a recent study, Manolopoulou-Sergi (2004) used the information-processing model, namely, input (first encounter with the new material), central processing (connections between new material and existing knowledge), and output (demonstration of the acquired knowledge), to look at motivational variation in the final outcome of the foreign language learning process.

In an attempt to operationalize the process-oriented conception of L2 motivation, Dornyei and Otto (1998) offered a model that describes aspects of motivational evolution

delineating how initial wishes and desires are first transformed into goals and then into operationalized intentions, and how these intentions are enacted, leading to the accomplishment of the goal, and concluded by the final evaluation of the process. In the process, at least three phases can be identified: Preactional Stage (when motivation is generated), Actional Stage (whether motivation is maintained), and Postactional Stage (retrospective evaluation of the experience and how motivated one will be to pursue the same activity in the future). However, according to Dornyei (2005), this approach has two obvious disadvantages. First, the actional process is usually less well-defined and does not have clear-cut boundaries. Secondly, the actional process does not happen in isolation. That is, it usually occurs with other ongoing activities in which the learner is engaged. Yet, this model is particularly applicable in classroom contexts where student motivation and achievement are the result of a complex set of interacting goals and intentions of both an academic and social nature (Juvonen & Nishina, 1997; Wentzel, 1999).

Willingness to Communicate

The importance of *Willingness to Communicate* (WTC) arises from the research of interaction-driven L2 development (Long, 1996; Mackey & Gass, 2006; Swain, 2005). Researchers in this area have contended that language learning is facilitated through meaningful interactions. It is assumed that more interaction leads to more language development and learning. With an increasing emphasis on authentic communication in L2 learning and instruction, a willingness to communicate on the part of learners is deemed to have multiple advantages such as an increase of exposure and practice in authentic L2 communication and development of learner autonomy (MacIntyre et al., 2001; Kang, 2005). In this section, I will present several models that researchers have put forth in the WTC literature and discuss factors that affect an individual's WTC behavior.

McCroskey's Willingness-To-Communicate Model

Originating from the early work of Philips (1965, 1968) on reticence, of Burgoon (1976) on unwillingness to communicate, and of Mortesen, Arntson, and Lustig (1977) on predisposition toward verbal behavior, the concept of *Willingness to Communicate* (WTC) was first put forth by McCroskey and his associates (McCroskey & Baer, 1985; McCroskey & Richmond, 1987) with reference to L1 use and speaking as its focus. WTC was considered as "an individual's predisposition to initiate communication with others" (McCroskey, 1997, p.77), and posited to remain stable across situations. McCroskey and McCroskey (1986a) found that L1 WTC was negatively associated with communication apprehension, introversion, alienation, and anomie. On the other hand, they also found

WTC to be positively associated with self-esteem and self-perceived communication competence (McCroskey & McCroskey, 1986a, 1986b). In addition, Chan and McCroskey (1987) found that students who scored high on the WTC scale were more likely to participate verbally in class than those who scored low on WTC.

Utilizing the conceptualization of WTC that McCroskey and colleagues proposed, other researchers found that communicative competence and communication anxiety to be significant predictors of WTC (Baker & MacIntyre, 2000; MacIntyre, 1994; MacIntyre et al., 2001). Other individual differences, such as prior immersion experience (MacIntyre et al., 2003a), sex and age (MacIntyre et al., 2003b), attitudes toward the international community (or *international posture*; Yashima, 2002; Yashima et al., 2004), have also been found to influence WTC.

Clement's and MacIntyre's Willingness-To-Communicate Models

Despite the findings described above, other researchers have questioned the adequacy of *Willingness to Communicate* (WTC) being treated as a trait-like attribute, arguing WTC could be situation-specific and non-transferable from L1 to L2. Clement and MacIntyre are two representatives of this view.

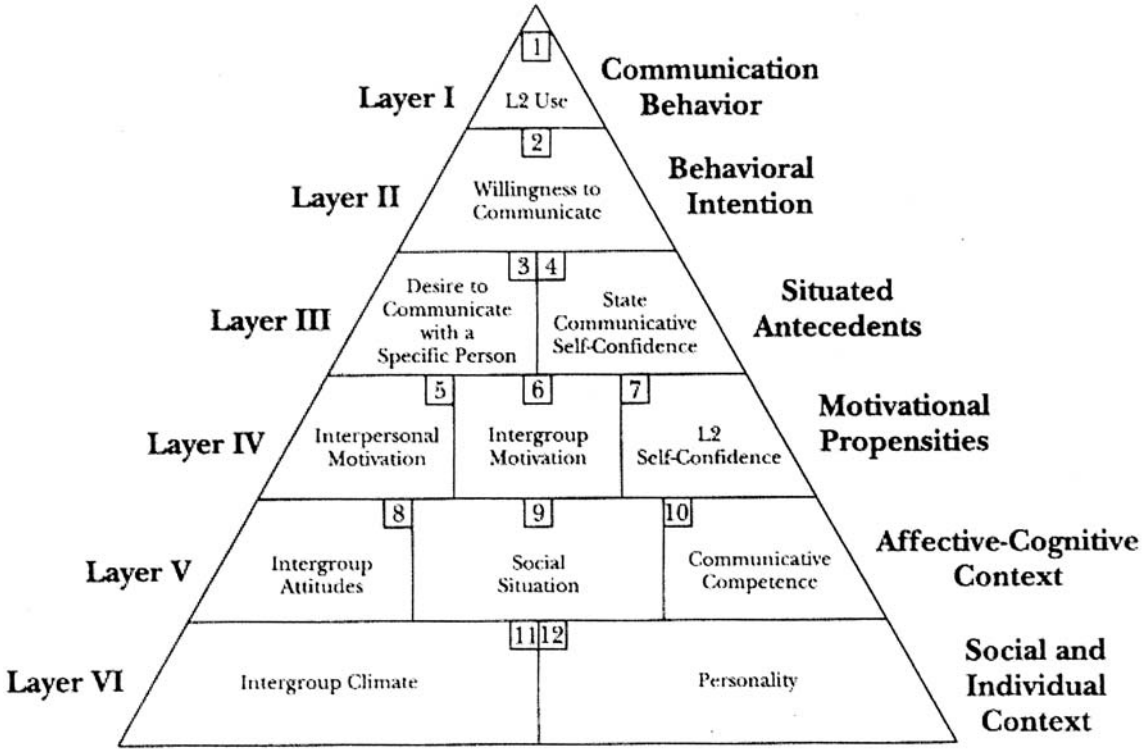
In Clement's *Social Context Model* (Clement, 1980; Clement & Kruidenier, 1985), he described the correlations among intergroup contact, L2 confidence, L2 competence, and L2 identity. The model suggested that the frequency and quality of contacts with the L2 community would eventually lead to variations in L2 confidence, which he saw as composed of perceived communicative competence and lower levels of L2 anxiety. In

addition, L2 confidence was associated with an increase in communication competence in L2, identification with the L2 community, and assimilation motive (Clement et al., 2003; Noels & Clement, 1996; Noels, Pon, & Clement, 1996). However, this model does not deal with L2 usage.

Building on Clement's model, MacIntyre and his colleagues (MacIntyre, Dornyei, Clement, & Noels, 1998) extended the influence of WTC to writing and comprehension of both written and spoken language. In addition, they argued that WTC should be treated as a situational variable that can be affected by linguistic, communicative, and social psychological factors of an individual, the group that he or she belongs to, and the L2 community. In the heuristic model they proposed, both proximal and distal causes that impact an individual's variation in WTC are included (Figure 1).

Figure 1

MacIntyre et al.'s (1998) heuristic model of variables influencing WTC



The model has six layers, with the top three being situation-specific and the bottom three more enduring. In other words, the bottom has the broadest factors, intergroup climate (box 11) and personality (box 12), on which the rest of the influences operate. MacIntyre and colleagues defined L2 WTC as "a readiness to enter into discourse at a particular time with a specific person, or persons, using a L2" (p. 547), and to them, WTC affects an array of L2 activities, such as speaking up in class and reading L2 newspapers. In the model, the most immediate antecedents for WTC are the desire to communicate with a specific person (box 3) and state communicative self-confidence

(box 4). The desire to communicate with a specific person results from interpersonal and intergroup motivations (box 5 and 6), and they tend not to be equally important at all times. While interpersonal and intergroup motivations represent the affective and social aspects of the motivation to communicate, L2 self-confidence (box 7) reflects the overall belief in being able to communicate in the L2 in an adaptive and efficient manner, and it is comprised of perceived L2 competence and L2 anxiety. Intergroup attitudes (box 8) encompass variables such as integrativeness (Gardner, 1985), fear of assimilation (or *subtractive bilingualism*; Lambert, 1978), and intrinsic motivation (Deci & Ryan, 1985). In any social situation (box 9), five factors may affect whether an individual will initiate an interaction: the participants, the setting, the purpose, the topic, and the channel of communication. The L2 proficiency level of the interlocutor relative to the speaker is of interest: the interaction between a native speaker and a non-native speaker shows an asymmetrical pattern, with the non-native speaker performing in a relatively passive manner, avoiding topic initiation. As for communicative competence (box 10), which refers to an individual's linguistic, discourse, actional, sociocultural, and strategic competence in a L2. Interestingly, the notion of strategic competence described by MacIntyre et al. resembles the category of *compensation strategies* that is measured in Oxford's *Strategy Inventory for Language Learning* (SILL). Intergroup climate (box 11) and personality (box 12) represent the most distal factors over which an individual has little control in L2 behavior. Issues of affiliation and control are the basic motives that mobilize factors at all levels throughout the model.

Using MacIntyre et al.'s model, researchers have found that WTC can be affected

by social contextual variables, such as social support from friends (MacIntyre et al., 2001), learning context (Baker & MacIntyre, 2000), and cultural differences (Freiermuth, 2006; Wen & Clement, 2003).

A recent study by Cao and Phlip (2006) investigated the dualities of trait-like WTC and situational WTC. In a university ESL program in New Zealand, using students' self-report and observation of their actual classroom behavior, these researchers found that students' WTC behavior could be affected by both trait-level and state-level WTC, depending on the mode of interaction (i.e., whole class, group, or dyadic), interlocutor familiarity and participation (mainly due to self-confidence in English), topic familiarity, and interest.

Synthesis

In the second language learning literature, even though the relationship between the extraversion-introversion dimension of personality, a relevant attribute of shyness, and how it may affect students' success has been discussed (see reviews by Dewaele & Furnham, 1999; MacIntyre & Charos, 1996), there has not yet been any study that has looked at how shyness is perceived differently in Chinese culture and the possible repercussions that it may render when Chinese students manage and engage in L2 communication. By examining the interrelationship between shyness and two pertinent constructs, willingness to communicate and foreign language anxiety, and how they may interact with students' motivation and strategy use, I hoped that this study would contribute significantly to research in both second language learning and educational

psychology. In addition, I hoped the conclusions could inform L2 instructors of how cultural endorsement of a certain personality trait may influence students' approach and participation in L2 communication.

The following chapter presents the details of an empirical study that investigated the relationship between shyness, foreign language anxiety, the choice and use of language learning strategies, L2 learning motivation, and willingness to communicate.

Chapter 3

Method

This chapter presents a description of the participants, measures used, data collection procedures, research questions, hypotheses, rationale for respective hypotheses, and data analysis techniques for the study.

Participants

Participants recruited for this study were 364 students who were taking either the sophomore (n = 322) or freshman English course (n = 42) at a private university in Taipei, Taiwan. Of these, 36.6% of the participants were men and 63.4% were women, with an average age of 20.5 years. The youngest participant was 18 years of age, and the oldest was 44 (SD = 2.12). Students were from 19 different departments with no English majors included. Most of them were from the Law school (22%), Accounting (17%), and International Trade (13%). Table 2 provides a list of the departments of the participants and the number of students from each department.

As for the years these participants have been studying English, the average was 9.5 years (SD = 2.39), with 2 years being the minimum (n = 1), and 20 years the maximum (n = 1). Only 29% of the participants reported having experience of traveling to or living in English-speaking countries.

Table 2

The Number of Participants from Each Department

Department	Number of Students Participated
Accounting	61
Business Administration	27
Business Mathematics	30
Chinese Language and Literature	11
Economics	24
Finance	29
History	2
Information Studies	1
Information Science	12
International Trade	48
Japanese Language and Literature	1
Law	79
Mathematics	7
Microbiology	5
Philosophy	1
Political Science	1
Psychology	7
Social Work	13
Sociology	2

*Note: Total of 361 students. Three students did not report their major, therefore were not shown in the table.

The freshman English course and the sophomore English course are required for non-English majors in their first two years at the university, while English majors have their own specialized courses designed by the department.

At the beginning of the freshman year, students had been divided into three levels through a placement test developed by the faculty of the English department on campus, with Level 1 being the most proficient and Level 3 being the least proficient. At the time of the study, there were 54 sections enrolled across the levels, with 25 to 40 students in each section. Among the participants who were taking the sophomore English course at

the time, 72 were of Level 1, 171 were of Level 2, 79 were of Level 3, while 42 were taking the freshman English course.

Both courses were taught in computer laboratories, which allowed the instructor to have access to the Internet and multimedia devices. The class met once per week for two hours. Both courses addressed the four language skills of listening, speaking, reading, and writing. In addition to using written examinations as a means of assessing students' learning, students were required to do pair work on a weekly basis, actively participate in class discussions, and orally present a project at the end of the semester. As a result, not only were the students expected to do well on exams, they were also supposed to integrate the usage they had learned from the course materials and use it in their oral communication in class.

The reasons why non-English majors were selected for the study are as follows:

(1) My familiarity with the population and accessibility to the students who were taking required English courses at this particular institution.

(2) The need to avoid confounding effects. Non-English majors who are required to take mandatory English courses may show a greater variety in their motivation and resourcefulness as English majors in terms of their attitude toward English learning. It was my hope to be able to generalize the findings of the current study across most of the disciplines.

Measures

Five scales were given to each participant: the Revised Cheek and Buss Shyness Scale (RCBS), the ESL/EFL version of the Strategy Inventory for Language Learning (SILL), the Intrinsic Motivation, Extrinsic Motivation and Amotivation subscales of the Language Learning Orientation Scale (LLOS-IEA), the Foreign Language Classroom Anxiety Scale (FLCAS), and the Willingness to Communicate Scale (WTC). On the WTC scale, participants were asked to rate their willingness to communicate in both English and Mandarin Chinese. At the end of the questionnaire, a single shyness self-rating item, "Are you shy?" was also asked, to see whether the response would corroborate the results of the RCBS. Moreover, information regarding participants' demographics and English-learning experience was collected for further analysis. All of the measures were translated into Chinese, with forward and back translation procedures checked by a colleague who is fluent in both English and Chinese, and who is knowledgeable about the topics pertinent to the study. Items were pilot-tested with students from one section of the sophomore English course prior to the study.

The Revised Cheek and Buss Shyness Scale (RCBS)

The shyness scale selected for this study was the 13-item Revised Cheek and Buss Shyness Scale (Cheek, 1983), first developed by Cheek and Buss in 1981 as a 9-item scale. The items are answered on a 5-point Likert scale, with 1 labeled as *very uncharacteristic or untrue* and 5 as *extremely characteristic or true*. A sample item would be, "I feel tense when I'm with people I don't know well." The scale has been used

frequently throughout the shyness literature for its sound psychometric properties (Bradshaw, 1998; Heiser et al., 2003; Paulhus & Trapnell, 1998; Schmidt & Riniolo, 1999; Van-Ameringen, Mancini, & Oakman, 1998). The alpha coefficient for the scale is .90, and the 45-day test-retest reliability is .88. Generally, moderate to strong correlations have been obtained between the RCBS and other measures of shyness: the SRS-II (Social Reticence Scale; Jones & Briggs, 1986), r = .77; the Shyness Questionnaire (Bortnik et al., 2002), r = .74; responses to the question, "How shy are you?" (Hopko et al., 2005), r = .56; the Fear of Negative Evaluation Scale (FNE; Watson & Friend, 1969), r = .63; the Social Phobia Scale (SPS; Mattick & Clarke, 1998), r = .56; and the Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998), r = .84. Convergent validity of the RCBS was also supported via strong correlations with the above-mentioned measures (see Hopko et al., 2005, for a review). Moreover, the correlation with aggregated ratings of shyness by friends and family was .68, and the correlation with the original 9-item version was .96. In an attempt to discriminate the constructs of shyness and sociability, the items were written to measure affective and behavioral aspects of shyness without referring to the desire to seek out or avoid social interactions (r = - .30) (Leary, 1991). The negative but low to moderate correlation between shyness and sociability also indicates that shyness is something other than low sociability.

Scores on the RCBS are obtained by reverse-scoring four negatively worded items and summing all responses, yielding a lowest possible score of 13 and a highest possible score of 65. According to Cheek (1983), the means for college students were

33.3 for men and 32.4 for women. Cheek proposed that participants scoring over 49 should be considered very shy. If the score falls between 34 and 49, then the person would be somewhat shy. However, if the score of a participant falls below 34, then he or she would probably not be a particularly shy person, though the person may feel shy on occasion. Most shy people score over 39, and a few reach the possible highest score of 65. Behaviorally, people who have high scores engage in less talk and less eye contact in dyadic interactions and are rated by observers as more tense, unfriendly, and inhibited than low scorers. In addition, high scorers report greater subjective tension, inhibition, and awkwardness during actual conversations (Cheek & Buss, 1981). Based on the categorization that Cheek made for shy and non-shy participants in his study, the cutoff score of 39 will be used for this study to differentiate the shy from the non-shy (see Appendix A for the RCBS).

Strategy Inventory for Language Learning (SILL)

The SILL (Oxford, 1986-1990) was first developed as a measure to assess the use of language learning strategies by students at the Defense Language Institute Foreign Language Center in Monterey, California. Afterwards, two revised versions of the SILL become widely used: 80 items for native English speakers who are learning foreign languages, and 50 items (49 multiple-choice and 1 open-ended item) for learners of English as a second or foreign language (ESL/EFL) (Oxford, 1990).

The SILL uses a 5-point Likert scale: 1 = *Never or almost never true of me*; 2 = *Generally not true of me*; 3 = *Somewhat true of me*; 4 = *Generally true of me*; 5 = *Always or almost always true of me*. The strategies in the SILL are organized into two

overarching types, direct and indirect strategies. Direct strategies are involved with explicitly manipulating the materials or language learning tasks at hand, whereas indirect strategies tap into the metacognitive and socio-affective realms of language learners. Both direct and indirect strategies have three subcategories: direct strategies with the subcategories of memory strategies, cognitive strategies, and compensation strategies, and indirect strategies with metacognitive strategies, affective strategies, and social strategies. Because the participants in the current study were college students learning English as a foreign language, it was appropriate to use the ESL/EFL SILL to measure students' use of language learning strategies.

Scores on the SILL are calculated in two ways: first, by summing all of the responses for the 49 multiple-choice items to get an overall average, in that the score illustrates the frequency of language learning strategy use in general, with the lowest being 1.0 and the highest being 5.0. Second, by summing responses for each subtype of strategy respectively and dividing by the number of items included in the subtype to get a mean, again ranging from 1.0 to 5.0. If a learner's mean for a subtype of learning strategy falls between 4.5 and 5.0, this would indicate the learner always or almost always uses this group of language learning strategies. If the mean falls between 3.5 and 4.4, this would denote the group of strategies is generally used by the learner. A mean score between 2.5 and 3.4 would show the set of strategies are sometimes used, and a score between 1.5 and 2.4 signifies this type of strategies is generally not used. Lastly, a score between 1.0 and 1.4 suggests the learner never or almost never uses that category of strategy.

In the ESL/EFL SILL, there are nine items in the memory strategy group, including such strategies as grouping, imagery, rhyming and reviewing. An example item for a memory strategy is, "When learning a new word, I create associations between new material and what I already know." For cognitive strategies, 14 items are used to measure reasoning, analyzing, summarizing and general practicing. An example item for a cognitive strategy is, "I look for similarities and contrasts between English and my own language." There are six items in the compensation strategy category, such as guessing meanings from the context in reading and listening, and using synonyms and gestures to convey meaning to compensate for a learner's limited knowledge. An example item is, "If I can't think of an English word, I use a word or phrase that means the same thing." Nine items, such as paying attention, planning for language tasks, evaluating and monitoring one's progress and errors, are used to measure the use of metacognitive strategies. An example item is, "I notice my English mistakes and use that information to help me do better." Six items, including anxiety reduction and self-encouragement techniques, are used to evaluate the use of affective strategies. An example item is, "I encourage myself to speak even when I am afraid of making a mistake." Social strategies, along with affective strategies, also have six items, such as asking the interlocutor for clarification/verification, cooperating with native speakers of English, and becoming culturally aware. An example item is, "If I do not understand something in English, I ask the other person to slow down or say it again." The last item on the ESL/EFL SILL is an open-ended question asking the participants to list strategies they use but were not mentioned in the previous items. In addition, to understand whether the participants were

well aware of the strategies listed in the ESL/EFL SILL and to detect possible cultural difference in strategy use, a question asking them to list the strategies that they found themselves not thought of before was added to the end of the scale. As a result, there were 51 items administered in the ESL/EFL SILL.

The correlations between the six subscales of the ESL/EFL SILL and the 80-item version of the SILL range from .66 to .81, and the subscales moderately correlate with each other (.35 to .61) (Oxford & Ehrman, 1995). In addition to the original English version, the ESL/EFL SILL has been translated into other foreign languages, such as Arabic, Chinese, French, German, Japanese, Korean, Portuguese, Russian, Spanish, Thai, and Ukrainian. In the current study, the English version was translated into Mandarin Chinese, and was compared with the Chinese version of the SILL in Yang's (1992) study. A few minor modifications were made in the wording of the items to ensure the accuracy of the translation and up-to-date usage in the language. The Cronbach alpha of the Chinese version of the ESL/EFL SILL was reported as .94 (Yang, 1992; Hsiao & Oxford, 2002), and .75, .84, .69, .86, .68, and .78 respectively, for the six subcategories of learning strategies (Hsiao & Oxford, 2002). Also, in Hsiao and Oxford's study, they found sound discriminant validity for the six strategy categories (chi-square values ranging from 11.81 to 185.54, exceeding the critical chi-square value of 6.63, with p=.01), which indicates that the six types of language learning strategies are indeed independent. Moreover, the construct validity data on the ESL/EFL SILL have continued to be corroborated through studies demonstrating relationships between strategies and language performance (Rossi-Le, 1989; Oxford et al., 1993a, 1993b; Park, 1994; Dreyer & Oxford,

1996) (see Appendix B for the SILL).

Language Learning Orientation Scale – Intrinsic Motivation, Extrinsic Motivation and Amotivation Subscales (LLOS-IEA)

The LLOS-IEA (Noels et al., 2000) was adapted from the Academic Motivation Scale (AMS, Vallerand et al., 1989, 1992, 1993), formerly the French-Canadian version of Echelle de Motivation en Education (EME), a measure developed based on *Self-Determination Theory* (Deci & Ryan, 1985, 2002). The AMS was translated from French into English through parallel back-translation procedure, using two independent back translation sequences. The AMS has 28 items measuring seven subscales: amotivation, external regulation, introjected regulation, identified regulation, and three dimensions of intrinsic motivation (i.e., knowledge, accomplishment, and stimulation). The latter dimensions were added to the original view of intrinsic motivation from *Self-Determination Theory* by Vallerand and his colleagues (Vallerand et al., 1989), indicating intrinsic motivation to know, to accomplish things, and to experience stimulation. Intrinsic motivation to know can be defined as the feeling an individual experiences when he or she engages in an activity for the pleasure and fulfillment of learning and exploring something new, whereas intrinsic motivation to accomplish refers to a sensation that one would experience when attempting to accomplish or create something. Lastly, intrinsic motivation to experience stimulation refers to an emotion an individual undergoes when seeking out opportunities to gain sensory pleasures, aesthetic experiences, and excitement.

For these seven subscales, the LLOS-IEA only has 21 items.. The original LLOS-IEA used 7-point rating scales. However, to correspond with the scaling systems of the

other measures I used in the study and so as not to confuse the participants, a 5-point scale was adopted, with 1 being strongly disagree and 5 being strongly agree. Each subscale consists of three items, thus, subscale scores can range from 3 to 15. A high score on a subscale denotes high endorsement of that particular academic motivation towards English learning. To suit the purpose of the current study, the word second language in the questionnaire was changed to English.

For the seven subscales that were used in the study, items on the amotivation subscale reveal the lack of motivation regarding English learning in respondents, and an example is, "I cannot see why I study English, and frankly, I don't care." Items on the external regulation subscale signal that a respondent would engage in English learning only because of outward rewards or punishment, and an example is, "I study English because I have the impression that it is expected of me." Items measuring introjected regulation indicate that respondents learn English to either avoid guilt or anxiety or to obtain an ego boost. An example is, "I study English to show myself that I am a good citizen because I can speak a second language." Items measuring identified regulation show that a respondent identifies English learning as something he or she values, and an example is, "I study English because I choose to be the kind of person who can speak more than one language." As for the three dimensions of the intrinsic motivation subscale, a sample intrinsic motivation-knowledge item is, "I study English for the pleasure that I experience in knowing more about English literature." A sample intrinsic motivation-accomplishment item is, "I study English for the pleasure I experience when surpassing myself in my English studies." Lastly, a sample intrinsic motivation-stimulation item is,

"I study English for the 'high' I feel when hearing English spoken."

The Cronbach alpha index of internal consistency of the LLOS-IEA was acceptable for all subscales, ranging from .67 to .88 (Noels et al., 2003) (see Appendix C for the LLOS-IEA).

The Foreign Language Classroom Anxiety Scale (FLCAS)

This scale was developed to measure students' level of anxiety when they are in a foreign language classroom (Horwitz et al., 1986). The items tap into communication apprehension, text anxiety, and fear of negative evaluation, all of which are ongoing emotions students may experience in a foreign language classroom. A 5-point scale is utilized, with 1 being *strongly disagree* and 5 being *strongly agree*. The score is obtained by summing the responses for all 33 items, with negatively worded items reversely coded. Consequently, the lowest possible score a learner can get is 33 and the highest is 165. A higher score on the scale denotes higher intensity of anxiety a learner may experience in a language class. A sample item is, "I tremble when I know that I'm going to be called on in language class" (see Appendix D for the FLCAS).

The FLCAS has been shown to demonstrate strong internal reliability, with an alpha coefficient of .93 (n = 108) and a test-rest reliability over eight weeks of .83 (p = .001, n = 78) (Horwitz et al., 1986). Similar outcomes were reported in Aida's (1994) study, in which the Cronbach alpha coefficient was .94, with a sample of 96 students. Furthermore, test-retest reliability over a semester was .80 (p =. 01) for 54 students. The Chinese version of the FLCAS obtained a Cronbach alpha at .95 in Wu's (1994) study

and of .94 in Yeh's (1993) study.

According to Horwitz et al.'s (1986), foreign language anxiety could be distinguished from related constructs and had evidence of construct validity. The FLCAS had a correlation coefficient of .29 ($p = .002$, $n = 108$) with the Trait scale of the State-Trait Anxiety Inventory (Spielberger, 1983); of .53 ($p = .001$, $n = 60$) with the Test Anxiety Scale (Sarason, 1978); of .28 ($p = .063$, $n = 44$) with the Person Report of Communication Apprehension (McCroskey, 1970); of .36 ($p = .007$, $n = 56$) with the Fear of Negative Evaluation Scale (Watson & Friend, 1969), and of .77 ($p = .001$, $n = 108$) with the item, "Rate your anxiety level concerning foreign language class" (Horwitz et al., 1986).

Furthermore, the FLCAS demonstrated acceptable predictive validity. Scores on the FLCAS were moderately associated with expected grades in the foreign language course ($r = .52$, $p < .001$, $n = 108$). Lower actual final grades were negatively correlated with high FLCAS scores ($r = -.54$, $p = .001$, $n = 32$ for beginning French classes; $r = -.49$, $p = .003$, $n = 35$ for beginning Spanish classes) (Horwitz, 2001).

To suit the purpose of the current study, the word *foreign language* or *language* in the original scale was changed to *English*. On a side note, in the Chinese version of the FLCAS administered to the participants in the current study, only 31 of the 33 items were used. The two items that were omitted from the original scale are:

4. It frightens me when I don't understand what the teacher is saying in the foreign language.
27. I get nervous and confused when I'm speaking in my language class.

Because the sections selected for the current study were all taught by local Taiwanese instructors, instead of native English speakers, the classes were usually instructed in both Mandarin Chinese and English, which may actually decrease students' anxiety in their English classroom, in that they always had the assurance to ask their instructor for clarification in Chinese, when they missed or did not understand what their instructor had just said. Consequently, question #4 was taken out because it might not apply to the participants chosen for the current study. In addition, students in the selected sections seldom had the opportunity to speak in front of the class, for most of the class activities were done either in the form of lectures or pair work. Therefore, when asking students to respond to question #27, their response might be two-fold: one of speaking in front of the class and the other of speaking with a partner, because of their experience in class. To avoid bias in interpretation of the participants' responses to the question, question #27 was thus removed.

The Willingness-To-Communicate Scale (WTC)

The WTC scale was developed to measure a respondent's propensity toward approaching or avoiding the initiation of communication (McCroskey & Richmond, 1987). The scale has 20 items, eight of which are fillers and 12 that are scored as part of the scale. It yields a total score, three subscores based on types of interlocutors (strangers, acquaintances, and friends), and four subscores based on the nature of communication contexts (public, meeting, group, or dyad). Originally, the scale was scored on a 100-point scale. However, to be consistent with the scaling system of other measures that I

was using in this study and not to confuse the participants, a 5-point scale was adopted, with 1 being *I never do this*, and 5 being *I always do this*. The subscores were obtained by adding the scores of selected items on particular subscales and calculating an average, whereas the total score was computed by adding subscores for the contexts of communicating with strangers, acquaintances, and friends and dividing the sum by three. Higher scores indicate a respondent's readiness to initiate conversations with others under the circumstance where they find themselves.

Since the scale was developed in 1980s based on the societal context of the United States, modern day Taiwanese college students may not be able to relate themselves to the situation which was described in certain items. For example, with the item of "willing to communicate with a service station attendant," the receiver of the communication was changed to "salesperson who sells tickets in a booth at a local movie theater," because students could easily associate the statement with their experience and imagine themselves in the scenario. Furthermore, additional examples were added to certain items to help students conceptualize the scenario that was depicted. The following is a list of items that were further elaborated with examples:

119. Present a talk to a group of strangers (e.g., to give a presentation at a scholarly conference).
124. Talk in a small group of strangers (e.g., to introduce yourself to a group of classmates on the first day of class).
127. Talk in a large meeting of acquaintances (e.g., to speak up in class during the semester).

130. Present a talk to a group of friends (e.g., to tutor a group of friends on an assignment that they had difficulty with).

131. Talk in a small group of acquaintances (e.g., to speak up during a group discussion in class).

133. Talk in a large meeting of strangers (e.g., to answer questions in order to win a prize at a fair or contest).

135. Talk in a small group of friends (e.g., you are in the same group with your friends in a group discussion in class).

136. Present a talk to a group of acquaintances (e.g., to debrief in a meeting of the student organization which you belong to).

Studies conducted by McCroskey and his colleagues have found estimates of internal reliability of the total score of the scale to range from .86 to .95. Reliability estimates for the context subscores ranged from .60 to .83, while estimates for the receiver subscores ranged from .70 to .91 (McCroskey, 1992; McCroskey & Baer, 1985; McCroskey & McCroskey, 1986a, 1986b). Estimates obtained from data collected in other countries, such as Australia and Japan have been consistent with those generated from U.S. data (Barraclough, Christophel, & McCroskey, 1988; Yashima, Zenuk-Nishide, & Shimizu, 2004) (see Appendix E for the WTC scale).

Demographic Information Sheet

Demographic data were collected on participants' major, year at school, gender, age, duration of English study, experience of traveling to or living in any English-

speaking countries, their devotion to finding time and opportunities to improve their English, and how they rated their own English proficiency on the four language skills of listening, speaking, reading and writing.

Data Collection Procedures

Before going into the classrooms, consent from the instructors of 11 sections of Sophomore English course and one section of Freshman English course at Soochow University was obtained via email. In addition, a cover letter delineating the purpose of the study and a sample questionnaire were attached to the email. Students in the selected sections were informed of the study by their respective instructor a week before the study took place. On the day of the questionnaire administration, instructors taught for the first half of class time, one hour, and left one hour for me to conduct the survey. To insure consistency in the questionnaire administration, I gave instructions and proctored the survey myself. In the beginning of each questionnaire administration, the instructor of each section introduced me and my affiliation with the university as an alumna and former instructor of the sophomore English course. After that, the instructor left the room, and I distributed cover letters and consent forms to the students and reiterated that their participation in the study would be voluntary and would not in any way affect their grade in the course. On a side note, students in Taiwan are not usually given the choice to "opt out" when being asked to complete a survey for their teacher or other authoritative figures. Therefore, it was interesting to see what students' reaction would be, once given the alternative. In fact, only two students declined participation in the study, across all 12

sections. Upon the completion of the consent form, students who agreed to participate in the study were given 40 minutes to finish the questionnaire booklets that consisted of the following instruments all presented in Mandarin Chinese:

1. The Revised Cheek and Buss Shyness Scale (RCBS) – 13 items;
2. The ESL/EFL version of the Strategy Inventory for Language Learning (SILL) and an extra open-ended item inquiring the respondents of their awareness of strategy use – 51 items;
3. The Intrinsic Motivation, Extrinsic Motivation, and Amotivation subscales of the Language learning Orientation Scale (LLOS-IEA) – 21 items;
4. The Foreign Language Classroom Anxiety Scale (FLCAS) – 31 items;
5. The Willingness to Communicate Scale (WTC) in both Chinese and English scenarios – 40 items;
6. One shyness self-rating item, "Are you shy," with response of 1 being *yes*, and 2 being *no*;
7. A demographic information sheet.

The participants were instructed to answer multiple-choice items in the questionnaire booklet on scantrons, and to specify their responses to open-ended items on the questionnaire booklet itself. Data collection took two weeks, since quite a few sections met at concurrent times.

Main Hypotheses

Research Question 1. Are shyness and foreign language anxiety related? In other words, does degree of shyness accompany level of anxiety in foreign language class?

Hypothesis 1: It was expected that shyness and foreign language anxiety would be correlated positively.

Rationale. Due to the overlap between their underlying constructs, i.e., fear of negative evaluation and communication apprehension (Leary & Schlenker, 1981; Horwitz et al., 1986), students who are shy may also experience anxiety in their foreign language class.

Statistical analysis. The hypothesis was tested in two ways: first, the Pearson Product-Moment correlation coefficient was calculated between students' total scores on the Revised Cheek and Buss Shyness Scale (RCBS) and their scores on the Foreign Language Classroom Anxiety Scale (FLCAS). In addition, the relationship between students' response to the single self-rating shyness item, "Are you shy?" and their response to the RCBS was examined. The number of "true" shy and non-shy students was calculated consequently. An independent samples t-test was then run between the two groups on their scores on the FLCAS and see if the result would support the finding of the relationship between students' scores on RCBS and those on the FLCAS.

Research Question 2. What is the difference between shy and non-shy students on their strategy use? Does gender make a difference in strategy use for shy and non-shy students?

Hypothesis 2: It was expected that shy and non-shy students would use different strategies to approach various English-learning tasks that are required in class: shy students may use social and affective strategies less frequently than non-shy students.

Hypothesis 2a: It was expected that there would be gender differences in students' English- learning strategy use: women may use more social and affective strategies than men.

Rationale. Given that there are speaking and listening components listed in the syllabi of the sophomore and freshman English courses, instead of enthusiastically taking the opportunities to practice and perfect their speaking and listening skills by cooperating with their fellow students as their non-shy peers do, shy students may not use as many social and affective strategies to manage the oral and aural demands of the class, due to their fear of negative evaluation and communication apprehension. Of the subscales on the SILL, I expected shy individuals to score lower than the non-shy on the social and affective strategy subscale. Moreover, several studies on gender differences in strategy use found women to report using a wider array of strategies and more frequently than men (Ehrman & Oxford, 1989; Oxford & Nyikos, 1989; Oxford, 1993; Sy, 1994; Wang, 2002).

Statistical analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques with shyness and gender as independent variables and the six subscales of the SILL and the mean of the total score on the SILL as dependent variables. The critical value for the test of significance was set at $p = .01$.

Research Question 3. Do shy and non-shy students report having different types of motivation in EFL learning? Does gender make a difference on motivation for shy and non-shy students?

Hypothesis: Shy and non-shy students were expected to report having different types of motivation in EFL learning.

Rationale. Due to their fear of scrutiny by others, it was expected that shy students would tend to have less enjoyment in learning English in an English class. With that in mind, shy students were not expected to demonstrate the dimensions of intrinsic motivation (IM) included in the Language Learning Orientation Scale (LLOS-IEA), i.e., IM to know, IM to accomplish and IM to stimulate. Nonetheless, because the sophomore and the freshman English courses are both required, it is possible that the majority of the participants may have patterns of extrinsic motivation, such as external or introjected regulation. Previous research has not yet established a relationship between learners' shyness and motivation in EFL learning.

Statistical analysis. This hypothesis was tested using Multivariate Analysis of Variance (MANOVA) techniques with shyness as the independent variable and the seven subscales of the LLOS-IEA as dependent variables. The critical value for the test of significance was set at $p = .01$.

Research Question 4. When predicting strategy use from different kinds of motivation, do different motivation scores emerge as significant predictors for shy and non-shy individuals?

Hypothesis: The types of motivation that shy and non-shy students have in EFL learning were expected to influence their choice of learning strategies differently.

Rationale. Motivation has been shown to be one of the strongest predictors for L2 learners' choice of strategy use (Ehrman & Oxford, 1989; Oxford, & Nyikos, 1989; Oxford, Park-Oh, Ito, & Sumrall, 1993). When students are highly motivated, they tend to employ strategies more frequently than less-motivated students (Ehrman & Oxford, 1989, 1990; Oxford & Ehrman, 1988; Oxford, & Nyikos, 1989). However, when the language course is required, it has been shown that the motivation of students was significantly negatively correlated with strategy use (Liao, 2000; Peng, 2001).

Statistical analysis. This hypothesis was tested using Hierarchical Multiple Regression techniques to assess whether the type of self-determined motivation that shy and non-shy students have respectively would affect their choice of the six types of strategy on the Strategy Inventory for Language Learning (SILL), while holding students' foreign language anxiety and willingness to communicate in both Chinese and English constant. Each strategy was served as the dependent variable, and the analyses were run for shy and non-shy students separately. Foreign language anxiety and willingness to communicate in both Chinese and English were entered in the first model. Afterwards, the seven self-determined motivation types were entered in the second model. The R^2 change between the two models was examined.

Research Question 5. What is the relationship between shyness and willingness to communicate in Mandarin Chinese and English respectively?

Hypothesis 5: It was expected that students would be more willing to communicate in Mandarin Chinese than in English.

Hypothesis 5a: It was expected that shyness and willingness to communicate in both Mandarin Chinese and English would correlate negatively, that is, if a student is shy, he or she is going to be reluctant to engage in interactions with other people, whether in the mother tongue or in English.

Rationale. There are overlapping attributes under the constructs of both shyness and willingness to communicate in one's first language, communication apprehension and familiarity with the interlocutor(s) (Cheek, 1983; McCroskey, 1992; McCroskey & Richmond, 1987, 1991). However, willingness to communicate in a second or a foreign language is more complicated than willingness to communicate in one's first language, in that L1 communication is relevant to an individual's global personality trait, while L2 communication may involve intergroup issues and social implications (McIntyre et al., 1998).

Statistical analysis. The hypothesis was tested by examining the Pearson Product-Moment correlation coefficients between shyness and willingness to communicate in Chinese and shyness and willingness to communicate in English respectively. The critical value for the test of significance was set at $p = .01$. Also, an independent-samples t-test was conducted to see whether the participants reported being more willing to communicate in Chinese than in English.

Research Question 6. What is the relationship between foreign language anxiety and willingness to communicate in both Chinese and English?

Hypothesis: It was expected that foreign language anxiety and willingness to communicate in both Mandarin Chinese and English would correlate negatively, with the correlation between foreign language anxiety and willingness to communicate in English higher than that of foreign language anxiety and willingness to communicate in Chinese.

Rationale. Communication apprehension is one underlying construct that both foreign language anxiety and willingness to communicate tap into. As a result, it was expected that participants who scored high on the Foreign Language Classroom Anxiety Scale (FLCAS) would score low on their willingness to communicate in English.

Statistical analysis. The hypothesis was tested by examining the Pearson Product-Moment correlation coefficients between foreign language anxiety and willingness to communicate in Chinese and foreign language anxiety and willingness to communicate in English respectively. The critical value for the test of significance was set at $p = .01$.

Chapter 4

Results

This chapter presents the results of analyses to answer my research questions. One purpose of this study was to investigate whether there is a correlation between shyness and foreign language anxiety, as the relationship between the two constructs has not yet been established in the literature. Moreover, how Taiwanese college students cope and manage in their required English courses is of great interest: students' use of learning strategies, self-determined motivation regulations, foreign language anxiety, and their willingness to communicate in both Mandarin Chinese and English were further examined.

My analyses included the entire sample of 364 students. These analyses provide a glimpse into Taiwanese college students' predilection for shyness, the strategies they use to learn English, their self-determined motivation regulations towards their English studies, level of foreign language anxiety, and willingness to communicate in both Mandarin Chinese and English.

Descriptive Statistics

Descriptive Statistics Derived from the Demographic Information Sheet

The demographic information sheet provided information pertinent to the participants in this study including their major, year at school, gender, age, years of learning English, experience of traveling to or living in English-speaking countries, motivation and enjoyment in learning English, time spent learning English outside of

their English class, opportunities to communicate with others in English, and self-ratings of their English skills.

In terms of participants' motivation for their current English class, 66.5% reported that they were moderately motivated, while 20% of the participants reported they were either motivated or strongly motivated to study for the class. More than half of the participants also reported self-initiated English-learning activities, such as reading English newspapers and magazines, watching English language movies, and singing English songs, outside of their English class. On the other hand, 55% of the participants reported spending less than two hours a week studying English outside of their English class, with only 26% of them having opportunities or seeking opportunities to communicate with others in English.

When being asked to assess their four skills in English, on the whole, the participants rated their reading skills as the best, then listening, writing and speaking in descending order.

Reliability of the Measures

Cronbach alpha coefficients were computed to estimate the reliability of scores on each instrument administered in the study, namely, the Revised Cheek and Buss Shyness Scale (RCBS), the ESL/EFL version of the Strategy Inventory for Language Learning (SILL), the Language Learning Orientation Scale – Intrinsic Motivation, Extrinsic Motivation and Amotivation Subscales (LLOS-IEA), the Foreign Language Classroom Anxiety Scale (FLCAS), and the Willingness to Communicate Scale (WTC) in both

Chinese and English situations. The Chinese translations of all measures showed strong reliability of the scores (see Table 3).

Table 3

Number of Items and Reliability Coefficients of Each Measure

Name of the Instrument	Number of Items	Cronbach Alpha Coefficient
RCBS	13	.88
SILL	49	.94
LLOS-IEA	21	.85
FLCAS	31	.92
WTC – Chinese	20	.89
WTC – English	20	.95

Descriptive Statistics of the Measures

The Revised Cheek and Buss Shyness Scale. With the lowest possible score of 13 and highest possible score of 65, the mean of the total scores on the Revised Cheek and Buss Shyness Scale (RCBS) for my 364 participants was 37.7 (SD=8.62), which indicated that this group, as a whole, was somewhat shy. The lowest score in the group was 15 (n=2), while the highest was 62 (n=1). Using the cutoff score of 39, recommended by Cheek, to divide the participants into groups of shy and non-shy individuals, 44% were shy and 56% were non-shy. Within the shy group, 63 were men and 96 were women. In the non-shy group, 69 were men and 133 were women. The mean of the RCBS total score was 38.1 for men, and 37.7 for women. Both means are higher than the ones that Cheek (1983) reported in his U.S. college sample (33.3 for men; 32.4 for women), which implies that the Taiwanese sample as a whole reported being more socially anxious when interacting with strangers or feeling comfortable in a new environment.

Interestingly, the composition of shy and non-shy participants on the response to the self-rating shyness item was reversed. When being asked, "Are you shy," 44.8% of the participants reported they were not shy, while 55.2% of them thought of themselves as shy. Point-biserial correlation was calculated to detect the degree of correlation between the students' total score on the RCBS and self-rated shyness. It was found that the two scales were moderately correlated ($r = .52$; $p < .001$), which is a bit lower than the correlation reported by Hopko and colleagues (2005) ($r = .59$). A possible explanation for the lower correlation for the selected sample is that of cultural differences. In Chinese culture, it may be socially desirable to claim to be shy, in that there are certain virtues that are attached to the notion of shyness, such as self-discipline and maturity.

The Foreign Language Anxiety Classroom Scale. With the lowest possible total score of 31 and highest of 155, the mean total score for the 364 participants on the Foreign Language Anxiety Classroom Scale (FLCAS) was 93.4 (SD=17.65), with a minimum score of 43 (n =1) and a maximum of 150 (n =1). According to Horwitz (personal communication, 2008), if a student's total score on the FLCAS divided by the number of items on the measure exceeds 4, then that student can be anxious in a foreign language classroom. On the other hand, if a student's average on the FLCAS is below 3, then the student is not considered anxious in learning foreign languages in a classroom setting. In this selected sample, 16 students (4.4%) had an average above 4 on the FLCAS, and 166 students (45.6%) had an average below 3. Therefore, as a whole, the participants in this study were not excessively anxious regarding their English studies.

Table 4

Descriptive Statistics of RCBS and FLCAS

Name of the Instrument	Mean (SD)	Range
RCBS	37.7 (8.62)	15-62
FLCAS	93.4 (17.65)	43-150

Note. 16 students (4.4%) reported having a mean more than 4 per item on the FLCAS (anxious), and 166 students (45.6%) reported having a mean below 3 per item (not anxious).

The Strategy Inventory for Language Learning. The mean of the participants' total score on the Strategy Inventory for Language Learning (SILL) is 2.97, which indicates that participants in the current study sometimes use the strategies mentioned in the instrument. Among the six subscales, compensation strategy was reported as the strategy used most often by the participants (M = 3.40), followed by metacognitive strategy (M= 3.03), affective strategy (M = 3.00), memory strategy (M = 2.91), cognitive strategy (M = 2.89), and social strategy (M = 2.67) (Table 5). As a result, participants in the study reported frequently using strategies that help them understand the English materials presented to them or better express themselves in English by making guesses and use of gestures to compensate for their lack of English vocabulary or usage. Results suggested that this particular group of Taiwanese college students strives to some degree for better understanding, or uninterrupted communication in English, without being limited by their current English competence. On the other hand, participants reported the least use of social strategies; possibly because of the EFL context in which these English learners are situated. Social strategies involve cooperation with an interlocutor, often a native speaker, to make the meaning exchange more smooth. Taiwanese students learn English mostly in classroom settings, where meaning exchange is not required and cooperative learning is

not common.

Table 5

Frequency of Use of Strategies Reported in the SILL (mean in descending order)

Strategy Type	Mean (SD)	Range
Compensation	3.40 (.58)	1.50 – 5.00
Metacognitive	3.03 (.69)	1.00 – 5.00
Affective	3.00 (.66)	1.00 – 5.00
Memory	2.91 (.55)	1.22 – 4.33
Cognitive	2.89 (.59)	1.00 – 4.64
Social	2.67 (.65)	1.00 – 5.00
Mean of Total Strategy Use	2.98 (.50)	1.16 – 4.31

Language Learning Orientation Scale. Among the seven subscales of the Language Learning Orientation Scale – Intrinsic Motivation, Extrinsic Motivation and Amotivation Subscales (LLOS-IEA), identified regulation was the type of motivation that most participants reported having towards their English learning, followed by intrinsic motivation to know, extrinsic motivation, intrinsic motivation to accomplish, intrinsic motivation to stimulate, introjected motivation, and amotivation. It is not surprising that most of the participants reported having identified regulation regarding their English studies, for most Taiwanese people place a great value on excelling in English at a young age. Along the same line, it is reasonable to see that the participants endorsed amotivation regulation the least (Table 6).

Table 6

Types of Self-determined Motivation on the LLOS-IEA Reported (mean in descending order)

Self-determined Motivation Type	Mean (SD)	Range
Identified Regulation	3.80 (.93)	1.00 – 5.00
Intrinsic Motivation to Know	3.07 (.97)	1.00 – 5.00
Extrinsic Motivation	3.03 (.89)	1.00 – 5.00
Intrinsic Motivation to Accomplish	2.66 (.95)	1.00 – 5.00
Intrinsic Motivation to Stimulate	2.58 (1.07)	1.00 – 5.00
Introjected Motivation	2.49 (.93)	1.00 – 5.00
Amotivation	1.57 (.74)	1.00 – 4.67

The Willingness to Communicate Scale. When being asked how willing they are to communicate with others in Chinese, the participants showed a preference for feeling more comfortable talking with friends, while they reported feeling least comfortable talking with strangers (Table 7). This trend carried over to their willingness to communicate in English as well. However, one difference for the participants' willingness to communicate in both languages is that they reported more willingness to talk to another person who has a close relationship with them than to their acquaintances in Chinese, but in the English scenario, this trend was reversed (Table 8)

Table 7

Willingness to Communicate in Chinese (mean in descending order)

Subscale	Mean (SD)	Range
Friends	3.92 (.68)	1.50 – 5.00
Group Discussion	3.52 (.73)	1.00 – 5.00
Dyads	3.42 (.68)	1.00 – 5.00
Acquaintances	3.42 (.75)	1.00 – 5.00
Meetings	3.21 (.72)	1.00 – 5.00
Public Speaking	2.95 (.76)	1.00 – 5.00
Strangers	2.48 (.73)	1.00 – 5.00
WTC Total Score	3.27 (.59)	1.17 – 5.00

Table 8

Willingness to Communicate in English (mean in descending order)

Subscale	Mean (SD)	Range
Friends	2.93 (1.03)	1.00 – 5.00
Group Discussion	2.65 (.92)	1.00 – 5.00
Acquaintances	2.57 (.89)	1.00 – 5.00
Dyads	2.54 (.92)	1.00 – 5.00
Meetings	2.44 (.86)	1.00 – 5.00
Public Speaking	2.20 (.81)	1.00 – 5.00
Strangers	1.88 (.74)	1.00 – 5.00
WTC Total Score	2.46 (.80)	1.00 – 5.00

Main Research Questions

Research Question 1

Are shyness and foreign language anxiety related? In other words, does degree of shyness accompany level of anxiety in foreign language class?

Hypothesis 1: It was expected that shyness and foreign language anxiety would be correlated positively.

Correlation between Shyness and Foreign Language Anxiety

The hypothesis was tested in two ways: first, the Pearson Product-Moment correlation coefficient was calculated between students' total scores on the Revised Cheek and Buss Shyness Scale (RCBS) and their scores on the Foreign Language Classroom Anxiety Scale (FLCAS). The result indicated that students' scores on the Revised Cheek and Buss Shyness Scale (RCBS) correlated positively with their scores on Foreign Language Classroom Anxiety Scale (FLCAS) ($r = .42$, $p < .001$). The moderate positive correlation between the two constructs showed that even though there may be underlying overlapping attributes between the two, shyness and foreign language anxiety are not identical.

In addition, the relationship between students' response to the single self-rating shyness item, "Are you shy?" and their response to the RCBS was examined. The number of "true" shy and non-shy students was calculated consequently: there were 112 students who scored above 39 on the RCBS and also rated themselves as shy, with mean of 102.5

on the FLCAS (SD = 14.7), while there were 116 students who scored below 39 and rated themselves as non-shy, with mean of 85.1 on the FLCAS (SD = 16.5). Results of an independent samples t-test showed that there was a significant difference between the FLCAS scores of the "true" shy students and those of the non-shy students, $t(226) = 8.413$, $p < .001$. These results indicated that there was a relation between shyness and level of foreign language anxiety.

Research Question 2

What is the difference between shy and non-shy students on their strategy use? Does gender make a difference in strategy use for shy and non-shy students?

Hypothesis 2: There will be a significant difference in the mean scores on the subscales of the Strategy Inventory for Language Learning (SILL) between shy and non-shy students. It was expected that shy and non-shy students would use different strategies to approach various English-learning tasks that are required in class: shy students may use social and affective strategies less frequently than the non-shy.

Hypothesis 2a: It was expected that there would be gender differences in students' English- learning strategy use: women may use more social and affective strategies than men.

Two-way MANOVA: Shyness and Gender with Strategy Use as Dependent Variable

To test these hypotheses, I first divided the participants into shy and non-shy groups using a cutoff score of 39 on the Revised Cheek and Buss Shyness Scale (RCBS).

Then, each shyness group was divided into men and women, and shyness and gender were used as independent variables, with the six subscales of the Strategy Inventory for Language Learning (SILL) as dependent variables. The critical value for the test of significance was set at $p < .01$ to control for the possibility of an inflated alpha level.

The overall F test indicated that there were significant differences between shy and non-shy students' use of English-learning strategies, $F (7, 351) = 5.71$, $p < .001$. Subsequent multivariate tests also showed significant differences between shy and non-shy students' overall strategy use and their use of the six categories of strategy on the SILL. As a whole, non-shy students reported using learning strategies more frequently than their shy counterparts in managing the demands of their English class. Moreover, non-shy students reported using strategies in each of the six categories more often than the shy students, which failed to support the hypothesis (Table 9). This finding implies that there may be variables other than shyness that affect students' strategy use in their English learning.

Table 9

Descriptive Statistics of Strategy Use of Shy and Non-shy Students

	Mean for Non-shy Group	Mean for Shy Group	Mean Difference
Memory	2.98	2.81	.17*
Cognitive	2.99	2.75	.24*
Compensation	3.50	3.28	.22**
Metacognitive	3.20	2.82	.38**
Affective	3.10	2.88	.22*
Social	2.85	2.48	.37**

*$p < .01$, **$p < .001$

However, there was no significant multivariate F for gender on strategy use, F (7, 351) = .73, p = .65. Furthermore, no interaction effect between shyness and gender on strategy use was found, F (7, 351) = .34, p = .93.

Research Question 3

Do shy and non-shy students report having different types of motivation in EFL learning? Does gender make a difference on motivation for shy and non-shy students?

Hypothesis 3: Shy and non-shy students were expected to report having different types of motivation in EFL learning.

Two-way MANOVA: Shyness and Gender with Self-determined Motivation Regulation as Dependent Variable

The two shyness groups (the shy and the non-shy) and gender were entered as independent variables and the seven self-determined motivation regulations on the LLOS-IEA as dependent variables. The critical value for the test of significance was set at $p < .01$.

The overall F test indicated that there were significant differences between shy and non-shy students' motivation regulation regarding their English studies, F (7, 351) = 3.20, p = .003. Subsequent multivariate tests showed that there were significant differences between shy and non-shy students on identified regulation and intrinsic motivation to know ($p < .01$), with non-shy students reporting having more of identified regulation and intrinsic motivation to know compared to their shy counterparts in

learning English (see Table 10). It seems that non-shy students have incorporated the mastery of the English language as one of their important goals in life (identified regulation) and readily engage themselves in English learning activities, because they find pleasure and fulfillment in doing so. Again, no gender differences were found on the types of self-determined motivation reported by students, $F(7, 351) = 2.58$, $p = .013$, and no interactions between shyness and gender on self-determined motivation were found, $F(7, 351) = 1.37$, $p = .22$.

Table 10

MANOVA for Shyness on Self-determined Motivation Regulations

Self-determined Motivation Regulation	Mean for Non-shy Group	Mean for Shy Group	Mean Difference
Amotivation	1.54	1.69	-.15
Extrinsic Motivation	2.99	3.07	-.08
Introjected Regulation	2.43	2.51	-.08
Identified Regulation	3.90	3.59	.31*
Intrinsic Motivation			
- to know	3.19	2.85	.34*
- to accomplish	2.70	2.52	.18
- to stimulate	2.65	2.39	.26

*$p < .01$

Research Question 4

When predicting strategy use from different kinds of motivation, do different motivation scores emerge as significant predictors for shy and non-shy students?

Hypothesis 4: The types of motivation that shy and non-shy students have for learning English were expected to influence their choice of learning strategies differently.

Hierarchical Multiple Regression Analyses

A series of hierarchical multiple regressions was conducted to assess whether the type of self-determined motivation that shy and non-shy students reported respectively would affect their choice of the six types of strategy on the Strategy Inventory for Language Learning (SILL), while accounting for their level of foreign language anxiety and willingness to communicate in both Chinese and English. In Step 1, students' scores from the Foreign Language Classroom Anxiety Scale (FLCAS), Willingness to Communicate Scale (WTC) in Chinese, and WTC in English were entered into the model to control for their influence on the use of respective strategies. In Step 2, the scores of the seven self-determined motivation regulations were entered to examine the unique contribution of each motivation type in predicting the use of respective strategies. The analyses were performed separately for shy and non-shy groups. The critical value for the test of significance was set at $p < .01$.

Memory Strategies. In the first regression predicting non-shy students' use of memory strategies in learning English, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 8% of the variance in memory strategy use, $\Delta F(3, 198) = 6.03$, $p = .001$. In Step 2, the combination of the seven self-determined motivation regulation scores explained an additional 11% of the variance in memory strategy use, $\Delta F(7, 191) = 3.85$, $p < .001$. Still, none of the self-determined motivation regulation scores by themselves emerged as significant predictors of non-shy students' use of memory strategies (see Table 11, top panel).

By contrast, for shy students, in Step 1, the scores on FLCAS, WTC in Chinese,

and WTC in English accounted for 18% of the variance in memory strategy use, $\Delta F(3, 155) = 11.17$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 21% of the variance in memory strategy use, $\Delta F(7, 148) = 7.42$, $p < .001$. Among them, intrinsic motivation to know was the strongest predictor ($\beta = .35$, $t = 3.03$, $p < .01$) that influenced shy students' memory strategy use. Therefore, for shy students, if they had some degree of enthusiasm about learning new things, they were likely to use mnemonic devices, such as grouping and association, to help them make progress in their English studies (Table 11, bottom panel).

Table 11

Predictors of the Use of Memory Strategies

Non-shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	*df*	β	*t*	Sig.
Step 1		.08	.07	.08	6.03	3, 198			.001*
	FLCAS						-.12	-1.59	.114
	WTC_1						.22	3.04	.003*
	WTC_2						.07	.87	.387
Step 2		.20	.16	.11	3.85	7, 191			.000**
	FLCAS						-.08	-1.01	.000**
	WTC_1						.17	2.44	.314
	WTC_2						.03	.44	.016
	Amot						-.03	-.39	.658
	Extreg						.08	.94	.699
	Introjec						.01	.17	.350
	Identif						.05	.57	.864
	IM_kn						.13	1.33	.568
	IM_ac						.20	2.12	.184
	IM_st						-.03	-.28	.036

Note. FLCAS: Foreign Language Classroom Anxiety Scale; WTC_1: Willingness to Communicate in Chinese; WTC_2: Willingness to Communicate in English; Amot: Amotivation; Extreg: Extrinsic Regulation; Introjec: Introjected Regulation: Identif: Identified Regulation; IM_kn: Intrinsic Motivation to Know; IM_ac: Intrinsic Motivation to Accomplish; IM_st: Intrinsic Motivation to Stimulate.

*p< .01, **p< .001

Shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	*df*	β	*t*	Sig.
Step 1		0.18	0.16	0.18	11.17	3, 155			.000**
	FLCAS						-.29	-3.61	.000**
	WTC_1						.19	2.29	.024
	WTC_2						.06	.68	.495
Step 2		0.39	0.35	0.21	7.42	7, 148			.000**
	FLCAS						-.18	-2.21	.029
	WTC_1						.16	2.06	.041
	WTC_2						-.01	-.08	.941
	Amot						.05	.68	.496
	Extreg						-.02	-.30	.766
	Introjec						.08	.82	.415
	Identif						-.08	-.77	.440
	IM_kn						.35	3.03	.003*
	IM_ac						.23	2.10	.037
	IM_st						-.05	-.50	.621

*p< .01, **p< .001

Cognitive Strategies. The next set of regression analyses tested for non-shy students' use of cognitive strategies in learning English. In Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 37% of the variance in cognitive strategy use, $\Delta F(3, 198) = 38.51$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 12% of the variance in cognitive strategy use, $\Delta F(7, 191) = 6.29$, $p < .001$. Among them, intrinsic motivation to know was the strongest predictor ($\beta = .31$, $t = 3.91$, $p < .001$) that influenced non-shy students' cognitive strategy use (Table 12, top panel).

In the same vein, for shy students, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 23% of the variance in cognitive strategy use, $\Delta F(3, 155) = 15.62$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 30% of the variance cognitive strategy use, $\Delta F(7, 148) = 13.42$, $p < .001$. Among them, intrinsic motivation to know was also the strongest predictor ($\beta = .32$, $t = 3.14$, $p < .01$) that influenced shy students' cognitive strategy use (Table 12, bottom panel).

In sum, the greater students' intrinsic motivation to know, both for shy and non-shy students, the higher the likelihood to use cognitive strategies, such as analyzing, summarizing and seeking opportunities to practice, to help them keep up with their English studies.

Table 12

Predictors of the Use of Cognitive Strategies

Non-shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.37	.36	.37	38.51	3, 198			.000**
	FLCAS						-.40	-6.66	.000**
	WTC_1						.14	2.32	.021
	WTC_2						.28	4.47	.000**
Step 2		.49	.46	.12	6.29	7, 191			.000**
	FLCAS						-.31	-5.16	.000**
	WTC_1						.12	2.17	.032
	WTC_2						.17	2.81	.005*
	Amot						.06	1.00	.321
	Extreg						-.09	-1.43	.153
	Introjec						.04	.56	.576
	Identif						.02	.32	.753
	IM_kn						.31	3.91	.000**
	IM_ac						-.03	-.38	.708
	IM_st						.09	1.07	.288

*p< .01, **p< .001

Shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.23	.22	.23	15.62	3, 155			.000**
	FLCAS						-.38	-5.02	.000**
	WTC_1						.18	2.14	.034
	WTC_2						.04	.42	.676
Step 2		.53	.50	.30	13.42	7, 148			.000**
	FLCAS						-.16	-2.21	.028
	WTC_1						.13	2.00	.047
	WTC_2						-.02	-.34	.738
	Amot						-.09	-1.30	.195
	Extreg						-.15	-2.18	.031
	Introjec						.01	.11	.911
	Identif						.00	.04	.967
	IM_kn						.32	3.14	.002*
	IM_ac						.26	2.62	.010
	IM_st						.04	.46	.644

*p< .01, **p< .001

Compensation Strategies. For non-shy students' use of compensation strategies in learning English, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 23% of the variance in compensation strategy use, $\Delta F(3, 198) = 20.07$, $p < .001$. In Step 2, the seven self-determined motivation regulations only explained an additional 7% of the variance in compensation strategy use, $\Delta F(7, 191) = 3.04$, $p < .001$. None of the self-determined motivation regulations emerged as significant predictors of non-shy students' use of compensation strategies (Table 13, top panel).

Along the same line, for shy students, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 14% of the variance in compensation strategy use, $\Delta F(3, 155) = 8.59$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 14% of the variance compensation strategy use, $\Delta F(7, 148) = 4.13$, $p < .001$. Again, none of the motivation regulations individually appeared as significant predictors of shy students' use of compensation strategies (Table 13, bottom panel).

Table 13

Predictors of the Use of Compensation Strategies

Non-shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.23	.22	.23	20.07	3, 198			.000**
	FLCAS						-.32	-4.74	.000**
	WTC_1						.15	2.35	.020
	WTC_2						.20	2.88	.004*
Step 2		.31	.27	.07	3.04	7, 191			.000**
	FLCAS						-.25	-3.50	.001*
	WTC_1						.09	1.41	.162
	WTC_2						.15	2.12	.036
	Amot						.01	.07	.947
	Extreg						.11	1.46	.147
	Introjec						-.09	-1.14	.255
	Identif						.02	.24	.810
	IM_kn						.24	2.60	.010
	IM_ac						-.20	-2.27	.025
	IM_st						.22	2.31	.022

*p< .01, **p< .001

Shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.14	.13	.14	8.59	3, 155			.000**
	FLCAS						-.19	-2.34	.021
	WTC_1						.21	2.46	.015
	WTC_2						.09	.97	.334
Step 2		.28	.23	.14	4.13	7, 148			.000**
	FLCAS						-.07	-.78	.436
	WTC_1						.20	2.40	.017
	WTC_2						.07	.76	.451
	Amot						.05	.58	.566
	Extreg						-.06	-.74	.462
	Introjec						-.09	-.88	.378
	Identif						.21	1.82	.072
	IM_kn						.20	1.59	.114
	IM_ac						.29	2.37	.019
	IM_st						-.22	-1.82	.071

**p< .001

Metacognitive Strategies. For non-shy students' use of metacognitive strategies in learning English, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 16% of the variance in metacognitive strategy use, $\Delta F(3, 198) = 12.89$, $p < .001$. In Step 2, the seven self-determined motivation regulations only explained an additional 22% of the variance in metacognitive strategy use, $\Delta F(7, 191) = 10.01$, $p < .001$. None of the self-determined motivation regulations individually emerged as significant predictors of non-shy students' use of metacognitive strategies (Table 14, top panel).

By contrast, for shy students, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 14% of the variance in metacognitive strategy use, $\Delta F(3, 155) = 8.55$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 37% of the variance in metacognitive strategy use, $\Delta F(7, 148) = 15.65$, $p < .001$. Among them, intrinsic motivation to know was the strongest predictor ($\beta = .36$, $t = 3.47$, $p < .01$) that influenced shy students' metacognitive strategy use. As a result, for shy students, their use of compensation strategies such as directing their attention, planning for English studies, or evaluating and monitoring their progress, was predicted by the degree to which they reported intrinsic motivation to know (Table 14, bottom panel).

Table 14

Predictors of the Use of Metacognitive Strategies

Non-shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.16	.15	.16	12.89	3, 198			.000**
	FLCAS						-.20	-2.89	.004*
	WTC_1						.19	2.75	.007*
	WTC_2						.18	2.58	.011
Step 2		.39	.36	.22	10.01	7, 191			.000**
	FLCAS						-.10	-1.48	.140
	WTC_1						.16	2.55	.011
	WTC_2						.10	1.46	.147
	Amot						-.11	-1.64	.104
	Extreg						-.08	-1.13	.262
	Introjec						.12	1.72	.087
	Identif						.07	.90	.371
	IM_kn						.22	2.48	.014
	IM_ac						.14	1.72	.088
	IM_st						.04	.48	.634

*p< .01, **p< .001

Shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.14	.13	.14	8.55	3, 155			.000**
	FLCAS						-.25	-3.09	.002*
	WTC_1						-.01	-.13	.899
	WTC_2						.21	2.28	.024
Step 2		.51	.47	.37	15.65	7, 148			.000**
	FLCAS						-.08	-1.11	.270
	WTC_1						-.08	-1.10	.271
	WTC_2						.13	1.77	.078
	Amot						-.18	-2.61	.010
	Extreg						-.07	-.93	.356
	Introjec						.13	1.53	.129
	Identif						.04	.45	.653
	IM_kn						.36	3.47	.001*
	IM_ac						.15	1.50	.137
	IM_st						-.01	-.07	.941

*p< .01, **p< .001

Affective Strategies. Following the same model, in the next analysis from their motivation scores, non-shy students' use of affective strategies in learning English, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 11% of the variance in affective strategy use, $\Delta F(3, 198) = 8.07$, $p < .001$. In Step 2, the seven self-determined motivation regulations only explained an additional 12% of the variance in affective strategy use, $\Delta F(7, 191) = 4.19$, $p < .001$. None of the self-determined motivation regulations emerged as significant individual predictors of non-shy students' use of affective strategies (Table 15, top panel).

On the contrary, for shy students, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 11% of the variance in affective strategy use, $\Delta F(3, 155) = 6.24$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 25% of the variance in affective strategy use, $\Delta F(7, 148) = 8.19$, $p < .001$, and this time, two motivation scores emerged as significant predictors. Introjected regulation ($\beta = .27$, $t = 2.81$, $p < .01$) and intrinsic motivation to know ($\beta = .36$, $t = 3.03$, $p < .01$) both influenced shy students' use of strategies to reduce their anxiety and cheer themselves up when they encountered setbacks or threats in their English studies (Table 15, bottom panel).

Table 15

Predictors of the Use of Affective Strategies

Non-shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.11	.10	.11	8.07	3, 198			.000**
	FLCAS						-.14	-1.92	.056
	WTC_1						.23	3.27	.001*
	WTC_2						.09	1.25	.212
Step 2		.23	.19	.12	4.19	7, 191			.000**
	FLCAS						-.09	-1.15	.252
	WTC_1						.21	2.97	.003*
	WTC_2						.04	.49	.622
	Amot						-.02	-.25	.805
	Extreg						-.03	-.41	.686
	Introjec						.20	2.44	.016
	Identif						-.02	-.23	.821
	IM_kn						.16	1.65	.102
	IM_ac						-.02	-.23	.818
	IM_st						.12	1.23	.222

*p< .01, **p< .001

Shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.11	.09	.11	6.24	3, 155			.000**
	FLCAS						-.03	-.39	.700
	WTC_1						.23	2.63	.009*
	WTC_2						.13	1.35	.178
Step 2		.36	.31	.25	8.19	7, 148			.000**
	FLCAS						.02	.22	.827
	WTC_1						.17	2.19	.030
	WTC_2						.04	.44	.659
	Amot						-.09	-1.18	.239
	Extreg						-.01	-.06	.953
	Introjec						.27	2.81	.006*
	Identif						-.07	-.68	.501
	IM_kn						.36	3.03	.003*
	IM_ac						.09	.81	.421
	IM_st						-.11	-.95	.343

*p< .01, **p< .001

Social Strategies. Lastly, as non-shy students' use of social strategies in learning English, in Step 1, the scores on FLCAS, WTC in Chinese, and WTC in English accounted for 26% of the variance in social strategy use, $\Delta F(3, 198) = 23.66$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 11% of the variance in social strategy use, $\Delta F(7, 191) = 4.99$, $p < .001$. Among these, intrinsic motivation to know was the strongest predictor ($\beta = .28$, $t = 3.22$, $p < .01$) that influenced non-shy students' social strategy use (Table 16, top panel).

Similarly, for shy students, in Step 1, the scores on FLCAS, WTC in Chinese and WTC in English accounted for 12% of the variance in social strategy use, $\Delta F(3, 155) = 6.95$, $p < .001$. In Step 2, the seven self-determined motivation regulations explained an additional 29% of the variance social strategy use, $\Delta F(7, 148) = 10.44$, $p < .001$. Among them, intrinsic motivation to know was again the strongest predictor ($\beta = .38$, $t = 3.27$, $p < .01$) that influenced shy students' use of strategies such as interacting with their interlocutor(s) in English and developing awareness of the culture of their interlocutor(s) (Table 16, bottom panel).

Table 16

Predictors of the Use of Social Strategies

Non-shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.26	.25	.26	23.66	3, 198			.000**
	FLCAS						-.31	-4.78	.000**
	WTC_1						.17	2.73	.007
	WTC_2						.23	3.41	.001*
Step 2		.38	.35	.11	4.99	7, 191			.000**
	FLCAS						-.27	-4.05	.000**
	WTC_1						.14	2.25	.026
	WTC_2						.17	2.55	.012
	Amot						.04	.59	.555
	Extreg						.04	.54	.587
	Introjec						.15	2.01	.046
	Identif						-.08	-.94	.350
	IM_kn						.28	3.22	.001*
	IM_ac						-.07	-.78	.439
	IM_st						.09	1.05	.297

*p< .01, **p< .001

Shy

Model		R^2	Adj. R^2	ΔR^2	ΔF	df	β	t	Sig.
Step 1		.12	.10	.12	6.95	3, 155			.000**
	FLCAS						-.14	-1.73	.086
	WTC_1						.14	1.62	.108
	WTC_2						.16	1.76	.080
Step 2		.41	.37	.29	10.44	7, 148			.000**
	FLCAS						.01	.18	.862
	WTC_1						.11	1.48	.140
	WTC_2						.07	.93	.356
	Amot						.05	.64	.522
	Extreg						-.19	-2.47	.015
	Introjec						.15	1.60	.112
	Identif						.08	.74	.461
	IM_kn						.38	3.27	.001*
	IM_ac						.11	.99	.324
	IM_st						-.01	-.01	.996

*p< .01, **p< .001

Based on the results from the hierarchical multiple regression analyses above, intrinsic motivation to know appears to be the driving force for both shy and non-shy students in this study for their use of most of the strategies listed in the Strategy Inventory for Language Learning (SILL) (Table 17).

Table 17

Predictors of the Use of Respective Strategies for Shy and Non-shy Groups

Strategy	Shy Group	Non-shy Group
Memory	IM- know*	--------
Cognitive	IM- know*	IM- know**
Compensation	--------	--------
Metacognitive	IM- know*	--------
Affective	Introjected Regulation*	--------
	IM- know*	
Social	IM- know*	IM- know*

*$p < .01$, **$p < .001$

Research Question 5

What is the relationship between shyness and willingness to communicate in Mandarin Chinese and English respectively?

Hypothesis 5: It was expected that students would be more willing to communicate in Mandarin Chinese than in English.

Hypothesis 5a: It was expected that shyness and willingness to communicate in both Mandarin Chinese and English would correlate negatively. That is, if a student is shy, he or she is likely to be more reluctant than a non-shy person to engage in interactions with other people, whether in the mother tongue or in English.

I used several analyses to test this hypothesis.

T-test for WTC in Chinese and WTC in English

First of all, paired-sample t-tests were run to determine whether the students were more willing to communicate in Chinese than they were in English. Not surprisingly, the students reported an overall preference across all settings on the WTC scale to communicate in their mother tongue, Chinese, to English ($p < .001$)

On the WTC scale in Chinese, the top three scenarios that students reported willingness to interact with others were to talk with *Friends*, talk in *Group Discussions* and talk with *Acquaintances* (tied with talk in *Dyads*). Students reported the least willingness to initiate conversations with *Strangers*.

The same trend was carried over to their responses on the WTC scale in English: talking with *Friends*, talking in *Group Discussions* and talking with *Acquaintances* were also students' top three choices if they had to interact with others. Similarly, talking with *Strangers* remained the least preferred scenario for students to be willing to communicate (Table 18).

Table 18

T-test Results for Mean Differences between Subscales on WTC in Chinese and WTC in English

Subscale	WTC in Chinese	WTC in English	Mean Difference
Group Discussions	3.52	2.65	.87**
Meetings	3.21	2.44	.77**
Dyads	3.42	2.54	.88**
Public Speaking	2.94	2.20	.74**
Strangers	2.48	1.88	.60**
Acquaintances	3.42	2.57	.85**
Friends	3.92	2.93	.99**
Total Score	3.27	2.46	.81**

**$p < .001$

Correlation between Shyness and Willingness to Communicate in Chinese

The correlation between the total score on the Revised Cheek and Buss Shyness Scale (RCBS) and the total score on the Willingness to Communicate Scale (WTC) in Chinese was found to be negative ($r = -.53$, $p < .001$). In addition, the correlation between shyness and the seven respective subscales on WTC scale in Chinese were all significantly negative ($p < .001$). Therefore, the results from the correlation analyses indicated that the more shyness students reported, the less willing they were to initiate interactions with other individual(s) in their native language, Mandarin Chinese (Table 19).

Table 19

Correlation Matrix of the Relationship between Shyness and the Seven Subscales on the WTC in Chinese

	Shyness	Group Discussions	Meetings	Dyads	Public Speaking	Strangers	Acquaintances	Friends
Shyness	1.00							
Group Discussions	-.466**	1.00						
Meetings	-.468**	.552**	1.00					
Dyads	-.367**	.512**	.481**	1.00				
Public Speaking	-.422**	.693**	.612**	.450**	1.00			
Strangers	-.481**	.618**	.671**	.481**	.697**	1.00		
Acquaintances	-.446**	.755**	.688**	.696**	.752**	.502**	1.00	
Friends	-.361**	.709**	.649**	.653**	.645**	.347**	.684**	1.00

**$p < .001$

Correlation between Shyness and Willingness to Communicate in English

The correlation between the total score on the Revised Cheek and Buss Shyness Scale (RCBS) and the total score on the Willingness to Communicate Scale (WTC) in English was found to be negative ($r = -.31$, $p < .001$). More specifically, the correlation between shyness and the seven respective subscales on the WTC scale in English were all significantly negative ($p < .001$). The results indicated that the more shyness a student reported, the less willing he or she was to initiate interactions with other people across all settings in English (Table 20).

Table 20

Correlation Matrix of the Relationship between Shyness and the Seven Subscales on the WTC in English

	Shyness	Group Discussions	Meetings	Dyads	Public Speaking	Strangers	Acquaintances	Friends
Shyness	1.00							
Group Discussions	-.291**	1.00						
Meetings	-.333**	.820**	1.00					
Dyads	-.241**	.781**	.789**	1.00				
Public Speaking	-.271**	.786**	.783**	.693**	1.00			
Strangers	-.258**	.701**	.758**	.677**	.821**	1.00		
Acquaintances	-.281**	.896**	.881**	.855**	.839**	.681**	1.00	
Friends	-.294**	.892**	.858**	.868**	.758**	.579**	.865**	1.00

**p< .001

Research Question 6

What is the relationship between foreign language anxiety and willingness to communicate in both Chinese and English?

Hypothesis 6: It was expected that foreign language anxiety and willingness to communicate in both Mandarin Chinese and English would correlate negatively, with the correlation between foreign language anxiety and willingness to communicate in English higher than that of foreign language anxiety and willingness to communicate in Chinese.

Correlation (FLCAS and WTC in Chinese vs. FLCAS and WTC in English)

The correlation between students' score on the FLCAS and their total score on the WTC scale in Chinese was found to be negative (r = -.30, p < .001) (Table 21). In a

similar fashion, the correlation between students' score on the FLCAS and their total score on the WTC scale in English was also found to be negative ($r = -.42$, $p < .001$) (Table 22). A test of whether these correlation coefficients are significantly different from each other revealed that they were significant, $t(357) = -2.10$, $p < .05$. That is to say, the more willing students are to communicate in English, the less anxiety they are likely to experience in their English classes, and WTC in Chinese, although also negatively associated with anxiety in English, was less strongly associated.

Table 21

Correlation Matrix of the Relationship between FLCAS and the Seven Subscales on the WTC in Chinese

	FLCAS	Group Discussions	Meetings	Dyads	Public Speaking	Strangers	Acquaintances	Friends	WTC_ Chinese
FLCAS	1.00								
Group Discussions	-.322**	1.00							
Meetings	-.230**	.552**	1.00						
Dyads	-.164**	.512**	.481**	1.00					
Public Speaking	-.265**	.693**	.612**	.450**	1.00				
Strangers	-.279**	.618**	.671**	.481**	.697**	1.00			
Acquaintances	-.245**	.755**	.688**	.696**	.752**	.502**	1.00		
Friends	-.224**	.709**	.649**	.653**	.645**	.347**	.684**	1.00	
WTC_ Chinese	-.304**	.842**	.815**	.742**	.852**	.756**	.891**	.815**	1.00

**p< .001

Table 22

Correlation Matrix of the Relationship between FLCAS and the Seven Subscales on the WTC in English

	FLCAS	Group Discussions	Meetings	Dyads	Public Speaking	Strangers	Acquaintances	Friends	WTC_ English
FLCAS	1.00								
Group Discussions	-.369**	1.00							
Meetings	-.404**	.820**	1.00						
Dyads	-.345**	.781**	.789**	1.00					
Public Speaking	-.401**	.786**	.783**	.693**	1.00				
Strangers	-.328**	.701**	.758**	.677**	.821**	1.00			
Acquaintances	-.398**	.896**	.881**	.855**	.839**	.681**	1.00		
Friends	-.390**	.892**	.858**	.868**	.758**	.579**	.865**	1.00	
WTC_ English	-.416**	.931**	.928**	.898**	.889**	.809**	.952**	.928**	1.00

**p< .001

Chapter 5

Discussion

In this chapter, I will describe the most important findings of this study, compare and contrast them with the published literature, and discuss the limitations and pedagogical implications that applied in this study.

General Discussion

Shyness Reported among Taiwanese College Students in the Study

On the single item that asked students to identify themselves as shy or not shy, the percentage of shy students (55.2%) was somewhat higher than non-shy students (44.8%). This phenomenon can be explained by cultural influences coming from a Confucian perspective that places a critical emphasis on interpersonal relationships and on how an individual should carry himself or herself. In a country such as Taiwan, predominantly influenced by Chinese culture, self-restraint and the value of public evaluation are likely to have been a part of the socialization process of these participants. As children growing up, they had likely unconsciously developed a strong sense of public self-consciousness and engaged in behaviors such as impression management and face-saving in order to avoid disapproval (Yang, 1981). During the process of learning a second language, a change of self-image, the adoption of new social and cultural behaviors, and ways of being within an individual may occur (Williams & Burden, 1997). Consequently, it is not surprising that Taiwanese students would be even more sensitive to the judgment of the public on their language behavior and may therefore engage in less "risk-taking"

behavior in an English class, such as demonstrating submission to the teacher, the grammar, or the textbooks, as an alternative to save face and protect their self-esteem (Wen & Clement, 2003).

However, the trend above was reversed on students' responses to the Revised Cheek and Buss Shyness Scale (RCBS): 44% were labeled shy, and 56% non-shy. This finding can perhaps be explained by the evolving social and economic situation in Taiwan. The visibility of Taiwan's economic and technological advances on the global scene and the prevalence of Western values of individualism and autonomy may have affected children's shy behavior and how those behaviors are perceived in modern Taiwanese society. The same trend was found in Mainland China as well. In his 2005 study, Chen and his colleagues (2005) examined the relationship between shyness-inhibition and adjustment among Chinese children in three urban cohorts (1990, 1998, and 2002). The results indicated that the relationship varied significantly across cohorts: in the 1990 cohort, shyness was perceived positively by adults and peers, and was associated with peer acceptance, leadership, and adjustment at school. By contrast, shyness was related to peer rejection, depression, and problems at school in the 2002 cohort. As for the 1998 cohort, shyness was found to be positively associated with both peer acceptance and peer rejection, indicating mixed attitudes of peers towards shy-inhibited children, which may mirror the cultural conflict between Western imported individualistic values and the indigenous Chinese values of reticence and self-control.

In addition, the fact that there were more non-shy students than shy students in this sample may also be attributed to their majors: a little more than a half of the students

(52%) were either in business (e.g., accounting and international trade) or law school. Students who choose to major in these subjects may have a preference for interacting with others because discussion and negotiation with peers and colleagues are expected in both their classrooms and in their future workplace.

Relationship between Shyness and Foreign Language Anxiety

There was a positive and moderate correlation between shyness and foreign language anxiety. Students who reported to be shy tended to feel anxious in the foreign language classroom. On the other hand, the moderate correlation between shyness and foreign language anxiety also implies that the two constructs, though related, are not identical.

Because the current study only used 31 items on the FLCAS, in order to compare the results obtained from my sample with the results from previous studies, I divided the means reported in each study by the number of items used, and obtained new means for respective studies. The table below gives the details (Table 23).

Table 23
Comparison of the FLCAS Results from Five Studies

Study	Language Class Enrolled	Number of Students	FLCAS Items Used	Mean	SD	Rescaled Mean
Aida (1994)	Japanese	96	33	96.7	22.1	2.93
Cheng (1998)	English	423	33	94.9	20.0	2.88
Horwitz (1986)	Various foreign languages	108	33	94.5	21.4	2.86
Truitt (1995)	English	204	33	101.2	23.4	3.07
Current Study (2008)	English	364	31	93.4	17.7	3.01

Compared to the results reported by Cheng (1998) on 423 Taiwanese university students (rescaled mean = 2.88), the mean for my sample was slightly higher (3.01). It seemed that the students in this study experienced more anxiety in their English class than those in Cheng's study. It is worth noting that Cheng recruited exclusively English majors from four universities for her study, but I only included non-English majors from one university in this study. Moreover, among the five studies listed above, only the rescaled mean of this study and that of Truitt's (1995) were higher than 3.0, which indicated that students in both studies experienced more anxiety than those in the other three studies. However, it is understandable that the Korean students in Truitt's study could experience more anxiety and feel intimidated in their English class because their instructors were all native English speakers, whereas the students in my sample were all taught by Taiwanese instructors.

Consequently, if 3.0 is used as the cutoff point of the grand mean on the FLCAS to indicate anxiety experienced in their second language class, the students recruited in this study were not excessively anxious; only less than 5% of the students reported experiencing debilitating anxiety (4.0 or higher), whereas 45% of them reported not being anxious at all (less than 3.0) in their English classroom. Such percentages may be related to the fact that about 30% of the students had had opportunities to visit or live in English-speaking countries, and the experience of being able to communicate in authentic English contexts increased students' familiarity with the language, its people, and culture. In addition, in recent years, because of the global economy and the efforts that the Taiwanese government has put forth to create an "English living environment" (see http:

//www.bless.nat.gov.tw for more information), Taiwan has attracted more foreign talents, professionals, and students who use English as their lingua franca. With the sweeping increase of opportunities to interact with English-speaking individuals and the constant bombardment of English media in their daily lives, compared to the college students of a decade ago, these modern day Taiwanese students may be less apprehensive to use English, both in their English class and outside of the class.

Relationship between Shyness and L2 Strategy Use

As a whole, non-shy students reported more frequent strategy use across the six categories that the Strategy Inventory for Language Learning (SILL) measures: memory, cognitive, compensation, metacognitive, affective, and social. The adeptness of non-shy students' use of assorted strategies may be credited to greater capacity in working memory, enabling them to multi-task (e.g., carrying on a conversation in L2 while implementing some strategies to repair or prevent miscommunications), especially under stressful situations. It has been reported that for shy individuals, stress heightens the degree of arousal thereby reducing their processing capacity, and in turn, impeding their L2 performance, especially in speaking (Dewaele & Furnham, 2000). Nonetheless, this finding is contradictory to the results reported by Ehrman and Oxford (1990), who used the Myers-Briggs Type Indicator (MBTI) to differentiate extroverts from introverts, a similar construct to shyness and non-shyness. They contended that because of their personality, extroverts had a preference for using social strategies whereas introverts were inclined to use metacognitive strategies when it came to English learning.

As for students' overall use of English learning strategies, *compensation* strategies were used the most often, whereas *social* strategies the least often. Compensation strategies include guessing meanings from the context in reading and listening, and using synonyms and gestures to convey meaning to make up for a learner's limited knowledge. It is no surprise that non-shy individuals would use this strategy often, as they might be less afraid of making mistakes or making fools of themselves than shy individuals. It was, however, unexpected that the shy participants in the study also reported using compensation strategies the most often (M=3.28) when compared to other strategy categories, even though less so than non-shy participants. As for the infrequent use of social strategies, it can be understood in light of the EFL context in which these participants were situated. Social strategies require cooperation with an interlocutor, often a native speaker, to make the meaning exchange more smooth. Taiwanese students learn English mostly in classroom settings, where meaning exchange is not required and cooperative learning is not common, even though these two aspects were stressed in the classes in which they were sampled. In fact, this result also corresponds to students' responses to one of the open-ended questions at the end of the SILL, which asked them to name the strategies listed in the SILL that they had never used or thought of before participating the study. There were three items that the majority of the students indicated that they did not think of prior to the study: "look for people to talk to in English" (#48), "ask English speakers to correct me when I speak" (#58), and "ask for help from English speakers (#60)." These items happen to fall in the categories of *social strategies*.

Nonetheless, the overall mean of the students' scores on the SILL was not very

high (2.98 out of 5), indicating that students as a whole only sometimes applied strategies in their English studies. This finding corroborates the results reported by studies that investigated the frequency and types of strategies students used in ESL versus EFL environments: students in ESL settings reported high frequencies of using at least half of the strategies listed on the SILL (Oxford, Talbott, & Halleck, 1989; Phillips, 1990; Rossi-Le, 1989), whereas students in EFL settings often reported strategy use at a medium level (Klassen, 1994; Noguchi, 1991; Oh, 1990; Park, 1997; Yang, 1992). In addition, students' use of language learning strategies may result from their knowledge, competence, and reasons in using those strategies (MacIntyre & Noels, 1996). For instance, students may not always be aware of the strategies they use or may not know how or when to use them. In the case of students' use of social strategies in this study, some students did express their concerns about not knowing where to find English speakers with whom to practice their English or how to approach them when seeing one. This finding may indicate that students either did not go to their English instructors for guidance or their teachers failed to provide such information. On the other hand, it is important to note that mere frequency and use of a larger set of language strategies does not necessarily make a learner successful. Successful L2 learners often use learning strategies in an orchestrated fashion, tailored to the requirement of the language task at hand (Chamot & Kupper, 1989). Moreover, they are more capable of reflecting on the strategies they use and are able to explain the nature and function of the strategies (Nunan, 1991; O'Malley & Chamot, 1990).

In my study, gender differences in strategy use, generally reported across second

language acquisition studies, were not found.

Relationship between Shyness and L2 Learning Motivation

Unlike most of the studies in which the constructs of *integrative* and *instrumental* motivation were used to investigate the students' motivation to learn English (Gardner, 1985), I adopted *self-determination theory* (Deci & Ryan, 1995) and used the motivation continuum that Deci and Ryan proposed as a basis for measuring these English learners' motivation. Compared to shy students, non-shy students reported having more *identified regulation* and *intrinsic motivation to know*. Even though they did not entirely endorse the three dimensions of intrinsic motivation measured in the LLOS-IEA, they seemed to have incorporated the mastery of the English language as one of their important life goals (identified regulation) and readily engaged themselves in English learning activities, because they found pleasure and fulfillment in doing so. This finding was in line with their frequent use of *compensation* strategies and *metacognitive* strategies, in that compensation strategies allow them to have interactions with either texts or their interlocutors without being limited by their English knowledge, whereas metacognitive strategies help them assess, monitor, and plan their English studies. By using both types of strategies, the non-shy students in this study appeared to be diligent and mindful in their English studies.

It is worth noting that the finding above, however, was not supported by studies that looked at non-English majors in college who took required English courses. In previous studies, it was found that Chinese students who took English courses to fulfill

requirements of their undergraduate work showed strong instrumental motivation, resembling extrinsic motivation (Liu, 1998a). A later study by Warden and Lin (2000) added a dimension of "requirement motivation," a more utilitarian attitude than the instrumental motivation, to the existing integrative/instrumental dichotomy of L2 learning motivation. The researchers found that 445 Taiwanese non-English majors who took required English courses in a technological college reported having strong requirement motivation as well as instrumental motivation, with an absence of integrative motivation.

Relationship between Shyness, L2 Learning Motivation, and Strategy Use

The types of motivation that shy and non-shy students have for learning English were expected to influence their choice of learning strategies differently. The results from a series of hierarchical multiple regressions showed that the L2 learning motivation type reported by shy and non-shy students influenced their L2 strategy choice. Consequently, for shy students, except for the use of compensation strategies (the strategy that students reported using the most), *intrinsic motivation to know* emerged to be the sole predictor of their use of L2 learning strategies, despite their report of less frequent strategy use than their non-shy counterparts across all strategy types. On a side note, along with intrinsic motivation to know, *introjected regulation* (a type of extrinsic motivation) also appeared to be a predictor for shy students' use of affective strategies such as anxiety reduction and self-encouragement. A possible explanation is that shy students may use different types of affective strategies based on the situations in which they find themselves. For instance, if

they were to be called in the English class and had to answer a question that the teacher has asked, they may use anxiety reduction techniques to calm themselves down and answer the question. The reason they do so may not be because of their passion for the subject matter or intention to impress others but because they do not want to embarrass themselves in front of their teacher and peers. Counter-intuitively, for shy students' motivation to learn English, *intrinsic motivation to know* (M = 2.85) and *introjected regulation* (M = 2.51) were not the types of motivation regulation that they endorsed the most. Instead, *identified regulation* (M = 3.59) and *extrinsic motivation* (M = 3.07) were their top two choices. This drastic discrepancy may indicate that the relationship between shy students' motivation to learn English and their strategy use is likely to be far more complex than was presented in this study.

As for non-shy students, *intrinsic motivation to know* also emerged to be the only predictor for their use of cognitive (strategies that help them analyze, summarize, and practice) and social strategies (strategies that require the cooperation of the interlocutor and help them become culturally aware). Interestingly, unlike shy students, *intrinsic motivation to know* (M = 3.19) was only second to *identified regulation* (M = 3.90) as non-shy students' top two choices regarding their motivation to learn English. This finding may imply that non-shy students, with their intrinsic motivation to know, used certain English learning strategies selectively.

Relationship between Shyness, Willingness-To-Communicate in Chinese, and Willingness-To-Communicate in English

As for the relationship between shyness and both willingness to communicate (WTC) in Chinese and in English, I had expected these to be negatively correlated. In other words, a student who reported shyness was expected to be less likely to initiate interactions with others, whether in Chinese or English. Among the four communication contexts (group discussions, meetings, dyads, and public speaking), students reported their preference to interact with others in *group discussions* the most and in *public speaking* the least. This trend was found not only in students' WTC in Chinese but also their WTC in English, only with lesser frequency. This finding can be understood in the light of how a group discussion is carried out in a traditional Taiwanese classroom, regardless of levels of education. When a group discussion occurs, not all of the participants are expected to contribute to the discussion. Some students may dominate the discussion and take the floor most of the time, whereas the timid ones can sit back and nod attentively in agreement without the need of saying much. Compared to the interaction occurring in a dyad in which each party presumably has an equal share of keeping the conversation going, group discussion poses less demand on its participants, especially for shy ones. Therefore, it is not surprising that this mode of communication was most favored by shy students. However, it is somewhat puzzling to explain non-shy students' preference for talking in groups.

As for the preference for interacting with three types of interlocutors (strangers, acquaintances, and friends), speaking with friends was favored by most students, whereas talking to strangers was ranked the least favorite in both Chinese and English scenarios (with lesser frequency in English). This finding is no doubt intuitive because individuals

are likely to feel most comfortable in interacting with those whom they are familiar.

Relationship between Foreign Language Anxiety, WTC, and Shyness

As a whole, students who reported experiencing more foreign language anxiety in their English class showed less willingness to communicate (WTC) in both Chinese and English, with the negative correlation between foreign language anxiety and WTC in English being stronger. This finding supports the results that have been reported by previous studies (MacIntyre, 1994; McCroskey & Richmond, 1991). In MacIntyre's heuristic model (MacIntyre, 1998), foreign language anxiety and self-evaluation of L2 skills resulted in L2 confidence, which is considered an enduring variable that affects a L2 learner's willingness to communicate. In addition, communication apprehension, which is an underlying construct of foreign language anxiety, has been shown to be one of the best predictors of WTC in L1 as well (McCroskey & Richmond, 1987, 1991). Lastly, shyness not only was mentioned in MacIntyre's WTC model (i.e., personality) as an enduring factor impacting WTC behavior, it also had a moderate positive correlation with foreign language anxiety reported in this study. Consequently, foreign language anxiety, willingness to communicate, and shyness interacted with one another and created an impact on this group of Taiwanese students in their English studies.

Conclusion

Several conclusions can be drawn based on the findings of this study.

First, the correlation between these Taiwanese students' shyness and foreign

language anxiety was found to be positively moderate, suggesting that these two constructs, though possessing overlapping underlying attributes such as communication apprehension and fear of negative evaluation, should not be viewed as default conditions for each other. This finding provides a clearer view of the relationship between the two concepts and adds to the literature on foreign language anxiety. Nonetheless, with the experience of traveling to (or living in) English-speaking countries and increasing opportunities to be exposed to English language media in their daily lives, the students in the current study were not found to be especially anxious in their English class.

Second, shyness had no effect on students' English learning strategy use. In general, non-shy students reported using strategies more frequently than shy students across the six categories of strategies on the Strategy Inventory for Language Learning (SILL). For both shy and non-shy students in this study, they reported using *compensation strategies* most often, the strategies that helped them work around with their limited knowledge in English and prevented gaps in their interaction with either written texts or interlocutors. On the other hand, *social strategies* was reported of the least used strategy type by all the students among the six categories on the SILL. Again, different from the extraversion-introversion dimension in the Myers-Briggs Type Indicator (MBTI) that Ehrman and Oxford (1990) utilized in their study of L2 strategy use, the relationship found between shyness and English strategy use in this study can provide an alternative view to this line of research.

Third, as it was measured in the current study using the Revised Cheek and Buss Shyness Scale (RCBS), shyness was different from introversion, in that introverts are low

in sociability and are not necessarily shy in social encounters. With an operational definition of shyness that focused on affective and behavioral aspects but did not include sociability, more than half of the students (56%) in the study were labeled non-shy. Because it was the first time that the RCBS was administered to a group of Taiwanese students, this empirical account can be of value for the literature on shyness.

Fourth, using the motivation regulations delineated in *self-determination theory* (Deci & Ryan, 1995), both shy and non-shy students endorsed the notion of *amotivation* the least regarding their English studies, and non-shy students reported having more *identified regulation* and *intrinsic motivation to know* than shy students. This finding showed that the non-shy students seemed to gravitate towards intrinsic motivation on the motivation continuum regarding their English studies. Nonetheless, when looking at the interaction among shyness, strategy use, and motivation, *intrinsic motivation to know* emerged to be the major predictor for both shy and non-shy students' use of English learning strategies. Interestingly, for shy students, along with *intrinsic motivation to know*, *introjected regulation* (a type of extrinsic motivation) also predicted their use of affective strategies, strategies that reduce their anxiety and encourage them to forge on in their English learning.

Fifth, regarding the relationship between students' shyness and their willingness to communicate in both English and Chinese contexts, a stronger negative correlation was found between students' willingness to communicate in English and their shyness than that of their willingness to communicate in Chinese and shyness. This finding indicates that students felt more apprehensive in communicating with others in a foreign

language than in their mother tongue, possibly because of the risks involved in the foreign language behavior in which they may need to engage.

Lastly, students who reported experiencing more foreign language anxiety in their English class also expressed less willingness to communicate in both Chinese and English contexts, and less so in English. This phenomenon supports MacIntyre's (1998) notion of L2 confidence, comprised of foreign language anxiety and self-evaluation, a critical variable that affects a L2 learner's willingness to communicate in the target language. Coincidentally, students in this study rated their English speaking ability to be the least well-developed, among the four skills (i.e. listening, speaking, reading, and writing), which, in turn, adversely affected their willingness to communicate in English, if given an opportunity.

Limitations of the Study

When interpreting the results from this study, several limitations must be heeded.

Potential Problems with Self-Reports and Possible Alternatives

Self-reports were adopted as the main venue to assess students' shyness, L2 learning strategies, motivation, foreign language anxiety, and willingness to communicate in the current study, and as such may have been biased by students' social desirability concerns and introspective limits (Greenwald & Banaji, 1995). Along with the quantitative measures, the variables measured in this study can also be assessed via qualitative procedures such as observation in their English class, focus groups, or focused essays (MacIntyre & Gardner, 1991). For instance, as an alternative, to measure students'

willingness to communicate (WTC) in L1 and L2, and to be able to distinguish one from the other, focused essays can be used asking students to describe a specific event in some detail and specify a time when they were "most willing" and "least willing" to communicate in L1 and L2 respectively. Or, to investigate how shy and non-shy students differ in their English strategy use and their motivation, the top 5% of the students who scored at either extreme ends of the shyness scale could be recruited for further individual interviews, asking them questions about whether their strategies and motivation change as their goals for English studies evolve from high school to college. Furthermore, to avoid bias on introspection of students' past experience and to assess their tendency for shyness or WTC responses, video clips that elicit such responses can be shown and immediate responses from the students can be obtained.

Potential Problems with the Sample Selected

Because at least half of the students selected for the current study came from business and law school, the results of this study may not be applicable to students from other disciplines. In addition, as the students in the sample were studying in an urban private university in the capital of the country, most of them may be privileged in their English education and have been able to tap into more resources since they first started learning English than students who attend universities in more rural areas. As a result, they may have responded differently to some of the variables that were measured in the study. For instance, successful past experiences in English learning can influence students' motivation to learn, strategies to manage the demands, levels of English anxiety

experienced in class, and WTC in both their English classroom and outside of the class.

Potential Problems with Measures and Statistical Procedures

Because the Revised Cheek and Buss Shyness Scale (RCBS) used in the current study was developed based on a sample of college students in the United States, the criterion used to distinguish shy from non-shy individuals may not be entirely appropriate for Taiwanese college students, in that the notion of shyness may have different cultural connotations. For instance, in addition to the relevance to reticence and introversion, the kind of shyness that Taiwanese society values may very well include obedience to authority figures (Ouyang, 2000; Tweed & Lehman, 2002) and individuals with seniority, and self-control. Moreover, traditionally, Asian students have been observed to be less vocal in learning. Even though they are attentive and diligent, they are likely to be quiet in class (Duncan & Paulhas, 1998; Kim & Marcus, 2002; Winner, 1989), because of their cultural belief that talking may interfere with their thinking (Kim, 2002). These seemingly "shy" students are not any less inquisitive or creative than their non-shy counterparts. In a study on Japanese school children's participation in scientific inquiry (Inagaki, Hatano, & Morita, 1998), researchers found that even though many children were overtly quiet, they were just as actively engaged as their more verbal peers. In the same vein, Pratt and his colleagues (1999) found that compared to the general learning approach of most American learners, the approach that most Chinese students took was vastly different: initially, they committed the material to memory through rote learning, and then made effort to understand the intention, style, and meaning of the material.

Afterwards, they applied their understanding in situations that called for use of such knowledge, and eventually they entered a deeper level of questioning and mentally reorganized the original material, when they saw fit. As one can imagine, the first few steps of this learning process calls for more solitary learning and contemplation, which is important in Chinese intellectual tradition (Li & Fischer, 2004), and this process may take a while before the learner feels comfortable in voicing his or her opinion and engaging in meaning exchange with other people. Thus, a ruminating but mindful Chinese learner may appear to be shy, which may be mistaken by Western-educated researchers as an inhibiting characteristic hampering his or her learning. As a result, to obtain a more culturally accurate view of shyness among Taiwanese students, open-ended questions can also be used to ask teachers and peers about their perceptions of shyness and whether they think of it as a potential problem both in their daily lives and in English studies.

As for potential problems for the Strategy Inventory of Language Learning (SILL), the items listed in the current measure may not be up to date or culturally appropriate. For instance, from my past teaching experience of Taiwanese college students and informal surveys that I conducted, there are strategies that students in Taiwan utilize but were not listed in the SILL. Such strategies include "using a dictionary or online resources to look up the words I don't know," "watching English movies/programs or singing English songs to help me learn English," or "talking to myself in English," all of which can be included in the six categories on the SILL seamlessly. Without staying up to date with the common practices among Taiwanese students' strategy use in learning English, the results of the measure may not reflect their actual strategy use.

In addition, the Willingness-to-Communicate behaviors measured in this study occurred in an EFL context, where students did not have frequent contacts or immediate needs to use English in their daily lives, compared to those who are in an ESL context. Therefore, their motivation to learn English and strategies they choose to use may vary accordingly.

Lastly, as an alternative to analyzing the interactions among the variables of shyness, English learning strategy use, motivation, foreign language anxiety and willingness to communicate in both Chinese and English contexts among Taiwanese college students, structural equation modeling (SEM) may be considered. Compared to multiple regression, SEM includes more flexible assumptions, such as allowing interpretation of the relationship among variables, even in the face of multicollinearity. Moreover, as regression is highly susceptible to error of interpretation by misspecification, the SEM strategy of comparing alternative models to assess relative model fit makes it more robust, if having enough number of participants.

Pedagogical Implications

English instructors in colleges that have similar settings as the one that was sampled in this study may feel somewhat relieved to know that the majority of their students are relatively motivated to learn English in their required English courses. However, because the results reported in this study cannot be generalized to all college students who are learning English in Taiwan, it is up to instructors to find out what encourages or impedes their students from practicing English, given the variables that

were investigated in this study. Using the information of students' personality trait (e.g. shyness), willingness to communicate, and the level of foreign language anxiety experienced, an instructor can gauge the participation of the class activities that he or she may want to implement and make modification of the curriculum accordingly. For example, if there were more shy students who were reluctant to speak up in the class, pair work or individual activities can take up a larger portion of the curriculum, to help create a low-risk learning environment, and to help students who prefer to process mentally before speaking. On the other hand, if the majority of the students in class were non-shy and were willing to take risks in their English learning behavior, an instructor can implement activities that require them to experiment, whether it is with the new strategies they acquired or the new vocabulary they have just learned, or provide opportunities for them to explore the possibilities of learning English anytime, anywhere.

Also, instructors can find out their students' preference for strategy use regarding learning English by asking the students to name the strategies they used most often and least often. With that information, instructors can implement strategy instruction complementary to their curriculum, to raise the awareness among students, and provide opportunities for them to practice the strategies. Both explicit instruction and proper modeling of the strategies are desirable (Chamot & Kupper, 1989; Crookall, Cohen, Lavine, Nyikos, & Sutter, 1990; Nyikos, 1991) because the ambiguity for the students about how and when to apply the new strategies is reduced, and the incoming English material is helped to be comprehensible, memorable, and retrievable (Nyikos & Oxford, 1993). An example of such instructional model is the "Cognitive Academic Language

Learning Approach" (CALLA) developed by Chamot and O'Malley (1994). It is a form of strategies-based instruction instruction for ESL learners incorporating explicit strategy instruction, content area knowledge, and academic language development.

Nonetheless, despite students' personality, willingness to communicate, level of anxiety experienced in their English class, and their preference in strategy use, instructors need to bear in mind that in order to assist their students in becoming effective and adaptive learners, they need to stretch their students' English-learning muscles by presenting an array of possibilities, may it be a new way of memorizing vocabulary, a new medium with which students can learn English, or an alternative assessment of students' progress. By guiding students through multiple options, the instructors can help them make informed decisions regarding their English studies. Surely, the same principle can be very well extended to other disciplines of students' studies.

As I mentioned earlier in the introduction of this study, the demand for cultivating Taiwanese students' communicative competence has led to the introduction of English at the third grade in elementary schools (GIO, 2006). In some urban areas such as Taipei, the English curriculum even extends down to the first grade, due to the request of enthusiastic parents. In a recent poll conducted by a private educational foundation of 2059 Taiwanese parents, up to 80% of them hoped that the government would declare English the second official language (The China Post, 2006), for they believed that better English ability promised better job opportunities. At the college level, more and more schools include English competency as a requirement for graduation (e.g., a minimum of 550 on the TOEFL paper-based test, or 213 on the TOEFL computer-based test, or a

minimum of 79 on the latest TOEFL internet-based test). The TOEFL scores and scores of other standardized English examinations of Taiwanese students are often compared with those in neighboring Asian countries, such as Mainland China, Singapore, South Korea and Japan, to determine the competitiveness against those countries. Despite the efforts that the Taiwanese government has put forth in English education, and intention to create the country an "English living environment" by erecting English-Chinese signage in the streets and at public transportation system, releasing bilingual government publications, setting up bilingual operator services, reconstructing websites of government agencies with English versions, and even training public transportation operators to speak English (see http://www.bless.nat.gov.tw for more information), the performance of Taiwanese students on those English standardized examinations had left much be desired. For the past few years, the TOEFL scores of Taiwanese students have been at the bottom places among other Asian countries, and the TOEIC scores of Taiwanese test-takers ranked ninth from the bottom around the world (The China Post, 2006). As disheartening as this result is, both the Taiwanese government and local English educators may want to re-examine as to what went wrong in the process of trying to help students achieving communicative competence. Was the pedagogical approach that the teachers adopted in line with the goal? Were the students being assessed properly and fairly by their instructors in class, based on the requirement of their course? Or were the students just overwhelmed by the sudden demand for being able to speak English, once they entered college, if they had never been trained to do so in their prior English studies?

I agree with the sentiment that MacIntyre had regarding a successful L2 language program: “A proper objective for L2 education is to create WTC. A program that fails to produce students who are willing to use the language is simply a failed program” (MacIntyre et al., 1998, p.547). Nonetheless, we also need to remember that assessment is the driving force behind curricular innovations, and how students are assessed in their L2 classroom will affect their strategy use, motivation, willingness to use that language to communicate, and the level of anxiety they may experience in their L2 classroom. Acknowledging and analyzing the impact of testing on language teaching practice would be a good starting point to investigate how a L2 program in a given context can better serve the communicative needs of the learners (Savignon, 2007).

Appendix A: The Revised Cheek and Buss Shyness Scale

INSTRUCTIONS: Please read each item carefully and decided to what extent it is characteristic of your feelings and behavior when you are in a social situation, not how it should be or what other people do. Your answer should be based on how you would react in general, not specifically for your English class.

1 = *Very uncharacteristic or untrue, strongly disagree*
2 = *Uncharacteristic*
3 = *Neutral*
4 = *Characteristic*
5 = *Very characteristic or true, strongly agree*

1. I feel tense when I'm with people I don't know well.
2. I am socially somewhat awkward.
3. I do not find it difficult to ask other people for information.
4. I am often uncomfortable at parties and other social functions.
5. When in a group of people, I have trouble thinking of the right things to talk about.
6. It does not take me long to overcome my shyness in new situations.
7. It is hard for me to act natural when I am meeting new people.
8. I feel nervous when speaking to someone in authority.
9. I have no doubts about my social competence.
10. I have trouble looking someone right in the eye.
11. I feel inhibited in social situations.
12. I do not find it hard to talk to strangers.
13. I am more shy with members of the opposite sex.

Appendix B: The Strategy Inventory for Language Learning

INSTRUCTIONS: You will find statements about learning English below. Please read each statement. Mark the response that tells how true of you the statement is. There is no right or wrong answer.

1 = *I never do this*
2 = *I seldom do this*
3 = *I sometimes do this*
4 = *I usually do this*
5 = *I always do this*

1. When learning a new word, I create associations between new material and what I already know.
2. I use new English words in a sentence so I can remember them.
3. I connect the sound of a new English word and an image or picture of the word to help me remember the word.
4. I remember a new English word by making a mental picture of a situation in which the word might be used.
5. I use rhymes to remember new English words.
6. I use flashcards to remember new English words.
7. I memorize new English words by grouping them into categories (e.g., synonym, antonym; noun, verb).
8. I review English lessons often.
9. I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.

10. I say or write new English words several times.
11. I try to talk like native English speakers.
12. I practice the sounds of English.
13. I use the English words I know in different ways.
14. I start conversations in English.
15. I watch TV shows or movies spoken in English or listen to English radio programs.
16. I read for pleasure in English.
17. I write notes, messages, letters, or reports in English.
18. I try to think in English.
19. I look for similarities and contrasts between English and my own language.
20. I try to find patterns in English.
21. I find the meaning of an English word by dividing it into parts that I understand.
22. I try not to translate word-for-word.
23. I make summaries of information that I hear or read in English.
24. To understand unfamiliar English words, I make guesses.
25. When I can't think of a word during a conversation in English, I use gestures.
26. I make up new words if I do not know the right ones in English.
27. I read English without looking up every new word.
28. I try to guess what the other person will say next in English.
29. If I can't think of an English word, I use a word or a phrase that means the same thing.
30. I try to find as many ways as I can to use my English.

31. I notice my English mistakes and use that information to help me do better.
32. I pay attention when someone is speaking English.
33. I try to find out a better way to learn English.
34. I plan my schedule so I will have enough time to study English.
35. I look for people I can talk in English.
36. I look for opportunities to read as much as possible in English.
37. I have clear goals for improving my English skills.
38. I think about my progress in learning English.
39. I try to relax whenever I feel afraid of using English.
40. I encourage myself to speak even when I am afraid of making a mistake.
41. I give myself a reward or treat when I do well in English.
42. I notice if I am tense or nervous when I am studying or using English.
43. I talk to someone else about how I feel when I am learning English.
44. If I do not understand something in English, I ask the other person to slow down or say it again.
45. I ask English speakers to correct me when I talk.
46. I practice English with other students.
47. I ask for help from English speakers.
48. I ask questions for clarification and verification about English.
49. I try to learn about the culture of English speakers.
50. Please state your own strategies or methods in learning English that are not included in the statements above.

Appendix C: The Language Learning Orientation Scale

INSTRUCTIONS: Please read the following items carefully. Indicate to what extent each of the following items presently corresponds to one of the reasons you learn English.

1 = Does not correspond at all
2 = Corresponds a little
3 = Corresponds moderately
4 = Corresponds a lot
5 = Corresponds exactly

1. I cannot see why I study English, and frankly, I don't care.
2. I study English because I have the impression that it is expected of me.
3. I study English to show myself that I am a good citizen because I can speak a second language.
4. I study English because I choose to be the kind of person who can speak more than one language.
5. I study English for the pleasure that I experience in knowing more about English literature.
6. I study English for the pleasure I experience when surpassing myself in my English studies.
7. I study English for the "high" I feel when hearing English is spoken.
8. Honestly, I don't know, I truly have the impression of wasting my time in studying English.
9. I study English in order to get a more prestigious job later on.

10. I study English because I would feel ashamed if I couldn't speak to my English-speaking friends in their native tongue.
11. I study English because I think it is good for my personal development.
12. I study English for the satisfied feeling I get in finding out new things.
13. I study English for the enjoyment I experience when I grasp a difficult construct in English.
14. I study English for the "high" feeling that I experience while speaking it.
15. I don't know; I can't come to understand what I am doing studying English.
16. I study English in order to have a better salary later on.
17. I study English because I would feel guilty if I didn't know it.
18. I study English because I choose to be the kind of person who can speak a second language.
19. I study English because I enjoy the feeling of acquiring knowledge about the English-speaking community and their way of life.
20. I study English for the satisfaction I feel when I am in the process of accomplishing difficult exercises in English.
21. I study English for the pleasure I get from hearing it spoken by native speakers.

Appendix D: The Foreign Language Classroom Anxiety Scale

INSTRUCTIONS: Please read the following questions carefully and indicate the extent to which you agree or disagree with each of the following statements. Your answer should be based on your experience in this English class.

1 = *Strongly disagree*
2 = *Disagree*
3 = *Neutral*
4 = *Agree*
5 = *Strongly agree*

1. I never feel quite sure of myself when I am speaking English in my English class.
2. I don't worry about making mistakes in English class.
3. I tremble when I know that I'm going to be called on in my English class.
4. It wouldn't bother me at all to take more English classes.
5. During my English class, I find myself thinking about things that have nothing to do with the course.
6. I keep thinking that the other students are better at English than I am.
7. I am usually at ease during tests in my English class.
8. I start to panic when I have to speak in English without preparation in my English class.
9. I worry about the consequences of failing my English class.
10. I don't understand why some people get so upset over English class.
11. In my English class, I can get so nervous I forget things I know.
12. It embarrasses me to volunteer answers in my English class.

13. I would not be nervous speaking English with native speakers.
14. I get upset when I don't understand what the English teacher is correcting in English.
15. Even if I am well-prepared for my English class, I feel anxious about it.
16. I often feel like not going to my English class.
17. I feel confident when I speak English in my English class.
18. I am afraid that my English teacher is ready to correct every mistake I make.
19. I can feel my heart pounding when I'm going to be called on in my English class.
20. The more I study for an English test, the more confused I get.
21. I don't feel pressured to prepare very well for my English class.
22. I always feel that the other students speak English better than I do.
23. I feel very self-conscious about speaking English in front of other students.
24. My English class moves so quickly that I worry about getting left behind.
25. I feel more tense and nervous in my English class than in my other classes.
26. When I am on my way to English class, I feel very sure and relaxed.
27. I get nervous when I don't understand every word the English teacher says in English.
28. I feel overwhelmed by the number of rules I have to learn in order to speak English.
29. I am afraid that the other students will laugh at me when I speak English.
30. I would probably feel comfortable around native speakers of English.
31. I get nervous when the English teacher asks questions which I haven't prepared in advance.

Appendix E: The Willingness-To-Communicate Scale

INSTRUCTIONS: Below are twenty situations in which a person might choose to communicate or not to communicate. Presume you have completely free choice. Indicate how often you would choose to communicate in each type of situation.

1 = *I never do this*
2 = *I seldom do this*
3 = *I sometimes do this*
4 = *I usually do this*
5 = *I always do this*

1. Talk with a service person in the ticket booth.
2. Talk with a physician.
3. Present a talk to a group of strangers.
4. Talk with an acquaintance while standing in line.
5. Talk with a salesperson in a store.
6. Talk in a large meeting of friends.
7. Talk with a police officer.
8. Talk in a small group of strangers.
9. Talk with a friend while standing in line.
10. Talk with a waiter/waitress in a restaurant.
11. Talk in a large meeting of acquaintances.
12. Talk with a stranger while standing in line.
13. Talk with a secretary.
14. Present a talk to a group of friends.

15. Talk in a small group of acquaintances.

16. Talk with a garbage collector.

17. Talk in a large meeting of strangers.

18. Talk with a spouse (or girl/boyfriend).

19. Talk in a small group of friends.

20. Present a talk to a group of acquaintances.

Appendix F: Demographics Questionnaire

Please fill in the following information:

1. Major: _____
2. Year at school: _____
3. Gender: ☐ Male ☐ Female
4. Age: _____
5. How long (in years) have you studied English (both at school and after school)?
   _____
6. Have you traveled or lived in an English-speaking country?
   ☐ Yes
   A. Which country/countries _____
   B. Duration of stay (please list the duration of stay for each country, if more than one) _____
   _____
   _____
   C. Does this experience help you learn English? If yes, please briefly explain the reason.
   _____
   _____

   ☐ No.

7. Do you enjoy studying English? (Please rate from **1** to **5** for each item)
   1 = *Not at all*
   2 = *Somewhat*
   3 = *Neutral*
   4 = *Yes*
   5 = *Very much*

   _____ A. In this class
   _____ B. Take additional English classes outside of school
   _____ C. When you engage in self-study (e.g. read English newspapers, watch English-speaking movies, listen to English songs, etc.)

8. How many hours do you spend each week on studying English **(Do not include actual class time in any English class)**? (Please choose one)

   _____ A. Less than 2 hours
   _____ B. 2-4 hours
   _____ C. 4-6 hours
   _____ D. 6-8 hours
   _____ E. More than 8 hours

9. Other than in your English class, do you have opportunities to use English to interact with others?

   ☐ Yes If yes, please describe the situation: _____
   _____
   _____

   ☐ No

10. How would you rate your English proficiency in the following areas? (Please choose one for each item)

    1 = *Least proficient*
    2 = *Less proficient*
    3 = *Somewhat proficient*
    4 = *Proficient*
    5 = *Native-like*

    _____ A. Speaking
    _____ B. Listening
    _____ C. Writing
    _____ D. Reading

(Approved by IRB on 12/20/06)

Appendix G: Cover Letter and Consent Form

Conducted By: Hsiang-Ning Rebecca Chu (beccachu@mail.utexas.edu) of University of Texas at Austin
Department / Office: Educational Psychology
Telephone: 512-471-4155
Faculty sponsor: Dr. Diane Schallert, 512-232-4835, dschallert@mail.utexas.edu

You are being asked to participate in a research study. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask any questions you might have before deciding whether or not to take part. Your participation is entirely voluntary. You can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time and your refusal will not impact current or future relationships with UT Austin or participating sites. To do so simply tell the researcher you wish to stop participation. The researcher will provide you with a copy of this consent for your records.

The purpose of this study is to investigate how Taiwanese college students learn English. I hope to learn about relationships among strategy use, personality traits and emotions evoked by the experience of learning English, relationships that might have implications for thinking of ways to help teachers understand their students' motivation and strategy use in an English classroom.

If you agree to be in this study, we will ask you to do the following things:

- You will complete a questionnaire booklet and rate the items using a five-point scale to indicate various characteristics of your experience in an English classroom.
- You will be asked to provide demographic information.

Total estimated time to participate in study is 20 minutes

Risks of being in the study

- Risks seem minimal, as participant identification will only be known by the Principal Investigator. However, if you wish to discuss the information above or any other risks you may experience, you may ask questions now or call the Principal Investigator listed on the front page of this form.

Benefits of being in the study

- Since striving for better English proficiency is a lifelong goal that most Taiwanese students have, so the feedback you receive about the study may be useful, or at least interesting to you. Also, I hope this study will be one of a series that will lead to advice to teachers for how to help boost students' motivation and strategy use, and coping with anxiety in the EFL classes.

Compensation:

- N/A

Confidentiality and Privacy Protections:

- Your identity will only be known to the Principal Investigator, not to your teacher.
- The data resulting from your participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate you with it, or with your participation in any study.

The records of this study will be stored securely and kept confidential. Authorized persons from The University of Texas at Austin, members of the Institutional Review Board, and (study sponsors, if any) have the legal right to review your research records and will protect the confidentiality of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject. Throughout the study, the researchers will notify you of new information that may become available and that might affect your decision to remain in the study.

Contacts and Questions:

If you have any questions about the study please ask now. If you have questions later, want additional information, or wish to withdraw your participation call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are

at the top of this page. If you have questions about your rights as a research participant, complaints, concerns, or questions about the research please contact Lisa Leiden, Ph.D., Chair of The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects, (512) 471-8871 or email: orsc@uts.cc.utexas.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information and have sufficient information to make a decision about participating in this study. I consent to participate in the study.

Signature: _____ Date: _____

_____ Date: _____
Signature of Person Obtaining Consent

Signature of Investigator:_____ Date: _____

Appendix H: Cover Letter and Consent form (Chinese Translation)

親愛的同學您好:

我的名字是朱湘寧，目前為美國德州大學奧斯汀分校 (University of Texas at Austin) 教育心理研究所博士候選人。藉由您參與此項研究，我希望可以了解台灣的大學生在學習英文的過程中，所採用的英語學習策略是否和其人格特質和學習時所感受到的情緒起伏變化有關聯。同時藉由您的答覆，也可以幫助老師們了解學生在課堂中學習英文時所採用的策略和學習動機。

此項問卷調查會問及您的學習英文的經驗，大約需要 25 分鐘的時間完成。您需要簽署一份同意書，授權讓我使用在本問卷調查中所收集到的資料。所有在本問卷調查中所收集到的個人資料，僅供本人研究使用，不會另做他用。

如果您有任何問題，可以立即詢問我，或以電子郵件與我聯絡。我的電子郵件地址是beccachu@mail.utexas.edu。謝謝您參加本次研究。

朱湘寧 敬上

同意書

本人已向參與本研究計畫的人員詳細解釋本研究的目的、程序及損益。

_____

姓名　　日期 (西元)

在簽署本同意書之前，您已完全了解本研究計畫的目的、程序及損益。同時，若您對本研究計畫有任何疑問，也可以隨時提問。簽署本同意書並不影響您在法律上的任何權益。

_____

姓名　　日期 (西元)

Appendix I: Main Questionnaire with Five Measures (Chinese Translation)

第一部份

說明: 請仔細閱讀下列問題，依照你在一般的社交場合中的感受及表現來作答。

1 = 我從不這麼覺得
2 = 我通常不這麼覺得
3 = 我有時會這麼覺得
4 = 我通常會這麼覺得
5 = 我總是會這麼覺得

1. 當我和不熟的人在一起時，我會感到緊張。
2. 我不擅於社交。
3. 從別人身上打聽消息，對我來說是輕而易舉的。
4. 我在大型的社交場合中常感到不自在。
5. 跟一群人在一起的時候，我常找不到話說。
6. 我很快就可以適應新的環境，一點也不覺得膽怯。
7. 與人初次見面時，我總是沒辦法表現得自然。
8. 當和長輩或權位高的人交談時，我會覺得緊張。
9. 我對自己的社交能力有信心。
10. 和他人交談時，我無法直視對方的眼睛。
11. 我在一般社交場合中常感到不自在。
12. 與陌生人攀談對我來說是件輕而易舉的事。
13. 面對異性時，我比較會覺得害羞。

第二部份

說明:下面你會讀到有關學習英文的敘述，請仔細閱讀每一個問題，選擇最符合<u>你的經驗</u>的選項。每個問題並沒有標準答案。

1 = 我從來不會這麼做
2 = 我通常不會這麼做
3 = 我有時會這麼做
4 = 我通常會這麼做
5 = 我總是會這麼做

14. 在學新單字時，我會把新學的東西和已經知道的東西聯想在一起。
15. 我會用新學的英文單字造句，以加深記憶。
16. 我會把英文單字的發音與其相關的形象或圖形做聯想，以幫助記憶。
17. 我藉著想像使用某個英文字的可能狀況，來記憶那個字。
18. 我會用相似的發音來背英文單字（如 rice 和 ice; bake 和 cake)。
19. 我會使用單字卡或單字手冊來背英文單字。
20. 我會把相關或同一類的英文單字合在一起背(如同義字，反義字; 名詞，動詞)。
21. 我常複習英文功課。
22. 我會利用英文單字或片語出現在書上、黑板上、或招牌上的位置來記憶。
23. 我會反覆練習說或寫新學的英文單字。
24. 我試著把英文說得像以英語為母語的人一樣。
25. 我會練習英語發音。
26. 我會以不同的用法練習使用我所學到的英文單字。
27. 我會試著用英文和他人交談。
28. 我會看以英語發音的電視節目或電影，或收聽英語廣播。
29. 閒暇的時候我會讀英文書刊。
30. 我會用英文寫筆記、書信、或報告。
31. 我試著用英文思考。
32. 我會試著找出英文與中文之間的相同與相異處。
33. 我會試著找出英文的規則。
34. 我會把一個英文單字分解成幾個我認得的部分(如字首或字根)，以了解它的意思。
35. 我避免逐字翻譯。

36. 我會把我所聽到的和讀到的英文作成摘要筆記。
37. 我遇到不熟悉的英文字時，我會猜一猜它的意思。
38. 在與他人用英語交談時，如果我一時想不起某個字，我會使用手勢或動作來表達。
39. 當我不知道適切的英文字時，我會自己造字來表達（如用 air ball 來表達氣球 balloon）。
40. 在閱讀英文時，我不會每個字都去查字典。
41. 我會去猜測別人下一句要說的英文。
42. 當我想不出某個英文字時，我會使用意義相通的字或辭來替代。
43. 我會找各種方式來運用我所學的英文。
44. 我會留意自己犯的英語錯誤，並利用它來改進我的英文。
45. 當別人說英語時，我會特別留心聽。
46. 我試著找出更好的英語學習方式。
47. 我會自訂學習計畫，讓自己有足夠的時間學習英文。
48. 我會留心尋訪可以用英語交談的對象。
49. 我會找機會多閱讀英文。
50. 對於增進我的英文能力，我有明確的目標。
51. 我常思考我的英文能力是否有進步。
52. 當我一想到要用英文就害怕時，我會想辦法讓自己放輕鬆。
53. 即使害怕會犯錯，我還是會鼓勵自己講英文。
54. 每當我在英文方面表現良好時，我會獎勵自己。
55. 當我在讀英文或使用英文時，我會注意到自己是否緊張。
56. 我會和別人討論自己學英文的感受。
57. 和他人用英文交談的時候，如果我有聽不懂的地方，我會請對方說慢一點或再講一遍。
58. 當我講英文時，我會請老外糾正我的錯誤。
59. 我會和其他同學練習英文。
60. 我會向老外求助。
61. 我會用發問的方式來澄清及求證英文方面的問題。
62. 我會試著了解老外的文化。
63. 除了以上所提到的英語學習方法，你還會使用那些其他的方式或策略？ 請寫下你的意見。

64. 上述所提到的英語學習方法中，有哪些是你不曾想過的？ (請寫題號即可)

第三部份

說明: 請詳讀下列問題，並且依據你學英文的理由來作答。

1 = 我完全不是這樣
2 = 我有時是這樣
3 = 我通常是這樣
4 = 我大部份時候是這樣
5 = 我完全就是這樣

65. 我不知道自己學英文的目的是什麼；坦白說，我也不在乎。
66. 我學英文是因為他人對我的期望。
67. 我學英文是因為我想成為會說第二外語的好國民。
68. 我學英文是因為我想成為會說多國語言的人。
69. 我學英文是因為多了解英文文學會帶給我樂趣。
70. 我學英文是因為我可以享受到學英文時超越自己的快感。
71. 我學英文是因為當我聽到有人講英文時，我會感到很興奮。
72. 坦白說，我認為學英文是浪費時間。
73. 我學英文的目的是希望日後可以找到一個好工作。
74. 我學英文是因為如果我不能用英文和以英語為母語的朋友交談，我會覺得慚愧。
75. 我學英文是因為我認為學英文對我個人的發展有幫助。
76. 我學英文是因為學習新的事物讓我覺得很滿足。
77. 我學英文是因為我很喜歡當我多了解一些困難的英文文法時的成就感。
78. 我學英文是因為講英文讓我覺得很興奮。
79. 我不知道自己學英文的目的何在。
80. 我學英文是為了日後獲得高薪 。
81. 我學英文是因為如果我不懂英文，我會覺得有罪惡感。
82. 我學英文是因為我希望自己會說第二外語。
83. 我學英文是因為如果我懂英文的話，我可以了解以英文為母語的人的文化和他們的生活方式。
84. 我學英文是因為當我能回答有難度的英文習題時，我覺得很滿足。
85. 我學英文是因為我喜歡聽以英語為母語的人說英文。

第四部份

說明:請在仔細閱讀下列問題後，圈選符合你所選擇答案的數字。請依據你在本堂英文課的經驗作答，謝謝!

1 = 非常不同意
2 = 不同意
3 = 既非同意也非不同意
4 = 同意
5 = 非常同意

86. 在英文課用英文發言時，我從未對自己有信心。
87. 我不擔心在上英文課時犯錯。
88. 上英文課，知道自己快被叫到時，我會發抖。
89. 我一點也不介意多修一些英文課。
90. 上英文課時，我發現自己在想一些跟上課毫無關係的事。
91. 我一直認為其他同學在英文方面比我好。
92. 英文課有考試時，我通常很輕鬆自在。
93. 當我必須在毫無準備的情況下，在英文課中用英文發言，我會開始驚慌失措。
94. 我對英文課被當的後果感到擔憂。
95. 我不懂為什麼有些人對英文課感到這麼煩惱。
96. 上英文課時，我可能會緊張得把我原本知道的東西給忘了。
97. 要我在英文課主動回答問題，我會覺得尷尬。
98. 和以英語為母語的人說英文的時候，我不會緊張。
99. 當我不了解英文老師在用英文糾正我什麼的時候，我會覺得懊惱。
100. 即使準備充份，我仍然對上英文課感到焦慮不安。
101. 我常常想翹英文課。
102. 當我在英文課用英文發言時，我很有信心。
103. 我擔心我的英文老師已經準備好要隨時糾正我所犯的每一個錯誤。
104. 在上英文課，快被叫到時，我可以感覺到自己的心臟在怦怦跳。
105. 我準備英文考試時，讀得愈多，就變得愈困惑。
106. 為英文課做好充分的準備，對我來說一點壓力也沒有。
107. 我老是覺得其他同學英文說得比我好。

108. 在其他同學面前說英文，我感到渾身不自在。
109. 英文課進度這麼快，我擔心會跟不上。
110. 我上英文課時，比上其他課來得更緊張不安。
111. 要去上英文課時，我覺得很踏實且輕鬆。
112. 當我沒聽懂英文老師用英文所講的每一個字時，我就會變得很緊張。
113. 為了說英文所必須學的規則那麼多，讓我覺得吃不消。
114. 說英文時，我擔心其他同學會笑我。
115. 和以英語為母語的老外在一起時，我或許會覺得自在。
116. 當英文老師問到我事先沒準備的問題時，我會變得很緊張。

第五部份

說明： 下面你會讀到二十個情境是關於人們是否願意在這些場合中與他人溝通。假設你有選擇的餘地，在下列的二十個情境當中，選擇最符合<u>你的經驗</u>的選項。

1 = 我從來不會這麼做
2 = 我通常不會這麼做
3 = 我有時會這麼做
4 = 我通常會這麼做
5 = 我總是會這麼做

117. 和電影院的售票員交談。
118. 和你的醫生溝通。
119. 在陌生人面前演講（例如：在學術研討會中做報告）。
120. 在排隊等待時會和認識的人聊天。
121. 和商店裏的服務人員聊天。
122. 和一大群朋友閒聊。
123. 和警察談話。
124. 在一小群陌生人當中發表意見（例如：在剛進東吳時，第一天上課時在小組中自我介紹）。
125. 在排隊等待時會和同行的友人聊天。
126. 和餐廳裏的服務生交談。
127. 在一大群熟識的人當中發言（例如：在學期中上課時，當著全班同學的面發表自己的看法）。
128. 在排隊等待時會和陌生人攀談。
129. 和系上的秘書交談。
130. 在一群朋友面前演說（例如：和一群朋友一起複習課業並指導他們）。
131. 在一小群認識的人當中發言（例如：在課堂上小組討論時發言）。
132. 和大樓裏或垃圾車上收垃圾的人交談。
133. 在一大群陌生人面前發言（例如：參加資訊展時，在現場回答有獎徵答的活動）。
134. 和你的男/女朋友談話。
135. 在一小群朋友中發言（例如：課堂小組討論時，組員都是你的好友）。
136. 對著一群認識但不熟的人作簡報（例如：在系學會開會時對系上同學作報告）。

第六部份

說明： 這個部份和第五部份題目相同，但請你想像你是必須用英文在下列的二十個情境當中與他人溝通來作答。

1 = 我從來不會這麼做
2 = 我通常不會這麼做
3 = 我有時會這麼做
4 = 我通常會這麼做
5 = 我總是會這麼做

137. 和電影院的售票員交談。
138. 和你的醫生溝通。
139. 在陌生人面前演講（例如：在學術研討會中做報告）。
140. 在排隊等待時會和認識的人聊天。
141. 和商店裏的服務人員聊天。
142. 和一大群朋友閒聊。
143. 和警察談話。
144. 在一小群陌生人當中發表意見（例如：在剛進東吳時，第一天上課時在小組中自我介紹）。
145. 在排隊等待時會和同行的友人聊天。
146. 和餐廳裏的服務生交談。
147. 在一大群熟識的人當中發言（例如：在學期中上課時，當著全班同學的面發表自己的看法）。
148. 在排隊等待時會和陌生人攀談。
149. 和系上的秘書交談。
150. 在一群朋友面前演說（例如：和一群朋友一起複習課業並指導他們）。
151. 在一小群認識的人當中發言（例如：在課堂上小組討論時發言）。
152. 和大樓裏或垃圾車上收垃圾的人交談。
153. 在一大群陌生人面前發言（例如：參加資訊展時，在現場回答有獎徵答的活動）。
154. 和你的男/女朋友談話。
155. 在一小群朋友中發言（例如：課堂小組討論時，組員都是我的好友）。
156. 對著一群認識但不熟的人作簡報（例如：在系學會開會時對系上同學作報告）。

Appendix K: Frequencies of Response, Means and Standard Deviation for the Measures

The Revised Cheek and Buss Shyness Scale (RCBS)

RCBS Item	Mean	Standard Deviation	Range
1	3.19	.974	1-5
2	2.85	1.019	1-5
3	2.90	.963	1-5
4	3.07	1.024	1-5
5	2.59	.981	1-5
6	2.93	1.019	1-5
7	3.07	1.070	1-5
8	2.96	1.071	1-5
9	2.20	1.081	1-5
10	2.20	1.081	1-5
11	2.61	.921	1-5
12	3.29	1.105	1-5
13	3.03	1.036	1-5

The Strategy Inventory for Language Learning (SILL)

SILL Item	Mean	Standard Deviation	Range
1	3.28	.916	1-5
2	2.36	.858	1-5
3	2.96	1.078	1-5
4	3.06	.972	1-5
5	2.65	1.108	1-5
6	3.28	1.098	1-5
7	3.05	1.083	1-5
8	2.57	.780	1-5
9	2.99	1.048	1-5
10	3.17	.969	1-5
11	3.16	1.092	1-5
12	3.36	1.052	1-5
13	2.56	.848	1-5
14	2.69	.989	1-5
15	3.31	1.062	1-5
16	2.56	.984	1-5
17	2.33	.950	1-5
18	2.32	.949	1-5
19	2.81	.985	1-5
20	3.13	.957	1-5
21	3.47	.959	1-5
22	3.05	.968	1-5
23	2.53	.936	1-5
24	3.59	.862	1-5
25	3.80	.941	1-5
26	3.16	1.095	1-5
27	3.42	1.031	1-5
28	2.61	1.012	1-5
29	3.86	.771	1-5
30	2.89	.875	1-5
31	3.15	.852	1-5
32	3.59	.932	1-5
33	3.42	.936	1-5
34	2.59	.908	1-5
35	2.45	.998	1-5
36	2.97	.980	1-5
37	2.85	1.030	1-5
38	3.39	.976	1-5
39	3.07	.965	1-5
40	3.26	.968	1-5
41	2.98	1.036	1-5
42	3.10	1.076	1-5
43	2.62	1.019	1-5
44	3.51	.951	1-5
45	2.33	1.077	1-5
46	2.38	.841	1-5
47	1.95	.941	1-5
48	2.69	.997	1-5
49	3.29	1.029	1-5

The Language Learning Orientation Scale – Intrinsic Motivation, Extrinsic Motivation, and Amotivation Subscales (LLOS-IEA)

LLOS-IEA Item	Mean	Standard Deviation	Range
1	1.69	.972	1-5
2	2.04	1.088	1-5
3	2.85	1.294	1-5
4	3.44	1.216	1-5
5	2.66	1.107	1-5
6	2.80	1.191	1-5
7	2.54	1.226	1-5
8	1.40	.794	1-5
9	3.72	1.169	1-5
10	2.36	1.207	1-5
11	4.12	1.020	1-5
12	3.18	1.119	1-5
13	2.39	1.085	1-5
14	2.58	1.176	1-5
15	1.62	.991	1-5
16	3.35	1.254	1-5
17	2.27	1.238	1-5
18	3.83	1.098	1-5
19	3.38	1.204	1-5
20	2.79	1.132	1-5
21	2.62	1.264	1-5

The Foreign Language Classroom Anxiety Scale (FLCAS)

FLCAS Item	Mean	Standard Deviation	Range
1	3.01	1.085	1-5
2	2.98	1.040	1-5
3	2.92	1.053	1-5
4	3.30	1.048	1-5
5	3.09	.991	1-5
6	3.60	.981	1-5
7	2.96	1.052	1-5
8	3.40	1.092	1-5
9	3.31	1.385	1-5
10	2.81	1.132	1-5
11	3.02	1.148	1-5
12	3.21	1.085	1-5
13	2.45	.971	1-5
14	3.49	.939	1-5
15	2.59	1.103	1-5
16	2.47	1.185	1-5
17	2.60	.907	1-5
18	2.62	.974	1-5
19	3.37	1.079	1-5
20	2.48	.968	1-5
21	2.94	1.015	1-5
22	3.44	1.048	1-5
23	3.00	1.044	1-5
24	2.48	.971	1-5
25	2.34	1.109	1-5
26	3.18	.950	1-5
27	2.91	1.058	1-5
28	2.86	1.026	1-5
29	2.73	1.070	1-5
30	2.64	.971	1-5
31	3.50	1.060	1-5

The Willingness-To-Communicate Scale (WTC)

WTC_ Chinese Item	Mean	Standard Deviation	Range
1	2.90	1.222	1-5
2	3.82	1.001	1-5
3	2.70	1.013	1-5
4	3.92	1.212	1-5
5	2.77	1.048	1-5
6	4.16	.957	1-5
7	2.15	1.045	1-5
8	2.80	1.007	1-5
9	4.23	.870	1-5
10	2.77	1.041	1-5
11	3.19	1.142	1-5
12	2.12	.908	1-5
13	2.32	1.029	1-5
14	3.13	1.079	1-5
15	3.59	.941	1-5
16	2.22	1.014	1-5
17	2.30	1.113	1-5
18	4.24	1.096	1-5
19	4.18	.851	1-5
20	3.02	.973	1-5

WTC_ English Item	Mean	Standard Deviation	Range
1	2.20	1.168	1-5
2	2.67	1.264	1-5
3	1.91	.899	1-5
4	2.84	1.282	1-5
5	2.08	1.073	1-5
6	3.08	1.245	1-5
7	1.74	.937	1-5
8	2.14	.983	1-5
9	3.09	1.210	1-5
10	2.16	1.040	1-5
11	2.53	1.115	1-5
12	1.73	.882	1-5
13	1.84	.963	1-5
14	2.46	1.085	1-5
15	2.71	1.049	1-5
16	1.71	.909	1-5
17	1.74	.928	1-5
18	3.36	1.325	1-5
19	3.09	1.184	1-5
20	2.22	.973	1-5

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