

COMMUNITY COLLEGE STUDENTS' MOTIVATIONAL ORIENTATIONS AND  
CHINESE LANGUAGE LEARNING

A Dissertation Presented to the  
Faculty of the College of Education  
University of Houston

In Partial Fulfillment  
of the Requirements for the Degree

Doctor of Education

By

Xiongying Deng

May 2015

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## Abstract

Motivation is a key component in Second Language (L2)/Foreign Language achievement. In existing literature, a few studies have explored the students' motivation in Chinese language learning. However, the majority of participants in those studies were either four-year university students or secondary school students. Few studies focused on students in U.S. community colleges. In addition, most of the research involved heritage language learners or the comparisons between heritage and non-heritage language learners. Finally, Gardner's Attitude/Motivation Test Battery (AMTB) has been the main instrument to examine the intangible motivational constructs, but the validity of the instrument was not mentioned in most studies despite different languages and different language learning contexts. To fill this gap in Chinese language motivation research, the present study integrated the classical theoretical model of integrative and instrumental motivations by Gardner, with Dörnyei's framework of L2 motivation, which specifically focuses on attitudinal motivation in the foreign language classroom, to investigate how motivational orientations influenced the Chinese learning outcomes of non-heritage students in U.S. community colleges. A 30-item survey was developed as the instrument to examine 161 participants' motivational orientations at T College. Factor analysis and multiple linear regression were employed as the major statistical tests in this study. The value of KMO (.91) indicated patterns of correlations were relatively compact and the sample size was adequate to yield distinct and reliable factors. Bartlett's test was highly significant ( $<.001$ ), indicating that R-matrix was not an identity matrix, and therefore factor analysis was appropriate. Three factors were identified from the process of analysis, namely attitudinal motivation, integrative motivation, and instrumental motivation. The

overall Cronbach's Alphas for these three subscales were .871, .878, and .804, respectively and indicated a good reliability. Furthermore, the results demonstrated that the multiple linear regression model with all the three motivational orientations was significant ( $p = .004$ ) in predicting the students' Chinese learning outcomes.

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## **Chapter I**

### **Introduction**

#### **Background of the Study**

In January 2006, President Bush launched the National Security Language Initiative (NSLI), a plan to further strengthen national security and prosperity in the 21st century through education, especially in developing foreign language skills. The President requested \$114 million in FY07 to fund this effort to increase the number of Americans learning critical need foreign languages such as Arabic, Chinese, Russian, Hindi, Farsi, and others through new and expanded programs from kindergarten through university and into the workforce.

Briefing by Dina Powell, Assistant Secretary of State for Education and Cultural Affairs and Barry Lowenkron, Assistant Secretary of State for Democracy, Human Rights and Labor (2006), summarized the situation:

Deficits in foreign language learning and teaching negatively affect our national security, diplomacy, law enforcement, intelligence communities and cultural understanding. It prevents us from effectively communication in foreign media environments, hurts counter-terrorism efforts, and hamstrings our capacity to work with people and governments in post-conflict zones and to promote mutual understanding. Our business competitiveness is hampered in making effective contacts and adding new markets overseas.

To address these needs, under the direction of the President, the Secretaries of State, Education and Defense and the Director of National Intelligence have developed NSLI, a comprehensive national plan to expand U.S. foreign language education

beginning in early childhood and continuing throughout formal schooling and into the workforce, with new programs and resources. In summary, the goals of NSLI are to expand the number of Americans mastering critical need languages and start at a younger age, to increase the number of advanced-level speakers of foreign languages with an emphasis on critical needs languages, and to increase the number of foreign language teachers and the resources for them.

Chinese has been listed as a critical need language under the NSLI umbrella because of America's strategic business and security interests in the Chinese-speaking world. The federal government has invested in seed funding for Chinese language programs around the nation through NSLI. The Foreign Language Assistance Program (FLAP) of the U.S. Department of Education funded 70 Chinese language programs and 3 States (Ohio, North Carolina, and Wisconsin) in 2006 and 2007, totaling approximately \$13 million dollars. STARTALK is a national program that provides critical language education for students K-16, professional development for critical language teachers, and resources for the world language teaching and learning field. The STARTALK program offers summer Chinese programs to students and teachers nationwide. In 2007, 944 high school students and 427 high school teachers participated in 25 summer Chinese programs supported by the STARTALK Program. In 2008, STARTALK is expected to support 55 Chinese programs, projected to service 1,884 students and 688 teachers nationwide.

Over the past 30 years, China has transformed itself from an underdeveloped country into a major world power. It is the second most important trading partner of the United States after Canada. A 2007 report from the National Bureau of Economic

Research predicts that by 2040 China's gross domestic product will be larger than that of the entire rest of the world and that the Chinese market will be larger than those of the United States, European Union, Japan, and India combined. The fact that the United States is routinely involved in political and diplomatic discussions and negotiations with China over issues ranging from climate change to currency to sanctions against Iran makes it clear that the two countries communicate effectively. As Secretary of State Hillary Clinton addressed in 2009:

Today it is tempting to focus our attention on the tensions and perils of our interdependence, but I prefer to view our connectedness as an opportunity for dynamic and productive partnerships that can address both the challenge and the promise of this new century. We believe that the United States and China can benefit from and contribute to each other's success. It is in our interests to work harder to build on areas of common concern and shared opportunities.

Citing the strategic importance of the U.S.-China relationship, in November, 2009, President Obama announced the "100,000 Strong" initiative, a national effort designed to increase dramatically the number and diversify the composition of American students studying in China. Secretary of State Hillary Clinton officially launched the initiative in May 2010 in Beijing. A target was set of 100,000 Americans studying in China during the four-year period of 2010-2014. Existing U.S. federally-funded scholarships, such as the Fulbright Program, the Benjamin A. Gilman Scholarship Program, and the National Security Education Program (NSEP), were to be supplemented by private sector funding from U.S. corporations and foundations. The initiative was also supported by the Chinese government, which pledged upwards of 20,000 scholarships to Americans studying in

China. This initiative seeks to prepare the next generation of American experts on China who will be charged with managing the growing political, economic and cultural ties between the United States and China. The initiative also seeks to develop specific opportunities and funding sources for underrepresented students to study in China.

For the past decade, the number of U.S. students studying in China for academic credit from their U.S. home institution has risen at an average of 18 percent per year, from 3,291 students in 2000 to 15,6471 in 2010/11, according to the latest Open Doors Report, published annually by the Institute of International Education in partnership with the U.S. Department of State's Bureau of Educational and Cultural Affairs (Belyavina, 2013). Since 2007, China has been the most popular study abroad destination outside of Western Europe, and one of the top five destinations for U.S. students studying abroad for academic credit from their college or university in the United States.

Despite the numerical goal of the initiative, little was known about how many Americans were in fact participating in a full range of educational activities in China. To address this gap, the Institute of International Education conducted a study from October, 2011, to September, 2012 with support from the Ford Foundation (Belyavina, 2013). The survey of U.S. higher education institutions was sent to 1,680 accredited U.S. colleges and universities and 563 valid responses were received, yielding a response rate of 34 percent. All types of institutions responded to the survey, ranging from doctoral level universities to specialized institutions of higher education. Data was also gathered from the China Scholarship Council and education provider institutions. The study indicates that the kind of for-credit study that has been reported by the U.S. campuses now represents about 59 percent of all U.S. students in China, while another 41 percent of

students are undertaking other types of educational activities. As this is a pilot study, including responses from over 500 U.S. campuses, these numbers are almost certainly an undercount. It is likely that there are many more U.S. students who go to China on their own, often over school breaks, who are not being tracked or reported by higher education institutions at this time. According to this study (Belyavina, 2013), first, in 2011, there were at least 26,686 American students participating in educational activities in China (including mainland China, Hong Kong and Macau). Based on these findings, the 100,000 Strong Initiative is likely to meet the goal of sending 100,000 American students to China over a four year period, assuming a sustained or increased interest in studying in China. Second, the majority of U.S. post-secondary students participating in education abroad activities are undergraduates, making up more than 76 percent of all U.S. students in China pursuing for-credit and not-for-credit education abroad. Twenty one percent of the American students in China were graduate students, and just over three percent were associates degree and non-degree students. Third, for-credit study abroad programs continue to be the most popular among students going to China. Study tours were the second most popular way to get an educational experience in China. Slightly over 4,000 students took part in study tours to China led by faculty or facilitated by outside organizations. Educators commented that these types of study tours were likely to become increasingly popular in the future, as there is often no prerequisite language requirement and these programs generally occur in summer or academic breaks in midwinter or spring so they do not interfere with the students' academic coursework. Fourth, several thousand students took part in more extended academic and language coursework in China. Nearly 2,200 U.S. students were enrolled in full degree programs in

Chinese higher education institutions in 2011, an increase of 23 percent from the previous year. The number of Americans working toward full degrees from Chinese institutions includes 1,028 students in undergraduate programs and 1,156 students in graduate programs, primarily at the Master's degree level. Finally, 92 percent of responding institutions predict an increase in U.S. student participation in educational programs in China in the next five years, particularly in short-term study abroad, internships, and language programs. These findings reveal that a significantly higher number of American students participate in education abroad activities in China than previously known and that there is considerable interest and room for growth in expanding U.S. student engagement in China.

This study also found that financial constraints (reported by over 43 percent of respondents) and language barriers (reported by 42 percent of respondents) are the biggest challenges to increasing the number of American students studying in China. While funding for study abroad is a longstanding challenge, many opportunities for American students have been created to facilitate more outbound mobility to China. Scholarships from private companies and foundations, solicited through the 100,000 Strong Initiative, have supplemented scholarships from U.S. colleges and universities and the U.S. government that have been in place for many years. As part of its commitment to the 100,000 Strong Initiative, the Chinese government announced that as many as 20,000 scholarships will be available for American students to study in China; over 6,500 of these scholarships have already been awarded to US students, according to the Chinese government sources (Asia Society, 2010). On January 24, 2013, Secretary of State Hillary Clinton announced the creation of a new independent nonprofit organization, the



100,000 Strong Foundation to enhance and expand opportunities for US students to learn Chinese and study in China, furthering the goals of the initiative. It is vital that information about funding for study in China reach interested students.

Regarding the language barriers, it is evident that to fulfill the target of 100,000 students studying in China, the United States will need many more students who are proficient enough in Chinese to be able to study at Chinese universities. In this new global age, young Americans growing up and seeking their place in this global society need knowledge and skills that differ from those of previous generations. In addition to their professional qualifications, they need to develop global competencies. These competencies include knowledge of other cultures and economies, along with skills in working across cultures and in communicating in languages other than English.

Calls for increased attention to foreign languages on the part of American citizens are nothing new. The need for high-level knowledge of foreign languages and cultures was recognized during World War II, when the U.S. government asked the American Council of Learned Societies (ACLS) to develop programs to teach several less commonly taught languages. Instructions in foreign languages at the high school and college levels increased sharply under the National Defense Education Act of 1958, which was inspired by the launching of Sputnik I by the Soviet Union in 1957 (Asia Society, 2010). Despite such periodic bouts of attention to foreign language acquisition, the United States remains behind other developed countries in cultivating linguistic capacity. The United States is the only industrialized country that waits until high school to begin teaching foreign languages in earnest. By contrast, a push is under way in the European Union for every student to learn at least two languages in addition to their

mother tongue and 300 million students in China are studying English (Salomone, 2010). Just 18 percent of Americans report speaking a language other than English. That's far short of Europe, where 53 percent of citizens speak more than one language (Duncan, 2010).

### **Chinese Programs in the United States**

Although it is widely accepted that languages are learned most effectively at an early age, in 2008, only one-quarter of elementary schools offered some form of language instruction – down from one-third 11 years earlier. Just 10 states require foreign language study for high school graduation (Duncan, 2010). Languages offered in U.S. K-12 schools tend to be limited to traditionally taught European languages, with little attention paid to less commonly taught languages. In higher education, a 2006 survey conducted by the Modern Languages Association found increasing interest among students in language study and a broad range of languages being studied. Nevertheless, the study concluded that the majority of students do not pursue the advanced study necessary to achieve fluency. As a 2007 report from the National Research Council warned, “The pervasive lack of knowledge of foreign cultures and languages threatens the security of the United States as well as its ability to compete in the global marketplace” (2007, p. 1).

The reasons for studying world languages apply to Chinese, which is the most widely spoken first language in the world. The Chinese language exists in written records dating back almost four thousand years, starting with oracle bone inscriptions, progressing to inscriptions on bronze vessels, and then to brush writings on bamboo and silk. As China is emerging as one of the world's largest economic entities and one of the most important social and political powers, more and more Americans need to understand

how Chinese live and think. The need for Americans to gain greater exposure to and understanding of China is clear: there is perhaps no more important or complex relationship in the world than that between the United States and China in terms of securing global peace and security. Virtually no major international issue – whether global economic recovery or nuclear non-proliferation can be solved without the active engagement of both the United States and China, working in concert. Yet Americans have much to learn about China. Language is the carrier of culture. There is no more important means of understanding China than learning the Chinese language. However, 600 times more Chinese study the English language than Americans study Chinese. This imbalance in knowledge can undermine strategic trust between the two countries. Redressing this imbalance in knowledge is essential to ensuring that Americans have the cultural understanding and language skills that underpin effective diplomacy and foreign policy. It will also enhance American students' ability to succeed academically and professionally in the global economy.

Although Chinese is still categorized as one of the less commonly taught foreign languages (LCTL) in the United States, student enrollment has been increasing rapidly at every level (Asia Society, 2010). There are no official counts of American schools offering Chinese, nor have any comprehensive studies been undertaken of the number of K-12 students studying Chinese and the levels of proficiency they reach. Data collected by the Asia Society and College Board from various sources identified 263 Chinese language programs in elementary and secondary schools in 2004 and 779 such programs in 2008, almost 200 percent increase. Of these, 444 programs were in public schools, 335 in private schools (2008, p. 2). A 2010 survey of enrollment by American Council on the

Teaching of Foreign Languages (ACTFL), funded by the U.S. Department of Education, found the number of students studying Chinese in K-12 public schools in 2007-2008 to be 59,860 (2011, p. 8). A 2010 nationwide survey of 1962 high schools by the American Council on Education to identify schools that offer less commonly taught language found that Chinese language instruction is quite widespread within the K-12 school system (2011, p. 11). This unprecedented expansion is not coming from a single driver but from multiple sources. For example, many municipal and state governments are moving forward fast, recognizing the study of Chinese language and culture as an economic competitiveness strategy and a way to develop the global competence of their future workers. Chicago and Los Angeles, each has a plan to make Chinese one of the “commonly taught” languages in their schools. At the state level, Kansas, Ohio, Oklahoma, Minnesota, North Carolina, Wisconsin, and Utah are making the instruction of Chinese a priority of their world language programs (Asia Society, 2010).

The growing interest in Chinese instruction is evident not only in growing enrollments and the proliferation of new programs, primarily at high school level, but in the emergence of innovative approaches to Chinese language instruction at the elementary school level. Studies have shown that the human brain is most open to linguistic development in the years before adolescence and that children who learn a language in the elementary school years are more likely to achieve native-like pronunciation. American parents and educators are increasingly interested in having children start learning a foreign language during elementary school. As with other world language programs, there is a range of Chinese language programs of varying intensity at the elementary school level. At one end of the spectrum are “foreign language exploration,”

or FLEX, programs that introduce children to other languages and cultures as a general concept. Since FLEX classes meet only once or twice a week, such programs do not have linguistic proficiency as a goal. However, they can provide valuable motivation for students to learn languages later and for school districts to start language programs.

Most elementary school language programs fall into the category of “foreign language in the elementary school,” or FLES, programs where Chinese is taught as a distinct subject. Such classes are taught three or five times a week. Children in these classes may attain substantial proficiency.

At the other end of the intensity spectrum are immersion programs in which children spend part or all of the school day taking regular academic courses in Chinese. In full immersion programs, children learn all of their subjects, including math, science, and social studies, in Chinese. In partial immersion programs, some of the curriculum is taught in Chinese. Research shows that children in both types of immersion programs reach far higher levels of language proficiency than they do in other programs, while showing no decrease in their achievement in other subjects. According to Mandarin Immersion Parents Council (2014), there are Chinese immersion programs in 26 states and the District of Columbia. California has the most with 37. It is followed by Utah with 26. Oregon has eight; Minnesota, Maryland and Colorado, each state has seven. From there the numbers fall, with 16 states having four or fewer programs. In cities, Portland, Oregon, has the most Chinese immersion programs, with six.

In higher education, although the number of students studying Chinese in the United States at the present time is modest- accounting for only 4 percent of foreign language enrollment, a major attitudinal shift is taking place. Whereas Chinese was once

approached as an intellectual or cultural curiosity, it is now viewed as an important world language alongside Spanish, French, German, and other traditionally taught languages. According to Welles (2004) and a 2007 MLA (The Modern Language Association of America) survey, the number of college students studying Chinese rose 20 percent from 28,456 in fall 1998 to over 34,153 in fall 2002, and increased 51 percent from 34,153 in fall 2002 to over 51,582 in fall 2006.

### **Statement of the Problem**

Chinese has become a more and more popular foreign language in American schools and colleges. Teaching Chinese has become more important in the United States today than in the past. Meanwhile, as a result of its unique language system and special social, political, cultural and historical factors, Chinese language learning and teaching in the United States has its own special characteristics and faces many challenges.

First, according to Walker (1989) and Walton (1989), Chinese is one of the most difficult languages to learn. The Foreign Service Institute (FSI) of the US Department of State has defined four categories of foreign languages on the basis of the difficulty for native speakers of English (Walker, 1989). It is significant that the most commonly taught languages- Spanish and French- are both Category I languages. The less commonly taught languages (LCTL), such as Chinese, Japanese, Korean, and Arabic, on the other hand, are included in Category IV. According to Silber (1989), for the level of proficiency, students need to take 1320 hours of instruction in a Category IV language in comparison with only 480 hours of instruction in Category I languages. This means it takes English-speaking Americans at least three times longer to learn Chinese than to learn French or Spanish. This is mainly because Chinese has a unique tonal speaking

system, and ideograms are employed for its orthographic writing systems. Spoken Mandarin Chinese is a tonal language, in which a tonal level of pronunciation determines meaning. Two spoken words virtually identical except for differences in the tone will have different meanings. The writing system developed in China several thousand years ago is fundamentally different from Western alphabetic systems.

Second, a variety of Chinese textbooks have been adopted in American schools and colleges. Before 1990, all the textbooks used in Chinese classrooms were in traditional characters as the majority of Chinese teachers originally came from Taiwan (Lu & Li, 2008). In the past twenty five years, however, more and more Chinese teachers came from Mainland China and brought them with Pinyin and simplified characters. The textbooks published in Mainland China have adopted Pinyin phonetic notation and simplified Chinese characters. Those from Taiwan use Zhuyin Fuhao, a completely different phonetic notation, and traditional Chinese characters. Besides these two phonetic notation systems, the textbooks written by native English speakers, even use other phonetic systems such as the Wade-Giles and Yale systems. Textbooks from these three areas are different not just pedagogically and socio-culturally but also in the manner and style in content editing and organization, as well (Lu & Li, 2008).

Third, American schools are short of highly qualified Chinese teachers. Once a Chinese program is in place, the most important requirement for making it effective is to put a qualified and effective teacher in charge. Developing and equipping a strong corps of Chinese language teachers to teach in the United States classrooms is thus the first step toward producing the linguistically competent workforce that the United States need today. Whatever their national or linguistic background, future teachers need strong

command of both Chinese and English, interactive language pedagogy, and effective classroom management skills to teach Chinese in the 21st century American context. To meet the growing needs for such a teaching force, some higher education institutions started to offer programs to prepare pre-service and in-service teachers with a firm foundations in language, literacy, and applied linguistics. For example, Arizona State University, Indiana University, New York University, Ohio State University, University of Oregon, Rutgers University, and Rice University. However, most Chinese programs can only find less qualified people to fill part-time, occasional, nontenured, and “soft-funded” language positions. Those teachers usually do not have theoretical foundations for second language acquisition to teach the Chinese language effectively.

Given the complexity of learning Chinese for English native speakers, a learner of the Chinese language must be highly motivated. Regarding the role of motivation in second language (L2) learning, Dörnyei (1998) contended that “...L2 motivation is one of the most important factors that determine the rate and success of L2 attainment: it provides the primary impetus to initiate learning the L2 and later the driving force for sustaining the long and often tedious learning process.” Gardner and Lambert (1972) proposed that the attainment of an L2 is affected by a variety of sociocultural factors such as language attitudes, cultural stereotypes, and even geopolitical considerations, but Dörnyei (1998) argued that high motivation can make up for considerable deficiencies both in one’s language aptitude and learning conditions.

Motivation is one of the key factors for any second language attainment, and this is especially true for learning Chinese. “Chinese language learners’ motivation must be high since persistence and determination are needed to deal with the stress of a difficult



language.” (Okada, Oxford, and Abo, 1996). Appropriate curricula and good teaching are not enough to ensure student achievement. Without sufficient motivation, even individuals with the most remarkable language abilities cannot reach the goal of proficiency.

With increasing enrollments in Chinese language classes among the colleges in the United States, it is urgent to find out the relationship between motivational orientations and language learning outcomes of Chinese language learners. This study is targeted at satisfying at least a portion of that need.

### **Purpose of the Study**

There have been numerous helpful studies on second language learners’ motivation (Clement, 1980; Gardner, 1985; Gardner, Day, & MacIntyre, 1992; Gardner & Lambert, 1972; Gardner & MacIntyre, 1991; Gardner, Tremblay, & Masgoret, 1997; Masgoret & Gardner, 2003). However, most of the studies have focused on the study of motivation in Indo-European languages (Hernandez, 2008; Kachru, 1997; Rahman, 2003; Vaezi, 2008). Few studies have explored the students’ motivation in Chinese language learning. Furthermore, those studies concerning Chinese language learning mainly focused on heritage language learners in four-year colleges (Weger-Guntharp, 2006; Wen, 1997). None of those studies investigated the non-heritage language learners in the two-year community colleges. The present study is intended to fill this gap in research, with the aim of investigating how motivation influences Chinese learning outcomes of non-heritage language learners in U.S. community colleges.

More specifically, in conducting this investigation, the researcher will integrate the classical theoretical model of integrative and instrumental motivations by Gardner

and Lambert (1972), with Dörnyei's (1994a) expanded theoretical model, which specifically focuses on attitudinal motivation in the foreign language classroom. Therefore, this study explores how integrative, instrumental, and attitudinal motivations play a role in the process of Chinese language acquisition, and how each of them influences a Chinese language learner's outcomes.

### **Theoretical Framework**

This study is based on the socio-educational model of second language acquisition proposed by Gardner (1985) and Dörnyei's (1994a) framework of L2 motivation.

Gardner began to develop his socio-educational model about the role of attitudes and motivation in second language learning in the 1960s. As a result of many empirical studies, Gardner's initial finished model was presented in 1979, revised in 1985 and again in 2001. Gardner's socio-educational model (1979) showed four variables, named social milieu, individual differences, second language acquisition contexts and outcomes. These four variables are interrelated in the process of second language acquisition. The first variable, social milieu, refers to the individual's cultural beliefs or environment. It influences both affective and cognitive individual differences among language learners. The second variable, individual differences, includes four sub-variables. Intelligence and language aptitude are the two cognitive factors; Motivation and situation anxiety are the two affective factors. According to Gardner (1979), these four individual differences are the most influential in acquiring a second language. The third variable, learning acquisition contexts, refers to the setting where the language is being learned. The fourth variable, language learning outcomes, includes linguistic knowledge and language skills

(vocabulary, grammar, fluency, and etc.) and non-linguistic skills (the individual's attitudes towards the target language community and cultural values of the second language group). In 1985, Gardner modified the model by adding integrative motive to the individual differences variable. Integrative motive includes two components: attitudes towards the learning situation and integrativeness. Attitudes towards the learning situation involves the evaluation of the language teacher and the language course. Integrativeness is perceived as the interest in the second language group.

The Attitude/Motivation Test Battery (AMTB) (Gardner, 1985) of the socio-educational model was developed to measure the various components of the socio-educational model of second language acquisition and it consists of five parts: Integrativeness, Attitudes toward the Learning Situation, Motivation, Instrumentality, and Language Anxiety. Integrativeness is about a general interest in foreign groups and it reflects an individual's openness to other cultures in general and the target culture in particular. There are three measures of Integrativeness: integrative orientation toward learning the second language; a favorable attitude toward the target language community or attitude toward native speakers; and interest in foreign language. Attitudes toward the Learning Situation involves attitudes towards the learning environment, reactions to the textbooks, evaluations of the language teacher and the language course. There are two measures of this variable: evaluation of the language teacher and evaluation of the language course. Motivation is the effort exerted to learn the material, desire plus positive attitudes in learning the material. There are three measures of this variable: motivation intensity, desire to learn the language, and attitudes toward learning the language. In the

socio-educational model, it is assumed that the Integrativeness and Attitudes toward the Language Situation are the major supports for motivation.

Instrumentality indicates a learner learns a language for pragmatic reasons. The only measure of this variable is instrumental orientations. Language Anxiety could happen in many situations, for example, interpersonal communication, examinations, and etc. In general, there are two different situations to assess learner's Language Anxiety: the language classroom and contexts outside the classroom. Two measures are employed: language class anxiety and language use anxiety. According to Gardner (1985), language anxiety could have deleterious effects on learning, and inadequate skill could give rise to feeling of anxiety.

Until the 1990s the L2 research had been dominated by the social-psychological approach initiated and inspired by the influential work of Gardner and Lambert (1972, 1985), who considered the motivation to learn a language to be the primary force responsible for enhancing or hindering intercultural communication and affiliation. A standardized motivation battery, the AMTB operationalized the components of socio-educational model in measurable terms. In the second language profession, two components of this model in particular became well-known: integrative and instrumental orientation. Integrative orientation is associated with a positive disposition toward the L2 group and the desire to interact with, and even become similar to, valued members of that community. Instrumental orientation is related to the potential pragmatic gains of L2 proficiency, such as getting a better job or a higher salary.

The 1990s brought along a shift in thought on L2 motivation. It seemed that the social-psychological approach did not provide a detailed description of the classroom

dimension of L2 motivation, one that could have been used to explain specific student behaviors and to help generate practical guidelines for motivating learners (Dörnyei, 1996). In this situation, a number of researchers would like to adopt a more pragmatic, education-centered approach to motivation research, which would be more directly relevant to classroom practice (Brown, 1990; Clement et al., 1994; Crookes and Schmidt, 1991; Dörnyei, 1994a). They hypothesized that situation-specific motives closely related to classroom practice played a far more significant role in the L2 motivation complex.

This hypothesis was tested by a study on Hungarian EFL (English as a Foreign Language) learners (Clement et al., 1994). Three motivation constructs existed among these learners: integrative motivation, linguistic self-confidence, and the appraisal of the classroom environment. The first component, integrative motivation, was very similar to Gardner's integrative motive. It validated the relevance of earlier research findings. The second component, linguistic self-confidence, was coherent with the findings of previous studies conducted by Clement (Clement, 1980; Clement & Kruidenier, 1985; Labrie & Clement, 1986). The third, classroom-specific component, however, was a new finding and supported the validity of the pedagogical extension of motivation research.

Based on this empirical study, Dörnyei (1994a) developed a more general framework of L2 motivation that synthesized various lines of research. This framework offered an extensive list of motivational components categorized into three main dimensions: the Language Level, the Learner Level, and the Learning Situation Level.

Table 1

*Components of Foreign Language Learning Motivation*

Level	Motivation components
Language Level	Integrative motivational subsystem Instrumental motivational subsystem
Learner Level	Need for achievement Self-confidence . Language use anxiety . Perceived L2 competence . Causal attributions . Self-efficacy
Learning Situation Level	
Course-specific motivational components	Interest Relevance Expectancy Satisfaction
Teacher-specific motivational components	Affiliative motive Authority type Direct socialization of student motivation . Modeling . Task presentation . Feedback
Group-specific motivational components	Goal-orientedness Norm and reward system Group cohesion Classroom goal structure

*Note.* From “Ten commandments for motivating language learners,” by Z. Dörnyei, 1998, *Language Teaching Research*, 2, p. 206.

The Language Level of motivation concerns “ethnolinguistic, cultural-affective, intellectual, and pragmatic values and attitudes attached to the target language” (Dörnyei,

1998, p. 205). The motivational processes at this level can be described comprehensively by using the traditional concepts of integrative and instrumental motivation.

The Learner Level concerns “various fairly stable personality traits that the learner has developed in the past” (Dörnyei, 1998, p.205). Two motivational components were identified underlying the motivational processes at this level: need for achievement and self-confidence. The latter encompassed various aspects of language anxiety, perceived L2 competence, attributions about past experiences, and self-efficacy.

The Learning Situational Level is “associated with situation-specific motives rooted in various aspects of language learning in a classroom setting” (Dörnyei, 1998, p. 206). Three main types of motivational sources are identified within this level: Course-Specific motivational components, which are related to the syllabus, the teaching materials, the teaching method and the learning tasks; Teacher-Specific motivational components, which are related to the teacher’s behavior, personality and teaching style, and direct socialization of student motivation; Group-Specific motivational components, which are related to the group dynamics of the learner group.

In summary, Gardner’s socio-educational model provides a fundamental research paradigm to investigate the role of attitudes and motivation in learning a second language. Integrative and instrumental orientations of this model had been very influential and are regarded as the major and indispensable factors of L2 motivation. Dörnyei expands motivation at the learning situation level by adding a number of specific situational motives and components to Gardner’s Attitudes toward the Learning Situation, such as course-specific, teacher-specific, and group-specific, and also the learner’s affective reactions to any aspect of the class and learning environment. Dörnyei (1994a) contended

that these specific components actually formed an independent motivational factor labeled “Evaluation of the Learning Environment.” Thus, in this study, the researcher integrated Gardner’s integrative and instrumental orientations with Dörnyei’s attitudinal motivation to investigate whether these variables predict the Chinese learning outcomes of non-heritage students in U.S. community college. If yes, to what degree and in what manner will students’ Chinese learning outcomes be predicted by these variables?



## **Chapter II**

### **Literature Review**

#### **Definitions of Motivation**

Motivation is one of the key determinants of a second/foreign language (L2) learning achievement. Despite the unchallenged position of motivation in language learning, there is, in fact, no agreement on the exact definition of motivation (Oxford & Shearin, 1994). According to Dörnyei (1998, p.117), “Although ‘motivation’ is a term frequently used in both educational and research contexts, it is rather surprising how little agreement there is in the literature with regard to the exact meaning of the concept”. Researchers still do not agree on its components and the different roles that these components play- individual differences, situational differences, social and cultural factors, and cognition (Belmechri & Hummel, 1998; Renchler, 1992). McDonough (1981) refers to the term ironically, calling it a dustbin that is used to “include a number of possibly distinct components, each of which may have different origins and different effects and require different classroom treatment” (p. 143). Dörnyei (2001), though less ironical but equally sharp, contends that researchers disagree about everything that relates to the concept of motivation, viewing it as no more than an obsolete umbrella that hosts a wide range of concepts that do not have much in common. The complexity of motivation can be more appreciated if one takes into consideration that it is “intended to explain nothing less than the reasons for human behavior” (Dörnyei, Csizér, & Németh, 2006, p. 9).

At its beginnings, the concept of motivation was examined and understood within a behavioral framework trying to understand “what moved a resting organism into a state

of activity”, with heavy reliance on concepts such as instinct, drive, need, energisation, and homeostasis (Weiner, 1990). It was considered too complex to investigate directly, and much experimental research conducted on animals was generalized to humans.

Reward systems were the backbone of the approach for motivating individuals to show the desired behavior (Williams & Burden, 1997). This understanding of the concept was visibly not relevant to the educational context and this tradition continued to the sixties with the machine metaphor of motivation (Weiner, 1990).

The cognitive revolution started in the sixties and by the seventies it rendered irrelevant the behavioral mechanical approaches to motivation. Such positivist approaches lost support in philosophy because they simply did not work (Locke, 1996). In the cognitive developmental theory laid down by Piaget, motivation is perceived as “a built-in unconscious striving towards more complex and differentiated development of the individual’s mental structures” (Oxford & Shearin, 1994, p. 23). With the advance of the cognitive approaches the field became more relevant to educational psychologists and the cognitive shift led to concentration on the individual’s role in his or her own behavior. In other words, there has been a shift toward focusing on why students choose to engage in academic tasks instead of focusing on what they do and the time they spend doing so as has been the case with the behaviorist approach (Rueda & Dembo, 1995). Concepts such as goal and level of aspiration replaced the unconscious concepts of drive, instinct and the like. Individual differences were more highlighted with the introduction of psychological concepts like anxiety, achievement needs and locus of control. More cognitive concepts were developed during the seventies and eighties like self-efficacy, learning helplessness, and causal attributions.

### **Gardner's Socio-Educational Model**

Social psychologists were the first to initiate serious research on motivation in language learning because of their awareness of the social and cultural effects on L2 learning (Dörnyei, 2003). This interest was translated into the appearance of a number of models that stressed the affective aspect of language learning including Krashen's (1981) Monitor Model and Schumann's (1986) Acculturation Model. However, the most influential model in the early sixties through the eighties of the previous century was the socio-educational model developed by Gardner and his associates (1985). Gardner and his associates grounded motivation research in a social psychological framework. They also established scientific research procedures and introduced standardized assessment techniques and instruments, AMTB (Attitude/Motivation Test Battery) (Gardner, 1985) and brought L2 motivation research to maturity.

Gardner (1985) defines L2 motivation as the extent to which an individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity; more specifically, motivation is conceptualized to subsume three components: motivational intensity, desire to learn the language, and an attitude towards the act of learning the language. Thus, according to Gardner's theory, "motivation" refers to a kind of central mental "engine" or "energy-center" that subsumes effort, want/will (cognition), and task-enjoyment (affect). Gardner argues that these three components belong together because the truly motivated individual displays all three and "it is the total configuration that will eventuate in second language achievement" (Gardner, 1985).

There are a number of components in the socio-educational model which are measured using different attitudinal and motivational scales in what Gardner called the AMBT (Attitude / Motivation Test Battery). Integrativeness, reflects a genuine interest in learning the second language in order to come closer psychologically to the other language community. In the extreme, this might involve complete identification with the community (and possibly even withdrawal from one's original group), but more commonly it might well involve integration within both communities. Integrativeness is measured by three scales: an integrative orientation toward learning the second language, a favorable attitude toward the language community, and interest in foreign languages (i.e., an openness to other groups in general).

Attitudes toward the learning situation involves attitudes toward any aspect of the situation in which the language is learned. In the school context, these attitudes could be directed toward the teacher, the course in general, one's classmates, the course materials, extra-curricular activities associated with the course, and etc. This is not meant to imply that the individual necessarily thinks everything about the class is ideal. If the language teacher is ineffective or non-responsive, etc., if the course is particularly dull or confused, etc., these factors will undoubtedly be reflected in the individual's attitudes toward the learning situation. In any situation, some individuals will express more positive attitudes than others. These differences in attitudes toward the learning situation are the focus of the socio-educational model. Attitudes toward the learning situation is measured by two scales: attitudes toward the teacher and attitudes toward the course.

Motivation refers to the driving force in any situation. In the socio-educational model, motivation to learn the second language is viewed as requiring three elements.

First, the motivated individual expends effort to learn the language. That is, there is a persistent and consistent attempt to learn the material, by doing homework, by seeking out opportunities to learn more, by doing extra work, and etc. Second, the motivated individual wants to achieve the goal. Such an individual will express the desire to succeed, and will strive to achieve success. Third, the motivated individual will enjoy the task of learning the language. Such an individual would say that language learning is fun, challenging, and enjoyable. All these three elements, effort, desire, and positive affect, are seen as necessary to distinguish between individuals who are more motivated and those who are less motivated. Each element, by itself, is seen as insufficient to reflect motivation. Some students may display effort, even though they have no strong desire to succeed, and may not find the experience particularly enjoyable. Others may want to learn the language, but may have other things that detract from their effort, etc. The point is the truly motivated individual displays effort, desire and affect. Gardner (1985) claims that motivation is a complex concept, and that the motivated individual exhibits many other qualities in addition to effort, desire and affect, but these three attributes adequately assess motivation.

The three classes of variables, integrativeness, attitudes toward the learning situation, and motivation form integrative motivation. It was the integrative motivation that was most stressed by Gardner and it was in fact the key element of his model. According to Gardner (1985), the integratively motivated individual is one who is motivated to learn the second language, has a desire or willingness to identify with the other language community, and tends to evaluate the learning situation positively. In the model, Integrativeness and attitudes toward the learning situation are seen as supports for

motivation, but it is motivation that is responsible for achievement in the second language. Someone may demonstrate high levels of integrativeness and/or very positive attitudes toward the learning Situation, but if these are not linked with motivation to learn the language, they will not be particularly highly related to achievement. Similarly, someone who exhibits high levels of motivation that are not supported by high levels of integrativeness and/or favorable attitudes toward the learning situation may not exhibit these high levels of motivation consistently. Integrative motivation represents a complex of these three classes of variables.

In contrast to integrative motivation is the form of motivation referred to as instrumental motivation, which is not part of Gardner's core theory. Instrumental motivation emphasizes the practical value and advantages of learning a new language (Lambert, 1974). With instrumental motivation the purpose of language acquisition is more utilitarian, such as meeting the requirements for school or university graduation, applying for a job, requesting higher pay based on language ability, reading technical material, translation work or achieving higher social status. The integrative motivation stresses an emotional involvement with the other community, while the instrumental motivation does not necessarily. In short, instrumental motivation is characterized as the desire to obtain something practical or concrete from the study of a second language. It arises from material rewards associated with language learning success. In the socio-educational model, instrumentality is measured by only one scale: instrumental orientation.

The final variable of the Gardner's socio-educational model is language anxiety. This variable involves the language class anxiety and language use anxiety. Language

anxiety can have a negative effect on the language learning process. Anxious students have more difficulty expressing themselves and tend to underestimate their level of ability compared with more relaxed students (MacIntyre & Gardner, 1994). Gardner and MacIntyre (1993) proposed that high levels of anxiety inhibit motivation and high levels of motivation abate anxiety. They found that language anxiety demonstrated the strongest correlations with second language achievement among attitudes, motivation, and anxiety.

The Attitude/Motivation Test Battery (AMTB) was developed by Gardner (1985) to measure the relationships among the variables proposed in his socio-educational model. It was revised as he conducted his studies. This instrument has been used to test the validity of the socio-educational model on several occasions with participants of different ages in different contexts (Gardner, Day, & MacIntyre, 1992; Gardner, Lalonde, Moorcroft, & Evers, 1987; Gardner & MacIntyre, 1991; Gardner & MacIntyre, 1993; Gardner, Tremblay, & Masgoret, 1997). The AMTB has been widely tested to show satisfactory reliability and validity (Gardner & MacIntyre, 1993; Gliksmann, Gardner, & Smythe 1982). As Dörnyei (2005) commented,

Attitude/Motivation Test Battery is a multicomponential motivation questionnaire made up of over 130 items, which has been shown to have good psychometric properties, including construct and predictive validity. It operationalizes all the main constituents of Gardner's theory of the integrative motive and it also includes the additional components of language anxiety, parental encouragement, and instrumental orientation. (pp. 70-71)

Gardner's theory was the dominant motivation model in the L2 field for more than three decades. The model of L2 motivation developed by Gardner and his associates

combined motivation theory with social psychological theory. It was more elaborate and advanced than many contemporary mainstream psychological modes of motivation in that it was empirically testable and did indeed explain a considerable amount of variance in student motivation and achievement (Dörnyei, 1994b).

### **Criticism of Gardner's Socio-Educational Model**

While acknowledging unanimously the fundamental importance of Gardner's socio-educational model, researchers also raised some problems with this model. The main problem with Gardner's social psychological approach was that it was too influential. Crookes and Schmidt (1991) argued that the socio-educational model was so dominant that alternative concepts had not been seriously considered. This resulted in an unbalanced picture.

Most criticism was raised against the concept of integrative motivation and its definition. The notion of integrative motivation has no parallel in mainstream motivational psychology (Dörnyei, 2003). The term has also been understood in different and sometimes contradictory ways by different researchers. The integrative motivation has been defined in a way in which almost every reason one can think of for studying the language of the target community can fall within its range (Clement & Kruidenier, 1983). For example, the orientation to travel was considered instrumental by some but interpreted as integrative by others. In another example, reasons such as having friends who speak English, or knowing more about English art, literature and culture could be classified as either instrumental or integrative depending on the intention of the respondent and his or her understanding. These approaches to the definition of the



integrative motive led to difficult communication and to different and sometimes contradictory research results.

In addition to integrative and instrumental orientations, a number of other reasons for learning the language were also found in many studies. Clement and Kruidenier (1983) claimed in their Canadian research that three other distinct general orientations to learn an L2 emerged, namely knowledge, friendship, and travel orientations. However, these had traditionally been lumped together in integrativeness. Moreover, when L2 was a foreign rather than a second language (i.e., learner had no direct contact with the L2 community), a fourth, socio-cultural, orientation was also identified.

While investigating the young adult learners in a foreign language learning situation in Hungary, Dörnyei (1990) identified three loosely related dimensions of a broadly conceived integrative motivational subsystems: interest in foreign languages, cultures, and people (which can be associated with Clement and Kruidenier's "socio-cultural orientation"); desire to broaden one's view and avoid provincialism (which can be associated with Clement and Kruidenier's "knowledge orientation") ; and desire for new stimuli and challenges (which has much in common with Clement and Kruidenier's "friendship" and "travel orientations"). The fourth dimension, the desire to integrate into a new community overlapped with the instrumental motivational subsystem. Oxford and Shearin (1994) also found other reasons for learning the language, ranging from "enjoying the elitism of taking a difficult language" to "having a private code that parents would not know" (p. 12).

All these studies show that there would be a wider range of orientations than was previously supposed. Meanwhile, researchers were also calling for a more pragmatic,

education-centered approach to motivation research, which would be consistent with the perceptions of practicing teachers and which would also be in line with the current results of mainstream educational psychological research. As Dörnyei commented (1994a), Gardner's motivation construct does not include details on cognitive aspects of motivation to learn, whereas this is the direction in which educational psychological research on motivation has been moving.

### **Expanding the Gardnerian Construct**

Although the majority of research has focused on the social and pragmatic dimensions of L2 motivation, some studies have attempted to extend the Gardnerian construct by adding new components, such as intrinsic/extrinsic motivation, attribution about past successes/failures, self-efficacy, self-confidence, and need for achievement.

### **Intrinsic/Extrinsic Motivation and the Self-Determination Theory**

One of the most general and well-known distinctions in motivation theories is that between intrinsic and extrinsic motivation. The first refers to an individual's motivation to perform a particular activity because of internal rewards such as joy, pleasure and satisfaction of curiosity. Whereas in extrinsic motivation the individual expects an extrinsic reward such as good grades or praise from others. Deci and Ryan (1985) argue that intrinsic motivation is potentially a central motivator of the educational process. Extrinsic motivation has traditionally been seen as something that can undermine intrinsic motivation. Brown (1994) points out that traditional school settings with their teacher domination, grades, and tests tend to cultivate extrinsic motivation.

The self-determination theory was developed by Deci and Ryan as an elaboration of the intrinsic/extrinsic construct (1985). Self-determination (i.e. autonomy) is seen as a

prerequisite for any behavior to be intrinsically rewarding. In this theory, extrinsic motivation is no longer regarded as an antagonistic counterpart of intrinsic motivation, but has been divided into four types along a continuum between self-determined and controlled forms of motivation (Deci, Vallerand, Pelletrier, & Ryan, 1991). External regulation refers to the least self-determined form of extrinsic motivation. It involves actions that are initiated by external source, such as rewards or threats: for example, a teacher's praise or parental confrontation. Introjected regulation refers to actions that are performed due to the externally imposed rules. The student accepts the rules as norms that pressure him or her to behave. Identified regulation occurs when the person has come to identify with and accept the regulatory process seeing its usefulness. Integrated regulation is the most developmentally advanced form of extrinsic motivation. It involves regulations that are fully assimilated with the individual's values, needs, and identities. For example, individuals learn an L2 because they think it is important for their educational development. Motives traditionally mentioned under instrumental motivation in the L2 literature typically fall under one of the last two categories- identified regulation or integrated regulation, depending on how important the learner considers the goal of L2 learning to be in terms of a valued personal outcome.

### **Proximal Goal-Setting**

The self-determination theory may suggest that extrinsic goals such as tests and exams should be avoided as much as possible since they are detrimental to intrinsic motivation. Bandura and Schunk (1981), however, point out that tests and exams can be powerful proximal motivators in long lasting, continuous behaviors such as language learning; they function as proximal subgoals and markers of progress that provide

immediate incentive, self-inducements, and feedback. Proximal goal setting contributes to the enhancement of intrinsic interest through the satisfaction derived from subgoal attainment.

The goal-setting theory was mainly developed by Locke and Latham (1990) within industrial and organizational psychology with frequent references to workplace settings. According to the theory, people must have goals in order to act since human action is caused by purpose and for action to take place, goals have to be set and pursued by choice (Locke & Latham, 1994). They conclude that goal-setting and performance are related and that goals affect the performance of the task, the energy expended, the strategies used and its duration and maintenance. The goal-setting theory suggests that there are three main characteristics of goals that cause them to differ: difficulty, specificity and commitment.

Research (Locke, 1996; Locke & Latham, 2002) based on the goal- setting theory reveals that there are particular relations among these different characteristics that can enhance individuals' motivation. First, the more difficult the goal, the greater the achievement (easy tasks do not give a sense of achievement). Second, the more specific or explicit the goal, the more precisely performance is regulated (general goals like "do your best" do not really cause individuals to do their best). Third, the highest performance is yielded when the goals are both specific and difficult. Fourth, commitment to goals is most critical when they are specific and difficult. Finally, high commitment to goals is attained when the individual is convinced that the goal is important and attainable. In addition, it has also been found that goal setting is most effective when there is feedback showing progress in relation to the goal.

Since mastering a language is not a goal to be achieved within a short time, Dörnyei (1994a) suggests that planners set subgoals (proximal subgoals) that can be achieved within a short time. Such subgoals might have a powerful motivating function for they also provide learners with feedback on their progress.

### **Cognitive Components of Motivation**

Since the mid-1970s, a cognitive approach has set the direction of motivation research in educational psychology. Cognitive theories of motivation view motivation to be a function of a person's thoughts rather than of some instinct, need, drive, or state. In his analysis of current theories of motivation, Weiner (1992) lists three major cognitive conceptual systems: attribution theory, learned helplessness, and self-efficacy. All three concern the individual's self-appraisal of what he or she can or cannot do, which will, in turn, affect how he or she strives for achievement in the future.

Attribution theory is the study of how causal ascriptions of past failures and success affect future goal expectancy. This theory hypothesizes that the reasons to which individuals attribute their past successes or failures shape to a great extent their motivational disposition (Dörnyei, 2001). For example, if learners attribute their failure to low ability (internal cause over which they have no control), then their motivation to learning the language is likely to decrease or even vanish completely. If, on the other hand, they believe that their failure is the result of their laziness or lack of effort (internal cause over which they have control), then they have good chances to increase their motivation if they double their efforts.

Learned helplessness refers to a pessimistic, helpless state that develops when the person wants to succeed but feels that success is impossible for him or her for some reason. It is a feeling of “I simply can’t do it.”

Self-efficacy refers to an individual’s judgement of his or her ability to perform a specific action. Attributions of past success play an important role in developing self-efficacy. People also appraise efficacy from observational experiences, as well as from persuasion, reinforcement, and evaluations by others, especially teachers or parents. Once a strong sense of efficacy is established, a failure may not have much impact. Some students do not have an initial belief in their self-efficacy. Therefore, teachers should help them develop a sense of self-efficacy by providing meaningful and achievable language tasks.

Self-confidence is the belief that one has the ability to accomplish goals or perform tasks competently. It is an important dimension of self-concept. It appears to be akin to self-efficacy, but used in a more general sense. Self-confidence was first introduced in L2 literature by Clement (1980). According to his conceptualization, self-confidence includes two components, language use anxiety (the affective aspect) and self-evaluation of L2 proficiency (the cognitive aspect) and is determined by the frequency and quality of interethnic contact. The more confident the learner is, the more frequent engagement in practicing the language, therefore, the higher proficiency. Although self-confidence was originally conceptualized with regard to multi-ethnic settings, Clement, Dörnyei, and Noels (1994) showed that it is a major motivational subsystem in foreign language learning situation as well (i.e., where there is no direct

contact with members of the L2 community) since interethnic contact can also be made in a more remote manner, through the media or through travel outside the country.

Need for achievement is a relatively stable personality trait that is considered to affect a person's behavior in every facet of life, including language learning (Dörnyei, 1994a). It is a central element of classical achievement motivation theory. Individuals with a high need for achievement are interested in excellence for its own sake. They tend to initiate achievement activities, work hard at these tasks, and persist in the face of failures. Dörnyei (1990) argued that need for achievement will play a particularly important role in institutional contexts, where academic achievement situations are very salient.

### **Dörnyei's Framework of L2 Motivation**

The variety of relevant motivation types and components described above is in accordance with Dörnyei's claim (1994a) that L2 motivation is an eclectic, multifaceted construct. In order to integrate the various components, it seems that it is necessary to introduce different levels of motivation. In addition, the 1990s brought a shift in thought on L2 motivation. As the social-psychological approach did not provide a detailed description of the classroom dimension, a number of researchers would like to adopt a more pragmatic, education-centered approach to motivation research. Gardner's socio-educational model was clearly focused on the social aspects of motivation rather than on the role of motivation in the classroom. Although he labeled "attitudes toward learning situation" as a construct in his model, its specific contents were absent. Dörnyei (1994a) argues that research on L2 motivation should consider the pragmatic dimensions of motivation. In this situation, based on the research literature discussed above and the

results of Clement, Dörnyei, and Noel's classroom study (1994) on Hungarian EFL (English as Foreign Language) learners, in which three motivation constructs existed among the learners: integrative motivation, linguistic self-confidence, and the appraisal of the classroom environment, Dörnyei (1994a) conceptualized a general framework of L2 motivation. This framework consists of three levels: the language level (reactions and attitudes toward the target language which can be instrumental and/or integrative), the learner level (socio-cognitive factors such as need for achievement and self-confidence), and the learning situation level (attitudinal motivation affected by specific learning situations). The three levels coincide with the three basic constituents of the L2 learning process: the L2, the L2 learner, and the L2 learning environment. They reflect "who learns what languages where."

The most general level of the construct is the language level, where the focus is on orientations and motives related to various aspects of the L2. In accordance with the Gardner's socio-educational model, this general motivational dimension can be described by two broad motivational subsystems, an integrative and an instrumental motivational subsystems. The integrative motivational subsystem is centered on the individual's L2-related affective predispositions, including social and cultural, as well as general interest in foreignness and foreign languages. The instrumental motivational subsystem consists of extrinsic motives (identified and integrated regulation) centered on the individual's future career endeavors.

The second level of the L2 motivation construct is the learner level, which involves "a complex of affects and cognitions that form fairly stable personality traits" (Dörnyei, 1994a). Two motivational components are identified underlying the



motivational processes at this level: need for achievement and self-confidence. Self-confidence consists of language anxiety, perceived L2 competence, attributions about past experiences, and self-efficacy.

The third level of the L2 motivation is the learning situation level, which is “associated with situation-specific motives rooted in the various aspects of language learning in a classroom setting” (Dörnyei, 1994a). Three main types of motivational sources are identified within this level. Course-specific motivational components are related to the syllabus, the teaching materials, the teaching method and the learning tasks. These are described in the framework of four motivational conditions proposed by Crookes and Schmidt (1991): interest, relevance, expectancy, and satisfaction. Teacher-specific motivational components are related to the teacher’s behavior, personality and teaching style, and direct socialization of student motivation (modelling, task presentation, and feedback). Group-specific motivational components are related to the group dynamics of the learner groups.

### **Integrating Gardner’s Socio-Educational Model with Dörnyei’s Framework of L2 Motivation**

Dörnyei’s framework of L2 motivation synthesized various lines of research and is sufficiently integrated into the Gardner’s socio-educational model. He categorizes motivation at the language level by using the concept of orientation introduced by Gardner. He identifies motivation at the learner level as influenced by the learners’ need for achievement and self-confidence, and he expands motivation at the learning situation level by adding a number of specific situational motives and components to Gardner’s attitudes toward the learning situation, such as course-specific, teacher-specific, and

group-specific, and also the learner's affective reactions to any aspect of the class and learning environment. According to Dörnyei (1994b, p.519), these specific components actually formed an independent motivational factor labeled "evaluation of the learning environment." It is the learning situational level (i.e., attitudinal motivation affected by specific learning situations) that distinguishes Dörnyei's framework of L2 motivation from Gardner's socio-educational model.

Gardner's socio-educational model provides a fundamental research paradigm to investigate the role of attitudes and motivation in learning a second language. Integrative and instrumental orientations of this model are regarded as the major and indispensable factors of L2 motivation. As highlighted by the criticism of Gardner's model mentioned above, integrative and instrumental orientations cannot be all but only part of the learning equation. The attitudes toward the learning situation are an important factor that can affect a learner's overall performance in language acquisition. Positive attitudes toward the learning situation will likely produce greater enjoyment, desire, and effort expended in learning the language. Thus, in this study, the integration of Gardner's integrative and instrumental motivation with Dörnyei's attitudinal motivation is used to investigate whether these variables predict the Chinese learning outcomes of non-heritage students in U.S. community college. If yes, to what degree and in what manner will students' Chinese learning outcomes be predicted by these variables?

### **Distinction between an L2 and a Foreign Language**

Generally, a language is a second language for an individual if it is readily available in that individual's environment and the individual has many opportunities to hear, see, and use it. For example, immigrants whose native language is not English learn

English as a second language in the United States and Australia. Similarly, it is claimed that a language is a foreign language for the individual if it is the language of a group with which the individual has little contact, so that there is little opportunity to meet with the members of that language group, or to experience the language first hand. For example, students in China, Japan, and Thailand learn English as a foreign language. American students learn German as a foreign language.

Gardner (1988) stated that the role of attitude and motivation should be consistent in different contexts and called for research to define the role of contextual factors. According to Dörnyei (1990), second language acquisition contexts refers to a range of learning environments that can be further classified according to the number of language spoken in the area, the learner's ethnolinguistic vitality, the cultural and social circumstances, as well as the intergroup relations found in the particular context. Gardner and his associates formulated their theory on the basis of surveys conducted primarily among English-speaking Canadian learning French, the second official language of the country. The Canadian environment is an example of second language context. Another type of language learning milieu, a foreign language learning context, involves a community in which one or two languages are taught in school as an academic subject and students develop proficiency in them. A common feature of such context is that learners often have not had sufficient experience with the target language community.

Despite the distinction between an L2 and a foreign language, these two terms are used interchangeably in motivation research (Oxford & Shearin, 1994). In the following literature review, motivational orientation in both second and foreign language contexts are examined.

### **Motivational Orientations in L2/Foreign Language Learning**

Gardner (1985, p.10) defined L2 motivation as a complex of constructs, involving "the combination of effort plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language." It is thus convenient to think of the goal of language learning as providing an orientation for the amount of desire and energy expended. Two orientations have received the most empirical attention. The first was the integrative orientation, (i.e., the integrative motivation), which referred to the desire to learn a language in order to interact with, and perhaps to identify with members of the L2 community. The instrumental orientation (i.e., the instrumental motivation) described reasons for L2 learning that reflect practical goals, such as attaining an academic goal or job advancement.

Despite the abundance of research, L2/Foreign Language learning in motivational orientation is not without controversy. Early research on L2/Foreign learning suggested that integrative motivation was more conducive to better language attainment as integrative motivation typically underlies successful acquisition of a wide range of registers and a native-like pronunciation. When learners are driven by integrative motivation, they have the desire to identify with the target language culture, to interact with members of the culture, and to integrate into the target language community (Gardner, 1985). Numerous studies identified a positive relationship between integrative motivation and language achievement at different levels of instruction (Clement, 1980; Gardner, 1985; Gardner, Day, & MacIntyre, 1992; Gardner & Lambert, 1972; Gardner & MacIntyre, 1991; Gardner, Tremblay, & Masgoret, 1997; Masgoret & Gardner, 2003). For example, Gardner and Lambert (1972) investigated the relationship between

integrative and instrumental motivation and the L2 achievement of students enrolled in French courses in Montreal (a bilingual community), reporting an integrative orientation in learning French was a stronger predictor of success.

Ely (1986) then examined the extent to which the integrative and instrumental motivation paradigm could describe the motivation of first-year university students of Spanish. His factor analysis of responses to a questionnaire found three existing motivation factors: integrative motivation, instrumental motivation, and the motivation provided by the need to fulfill the foreign language requirement. Ramage (1990) investigated the relationship between motivation and the desire to continue to enroll in French or Spanish courses after completing the second-year of high school. She contended that a positive relationship existed between interest in the L2 culture and intent to continue studying French or Spanish.

Gardner and MacIntyre (1991) examined the motivation orientation of 92 college introductory psychology students studying French as a second language. The major purpose of this study was to investigate the effects of integrative motivation and instrumental motivation on the learning of French/English vocabulary. Integrative motivation was defined in terms of a median split on scores obtained on subtests from the Attitude/Motivation Test Battery, while instrumental motivation was situationally determined in terms of monetary reward for doing well. Three dependent measures were investigated. The major one was achievement on each trial. The second dependent variable of interest was the mean time spent on each trial studying the pairs when they were presented together. The third dependent variable was the mean time spent viewing the English word before subjects attempted to type in the French equivalent. There were

two parts to this study. In the first part, subjects were asked to respond to questions assessing eight different attitudinal/motivational characteristics adapted from Gardner, Lalonde, and Moorcroft (1985) as well as the trait of social desirability responding. In the second part of the study, subjects were given 6 trials to learn 26 English/French word pairs using the anticipation method. The results demonstrated that both integrative motivation and instrumental motivation facilitated the learning of French vocabulary pairs. However, subjects with higher levels of integrative motivation learned more words overall than did subjects with low levels. In addition, integratively motivated students spent more time viewing the English stimulus than those who were not as motivated.

Gardner, Tremblay, and Masgoret (1997) offered further evidence to support a relationship between integrative motivation and L2 achievement. Student achievement was measured by a 100-item multiple choice achievement test, a cloze test, a vocabulary test, a composition, and grades in French. The authors found a significant correlation between integrative motivation and each measure of L2 achievement.

Hernandez (2008) examined the relationship among five independent variables- integrative motivation, instrumental motivation, the need to fulfill a foreign language requirement, grade point average (GPA), and previous years studying Spanish- as predictors of five dependent variables: scores on a simulated oral proficiency interview (SOPI), final exam grades, final grades, the desire to enroll in Spanish courses after completing the language requirement, and intention to major in Spanish. Data from a questionnaire and a SOPI administered to 130 students enrolled in fourth-semester Spanish identified integrative motivation as a significant predictor of SOPI scores and final exam grades. Furthermore, integrative motivation was a significant predictor of

students' desire to enroll in additional coursework after completing the four-semester foreign language requirement. It also had an important role in students' intention to major in the language. A negative relationship was found between the need to fulfill the language requirement and intent to continue with further studies in Spanish. The findings demonstrate that integrative motivation is important in predicting student achievement in the foreign language classroom.

All these studies concluded that integrative orientation was indeed an important requirement for successful language learning. But the claim was challenged. Some researchers questioned the universality of integrative orientation as the most important motivational force. Dörnyei (1990) contended that integrative motivation might be less relevant for foreign language learners than for second language learners and that instrumental goals contribute significantly to motivation for foreign language learners. According to him, foreign language learners do not have sufficient experience with the target community and they are therefore not committed to integrating into that group. Oxford (1996) claimed that instrumental motivation is meaningful for the learner who has had limited access to L2 culture, or foreign language settings. Some research on motivation in foreign language settings showed that both forms of motivation are important and in some situations or instances, instrumental motivation is even more important for successful foreign language achievement.

Lukmani (1972) investigated the motivational orientation of Marathi-speaking high school students learning English in India. The result demonstrated that instrumental motivation scores correlated significantly with English proficiency scores and that students with instrumental orientations scored higher in tests of English proficiency.

Rahman (2003), in his study of Bangladeshi college students' motivational orientation toward English learning, finds that students focus on English for its utilitarian value (e.g., getting a good job, going abroad for further study, reading books, and traveling) and integrative motivation was not a dominant motivational orientation.

The importance of instrumental motivation was also found in Dörnyei's (1990) investigation consisting of 134 young adults of English learner enrolled in a language school. It was discovered that instrumental motives significantly contributed to motivation in this language learning context. Learners with a high level of instrumental motivation and need for achievement were more likely than others to achieve an intermediate level of proficiency in the target language. Nevertheless, in order to attain native speaker like proficiency of the target language, one had to be integratively motivated.

Kachru (1997, cited in Brown 2000) also pointed out that in India, where English had become the official language, it was common for second language learners to be successful with instrumental purposes being the underlying reason for learning.

Vaezi (2008) in her research, language learning motivation among Iranian undergraduate students, has shown that Iranian students had very high motivation and positive attitudes toward learning English and that they were more instrumentally motivated. She confirms the opinion of some researchers who believe that in a foreign language situation students are instrumentally motivated.

In response to the conflicting findings of these studies regarding integrative and instrumental orientation, Brown (2000) made the point that both integrative and instrumental motivations were not necessarily mutually exclusive. Learners rarely



selected one form of motivation when learning a second language, but rather a combination of both orientations. He cited that international students residing in the United States learned English for both integrative and instrumental orientations. On one hand, international students learned English for academic purposes, and, on the other hand, they would like to become integrated with the people and culture of this country.

### **Motivation Research in Less Commonly Taught Foreign Languages**

As discussed in the first chapter, Chinese, Japanese, Korean, and Arabic are considered the most difficult languages for native speakers of English to acquire by the Foreign Service Institute of the United States Department of State. These languages are linguistically distant from English and they are categorized as the less commonly taught foreign languages in the United States. As the purpose of the current study is to investigate whether motivational orientations predict the students' Chinese learning outcomes, it would be helpful to examine the literature in these four foreign languages in the context of United States.

Husseinali (2006) investigated the initial motivation of learners of Arabic as a foreign language. One hundred and twenty students enrolled in first-year and second-year Arabic classes participated in this study. The participants were classified into two major groups according to their heritage background: learners of Arab and Muslim heritage and non-heritage language learners. Survey methods were employed to collect the data. Descriptive statistics were used to find out the initial motivations of each group. Inferential statistics (t test) were used to compare the initial motivation of the two groups with each other. The results identified three major types of orientations prompting the students to learn Arabic: instrumental orientations, identification orientations, and travel

and culture orientations. Significant differences were found between heritage and non-heritage learners on instrumental and identification orientations. It was found that non-heritage learners are more motivated than heritage learners to learn Arabic to get a job and heritage learners are more motivated than non-heritage learners to learn Arabic to fulfill degree requirements. The results also showed that non-heritage language learners are significantly more motivated than heritage language learners to study Arabic for instrumental reasons, whereas heritage language learners are significantly more motivated to study Arabic for identification reasons. Given the differences in these orientations between heritage and non-heritage learners, Husseinali claimed that it would be hard to keep either group motivated if both groups are taught invariantly. He suggested that courses should be designed to address the different needs of the two groups.

Yang (2003) studied the motivational orientations of 341 college students enrolled in East Asian language classes (Chinese, Japanese, and Korean). 22.9% of the students were Chinese learners, 37.5% were learning Japanese, and 39.6% were learning Korean. The instrument consisted of three parts. The first part was used to collect students' demographic information; the second part was made up of 45 items to investigate students' motivational orientations; the third part consisted of 40 statements and questions to collect data on students' self-reported proficiency in listening, speaking, reading, and writing in the target language. Motivational orientations were classified and measured on seven subscales: integrative, instrumental, heritage-related, travel, interest, school-related, and language use. The results revealed that East Asian language learners were highly influenced by interest, language use, and integrative motivational

orientations and that integrative motivation was more important than instrumental motivation. The results also revealed that Chinese learners were more integratively motivated while Japanese learners were more instrumentally motivated. It was suggested that administrators and teachers use different approaches in recruiting students for the different programs.

While Yang investigated motivational orientations of college students, Sung and Padilla (1998) examined the motivation of the Chinese/Japanese/Korean learners at elementary and secondary schools. 140 elementary school students and 451 high school students participated in this study and completed a three-part questionnaire. The first part was a scale of instrumental and integrative motivation for Asian languages study, which was adapted from Gardner's AMTB (1985). The second part consisted items concerning other motives or reasons for studying a specific Asian language. The third part was a survey on parental involvement in their language study. Another questionnaire was completed by 847 parents to investigate their attitudes toward foreign language learning and involvement in their child's language study. The findings revealed that elementary students were more motivated overall toward Asian language study than were older students. Younger students also perceived their parents as more involved in their language study than did high school students. The findings also revealed that female students, regardless of grade level or language program type, reported significantly higher motivation to learn an Asian language. Regarding parental involvement, elementary school parents had more positive attitudes toward FL learning and were more involved in the child's language study than were parents of high school students.

Wen (1997) investigated the initial motivation of college students who chose to learn Chinese and the motivation that encouraged them to continue their study. 77 heritage language learners enrolled in first and second year Chinese classes participated in this study. The instrument was a two-part questionnaire. The first part was adapted from Gardner's AMTB (1985); the second part consisted items to measure expectancy. Four motivational factors were identified in this study: instrumental motivation, intrinsic motivation, expected learning strategies and efforts, and passivity toward requirements. The results revealed that intrinsic motivation was the initial motivation for students to enroll in Chinese classes while expectations of learning strategies and efforts were the motives that keep students continuing to learn Chinese. It was also reported that motivational factors correlate significantly with desired learning outcomes from the expectancy theory.

Weger-Guntharp (2006) investigated both heritage and non-heritage language learners in the context of first semester Chinese classes at a U.S. university, but the focus was on heritage language learners. 25 students participated in this study and 8 of them were identified as heritage language learners, who had one or more parents speaking Chinese as their first language and who self-identified as taking Chinese in part because of their ethnic heritage. The instrument included a short biographical data profile with a question to examine the participant's motivation for studying Chinese, an online questionnaire to investigate the participant's attitudes toward learning Chinese, and an open-ended informal interview. The results showed that a learner's heritage was an important factor in that it affected the construction of a language learner's identity and the co-construction of motivation, and influenced attitudes toward classroom activities. It

was found that the complexity of individual backgrounds problematized the identification of heritage language learners based on their home-language use or place of birth.

### **Summary**

Based on the existing literature, it was evident that motivation was an important component in L2/Foreign Language achievement. There have been numerous helpful studies on learners' motivation. However, most of the studies have focused on the study of motivation in Indo-European languages. Only a few studies have explored the students' motivation in Chinese language learning (Padilla & Sung, 1998; Yang, 2003; Weger-Guntharp, 2006; Wen, 1997). Even though some progress has been made in Chinese language motivation research, a review of the literature reveals some problems for us to explore to gain deeper understanding of students' motivation and attitudes toward Chinese language learning.

First, the majority of participants in Chinese language motivation research are either four-year university students or secondary school students. Few studies focused on students in community colleges. As discussed in the first chapter, with an aim to provide a baseline against which the 100,000 Strong Initiative can be benchmarked and progress can be tracked over the coming years, the Institute of International Education conducted a study from October 2011 to September 2012 with support from the Ford Foundation (Belyavina, 2013). The findings of this study reveal that community college students are underrepresented in education abroad activities in China. While community college students represent 45 percent of all undergraduate students in the U.S. (American Association of Community Colleges, 2014), only 2 percent of students studying in China in 2011 were community college students. 100,000 Initiative is a national effort designed

to not only increase dramatically the number but also diversify the composition of American students studying in China. More efforts are needed to increase the number of community college students studying in China given that they represent more than one third of students pursuing undergraduate education in the U.S. and have a diverse file (Belyavina, 2013). Research is needed to shed light on how community college students learn Chinese in a motivated way in the context of U.S..

Second, most of the Chinese language motivation research involved heritage language learners or the comparisons between heritage and non-heritage language learners. However, the definition of heritage language learners was not clear in the literature. As Weger-Guntharp (2006) claimed, the complexity of individual backgrounds problematized the identification of heritage language learners based on their home-language use or place of birth. Due to the ambiguity of the definition of non-heritage language learners and the heterogeneous nature of the heritage language population, the present study focuses on non-heritage language learners.

Third, quantitative research methods have been dominant in examining the intangible motivational constructs in the existing literature and Gardner's AMTB has been the main instrument in the studies. In some studies (Hernandez, 2008; Rahman, 2003; Vaezi, 2008), the instrument was adapted from the AMTB, but the validity of the instrument was not mentioned despite different languages and different learning situations. Although Gardner's AMTB has been widely tested and its validity is verified in general, surveys and questionnaires should be adapted to the learning context and tested.

Due to the problems discussed above, the present study is intended to fill this gap in Chinese language motivation research. With increasing enrollments in Chinese language classes among colleges in the United States, it is urgent to find out the relationship between motivational orientations and language learning outcomes of Chinese language learners. With the aim of investigating how motivation influences Chinese learning outcomes of non-heritage community college students in the United States, this study integrates the classical theoretical model of integrative and instrumental motivations by Gardner (1985), with Dörnyei's (1994a) expanded theoretical model, which specifically focuses on attitudinal motivation in the foreign language classroom. Therefore, this study explores how integrative, instrumental, and attitudinal motivations play a role in the process of Chinese language acquisition, and how each of them influences a Chinese language learner's outcomes.

### **Research Questions**

Based on the studies of L2/Foreign Language motivation, this study integrates Gardner's dichotomous model with Dörnyei's framework of L2 motivation to test Chinese learners' outcomes in a community college classroom setting. The development of the framework is necessary for the following reasons.

First, integrative/instrumental orientations in Gardner's socio-educational model are regarded as the major and indispensable factors in language acquisition. It is not clear how integrative/instrumental motivation affects a Chinese learner's language outcomes. The present study intends to provide a more comprehensive insight into the previous inconsistent findings regarding learners' motivation in relation to their achievement. Thus,

Gardner's classical motivation theory is employed to investigate whether different motivational orientations will affect the achievement.

Second, as highlighted by the criticism of Gardner's model mentioned above, integrative and instrumental orientations cannot be all but only part of the learning equation. The attitudes toward the learning situation are an important factor that can affect a learner's overall performance in language acquisition. The learner's attitudes toward the learning situation, such as the teacher, class activities, and classmates, will influence a learner's core motivation and orientation. Positive attitudes toward the learning situation will likely produce greater enjoyment, desire, and effort expended in learning the language. Little has been done, however, to study how the learning situation can be manipulated in order to affect the learner's motivation in a positive way.

Hence, the specific question in this study is:

To what degree and in what manner will students' Chinese learning outcomes be predicted by the following variables: integrative motivation; instrumental motivation; and attitudes toward the learning situation?



## **Chapter III**

### **Research Methodology**

#### **Setting**

T College is a community college in the Greater Houston area in the state of Texas. A half-century of innovation, inclusion and extraordinary growth mark the history of T College. T College has evolved from one location to three campuses and twelve extension centers serving the Greater Houston community. Today nearly 30,000 students discover their pathways at T College. Although many students are creating a pipeline for seamless transfer to four-year institutions, others participate in the workforce training programs or continuing education to sharpen their skills and boost lifetime earning power.

#### **Participants**

The target population of this study was non-heritage Chinese language learners in U.S. community colleges. Convenience sampling was used in this study. Convenience sampling includes in the sample whomever happens to be available at the time. The Chinese lecturer, Ms. L, at T College agreed to help the researcher with this study. Thus, the participants were students from T College who were taking Chinese I, the only Chinese language course offered at the college. A total of 161 students participated voluntarily in this study during the spring semester 2014 and the fall semester 2014.

Students under 18 years of age were not considered since paper work from the parent/guardian would have necessitated a great deal of additional time. Chinese heritage speakers and Chinese native speakers were excluded since the purpose of the study was to explore how motivation influences Chinese learning outcomes of non-heritage

language learners in U.S. community colleges. Students who did not sign the consent form also were excluded.

### **The Chinese Program Environment**

Dörnyei (1994a) categorized motivational components into three main dimensions: the language level, the learner level, and the learning situation level. The learning situation level is associated with various aspects of language learning in a classroom setting and includes three types of motivational sources: course-specific motivational components, teacher-specific motivational components, and group-specific motivational components. All three components could affect a learner's motivation to learn a language.

The Chinese I class at T College meets each Saturday from 10 a.m. to 4 p.m., with a one-hour break at noon. This course is an introduction to the Mandarin Chinese language in written and spoken form. Students in the course spend three hours a week learning language patterns and forms and two hours in lab activities. Upon completion, students should be able to carry on simple conversations in Chinese; understand certain cultural differences and similarities between China and the U.S.; write about 200 Chinese characters; and produce the various sounds, phonetic symbols and the five different tones in the language. Students may take this course for academic credit or through the Continuing and Professional Development division as a form of professional development. Tutorials are available for students Monday through Thursday 8:00 am to 7:00 pm.

The Chinese lecturer, Ms. L, a native speaker of Chinese, has a master degree of education from an American university with a focus on foreign language education. Ms. L is familiar with the language pedagogy and has a good foundation in applied linguistics.

Communicative language teaching approach is adopted in Ms. L's Chinese classroom. Learner-centered instruction, cooperative learning, and interactive learning are the distinctive features of her Chinese class.

### **Variables for this Study**

In this study, the three independent variables were students' motivational orientations: integrative motivation, instrumental motivation, and attitudinal motivation. The dependent variable was the students' Chinese learning outcomes, which was measured by semester average. The semester average consisted of 3 parts: major grades (45%), daily grades (40%), and class attendance and participation (15%). Major grades included tests, quizzes, and projects; daily grades included homework and classwork.

### **Instruments**

As stated above, the current study integrated Gardner's Socio-Educational Model with Dörnyei's expanded theoretical model. The instruments used in this study consisted of two parts. The first part was to collect the demographic information of the participants, such as age, gender, and ethnicity. The second part was a 30-item survey to investigate the participants' motivational orientations and attitudes toward the learning situation. Items 1 to 20 of the survey were adapted from Gardner's AMTB (Attitude/Motivation Test Battery, 1985) and these 20 items included Gardner's motivation scale. Items 21 to 30 of the survey were adapted from Lu & Li's study (Lu & Li, 2008) to examine participants' attitudinal motivation (i.e., attitudes toward the learning situation) proposed by Dörnyei (1994a). These 30 items were measured with a five-point Likert scale to examine the degree to which the participants agree or disagree with the item, from 1= "Strongly Disagree" to 5= "Strongly Agree".

## **Instrumental Design**

Six steps were taken throughout the survey development process.

**Step 1 Define clearly what it is to measure.** Thinking clearly about the content of a scale requires thinking clearly about the construct being measured. Although there are many technical aspects involved in developing and validating a scale, one should not overlook the importance of being well grounded in the substantive theories related to the phenomenon to be measured. Theory is a great aid to clarity. Relevant social science theories should always be considered before developing a scale. The survey in this study is intended to measure students' motivational orientations, which are elusive phenomena that cannot be observed directly. Gardner's (1995) socio-educational model and Dörnyei's (1994a) framework of L2 motivation offer a great aid to clarity and serves as a guide to the scale development.

**Step 2 Generate an item pool.** Once the purpose of the scale has been clearly articulated, the researcher is ready to generate a large pool of items that are candidates for eventual inclusion in the scale. Obviously, these items should be selected or created with the specific measurement goal in mind and the content of each item should primarily reflect the construct of interest. The description of exactly what the scale is intended to do guides the process. In this study, the researcher originally generated 40 items, attempting to capture the phenomenon of interest by developing a set of items that reveals the phenomenon in different ways. At this stage of the scale development process, it is better to be overinclusive, all other things being equal. Redundancy is not a bad thing when developing a scale. In fact, reliability varies as a function of the number of items, all else

being equal. Multiple items will constitute a more reliable test than individual items, but each must still be sensitive to the true score of the latent variable.

**Step 3 Determine the format for measurement.** This step actually occurred simultaneously with the generation of items so that the two were compatible. Numerous formats for questions exist. One of the most common item format is the Likert scale format. Likert scaling is widely used in instruments measuring opinions, beliefs, and attitudes, and it is obviously the best format for the survey on motivational orientations. Consequently, the researcher decided to present each item as a declarative sentence, followed by response options that indicate varying degrees of agreement with or endorsement of the statement: “strongly disagree,” “disagree,” “neutral,” “agree,” and “strongly agree.” These five responses formed a continuum from strong disagreement to strong agreement.

**Step 4 Have the initial item pool reviewed by experts.** This step involved the process of asking a group of people who were knowledgeable in the content area to review the item pool. This review served multiple purposes related to maximizing the content validity of the scale. First, having experts review the item pool confirmed or invalidated the definition of the phenomenon. The researcher asked the panel of experts to rate how relevant they felt each item was to what it intended to measure. Second, reviewers also evaluated each item’s clarity and conciseness. The content of an item may be relevant to the construct, but its wording may be problematic. This bears on item reliability because an ambiguous or otherwise unclear item, to a greater degree than a clear item, can reflect factors extraneous to the latent variable. A third service that the expert reviewers provided was pointing out ways of tapping the phenomenon that the

researcher failed to include. As the scale developer, the researcher made the final decision to accept or reject the advice of the experts. Sometimes content experts might not understand the principles of scale construction. This can lead to bad advice.

**Step 5 Administer items to an appropriate Sample.** After deciding which construct-related and validity items to include in the questionnaire, the researcher administered them to the 161 subjects in this study. Theoretically, the sample should be sufficiently large to eliminate subject variance as a significant concern. There are several risks in using too few subjects. First, the patterns of covariation among the items may not be stable. When the ratio of subjects to items is relatively low and the sample size is not large, the correlations among items can be influenced by chance to a fairly substantial degree. Consequently, the alpha obtained on occasions other than the initial development study may be lower than expected. Similarly, a potentially good item may be excluded because its correlation with other items was attenuated purely by chance. A second potential pitfall of small sample size is that the development sample may not represent the population for which the scale is intended. Of course, this can also be the case if the development sample is large, but a small sample is even more likely to exclude certain types of individuals.

**Step 6 Evaluate the items.** There were two steps involved in this process. The first step was the initial examination of item's performance. One way to determine how intercorrelated the items are is to inspect the correlation matrix. The higher the correlations among items, the higher are the individual item reliabilities. The more reliable the individual items are, the more reliable will be the scale that they comprise. The second step was factor analysis. A set of items is not necessarily a scale. Items may

have no common underlying variable or may have several. Determining the nature of latent variable underlying an item set is critical. The researcher determined which groups of items constituted a unidimensional set by factor analysis.

### **Measurement of Integrative Orientation**

The odd-numbered (1-19) items were what Gardner (1985) called Integrative Orientation (a desire to learn the target language in order to identify with the target community).

I take Chinese class because:

Item 1. It will allow me to be at ease with people who speak Chinese.

Item 3. It will allow me to meet and converse with more and varied people.

Item 5. It will enhance my understanding of Chinese culture and society.

Item 7. I will be able to participate more freely in the activities of Chinese cultural groups.

Item 9. I will be able to enjoy Chinese classics, literature, music, and films.

Item 11. It will enable me to better understand and appreciate the Chinese way of life.

Item 13. It fulfills my personal interests.

Item 15. I want to learn as many foreign languages as possible.

Item 17. I want to learn about other cultures to better understand the world.

Item 19. It is close to my culture.

### **Measurement of Instrumental Orientation**

The even-numbered (2-20) items were what Gardner (1985) called Instrumental Orientation (a desire to learn the target language for pragmatic reasons).

I take Chinese class because

Item 2. I need the class to fulfill my institution's requirements.

Item 4. It will make me a knowledgeable person.

Item 6. I think it will be useful in getting a good job.

Item 8. It will enable me to compete effectively in the global economy.

Item 10. I want to use Chinese when I travel to a Chinese-speaking country/area.

Item 12. China is playing a more and more important role in the economic development of the world.

Item 14. I will feel proud if I can speak Chinese.

Item 16. My friends/siblings took Chinese and they recommend the Chinese class to me.

Item 18. It is a language that is going to be very useful.

Item 20. My parents suggested me learn it.

### **Measurement of Attitudinal Motivation**

As discussed previously, Dörnyei's (1994a) framework of L2 motivation offered an extensive list of motivational components categorized into three main dimensions: the language level, the learner level, and the learning situation level. However, it is the learning situational level (i.e., attitudinal motivation affected by specific learning situations) that distinguishes Dörnyei's framework of L2 motivation from Gardner's socio-educational model. Thus, in this survey, 10 items were developed to examine the participants' attitudinal motivation. As Dörnyei identified three main types of motivational sources within the learning situation level: course-specific, teacher-specific, and group-specific, these 10 items were also categorized into three components.



**Course-specific.** I take Chinese class because

Item 22. The course material is interesting.

Item 23. The course tasks are at the proper level for me.

Item 29. The tutorial sessions increase the learning opportunity.

Item 30. I can learn Chinese culture in/out side the classroom.

**Teacher-specific.** I take Chinese class because

Item 21. The teacher makes learning fun.

Item 24. The teacher's feedback is encouraging.

Item 25. Learning is student-centered and interactive.

Item 28. The teacher is sufficiently proficient to have the knowledge and skills to teach the language.

**Group-specific.** I take Chinese class because

Item 26. The group-work or paired-work is fun and helpful.

Item 27. I enjoy speaking Chinese with my classmates.

### **Methods of Analysis**

The major statistical tests used in this study were factor analysis and multiple linear regression. Factor analysis was used to identify the latent variables (i.e., motivational orientations) underlying the 30 items. Multiple linear regression was used to examine the effect of motivational orientations on Chinese language learning outcomes.

### **Factor Analysis**

As this study integrates Gardner's (1985) socio-educational model and Dörnyei's (1994a) framework of L2 motivation, the survey items used in this study are based on

Gardner's dichotomous integrative/instrumental orientations and Dörnyei's components at learning situation level (i.e., attitudes toward the learning situation).

Gardner's AMTB (Attitude/Motivation Test Battery) (1985) has been validated and widely used in educational motivation and language acquisition research. The AMTB has been translated and used in research in Brazil, Croatia, Japan, Poland, Romania, and Spain (Catalonia). However, Gardner's AMTB was originally developed for the Canadian context and for English speaking Canadians learning French in elementary and secondary school. This study involved English speaking Americans learning Chinese in community colleges. According to Gardner (1985), changing the setting, the language or the general socio-cultural milieu in which the language program exists might necessitate major changes in the items to make them meaningful and relevant. At least, researchers should be concerned with the issue involved in transporting items to other contexts. In this situation, AMTB had to be tested to be a reliable instrument to investigate the Chinese learner's motivational orientations in the context of U.S. community colleges.

Dörnyei's framework of L2 motivation is considered an extension of Gardner's dichotomous model of motivation and provides a more comprehensible insight into the study of L2 motivation. Although his three levels of motivation integrates many lines of research:

It is at this stage no more than a theoretical possibility because of many its components have been verified by very little or no empirical research in the L2 field. In fact, only the components at the language level and the self-confidence construct at the learner level have been analyzed systematically, notably by Gardner, Clement, and their associates. (Dörnyei, 1994a, p. 282)

Thus, the components at the learning situation level used as one part of the instruments, namely course-specific motivational components, teacher-specific motivational components, and group-specific motivational components, needed to be verified by this study.

Due to the two facts above, factor analysis was employed as a statistical tool to serve several related purposes in this study. First, one of its primary functions was to help the researcher determine how many latent variables underlie the 30 items. Second, factor analysis also could provide a means of explaining variation among relatively many original variables (e.g. 30 items) using relatively few newly created variables (i.e., the factors). Third, factor analysis was to define the substantive content or meaning of the factors (i.e., latent variable) that accounted for the variation among the 30 items.

### **Multiple Linear Regression**

The purpose of this study was to investigate the relationships between motivational orientations and Chinese language learning outcomes. It was evident that regression was the most appropriate statistical procedure in this study since it determines not only whether variables are related, but also the degree to which they are related. A combination of variables usually results in a more accurate prediction than any single variable. A prediction equation that includes more than one predictor is referred to as a multiple regression equation. A multiple regression equation uses variables that are known to individually predict the criterion to yield a more accurate prediction. In this study, integrative motivation, instrumental motivation, and attitudinal motivation were determined through the literature review to comprise the most appropriate predictors of the students' Chinese learning outcomes. Thus, in this study a multiple linear regression

was run using SPSS to ascertain how well the latent variables (integrative/instrumental/attitudinal motivations) predict Chinese learning outcomes.

### **Procedures**

In the spring/fall semesters of 2014 the researcher sent emails to the Chinese lecturer, Ms. L at T College asking for assistance with this study. Ms. L agreed to help with the survey. One week before the survey, the researcher went to Ms. L's Chinese classes to pass out the letters of invitation and consent forms. Both Ms. L and the researcher emphasized that participation was voluntary and that it would not affect their grades or status in class if they did not participate in the survey. The students understood that there are no rewards for their participation, but their participation would benefit the Chinese language teaching and learning in U.S. community colleges by better understanding the relationships between motivational orientations and Chinese language learning outcomes.

One week after the distribution of the invitation letters and consent forms, the researcher went to Ms. L's classes to collect the consent forms. Students should have made their decisions after a whole week of consideration. Then the researcher distributed the survey to the students who had signed the consent form to participate in this study. Since participants' Chinese grades were used to be compared with their motivation types in analysis, the survey was not anonymous to the researcher. It took each participant about half an hour to finish the survey. The survey replaced their regular Chinese class. Participants were also granted the privilege of withdrawing their participation at any time. The students who did not participate went to the hallway to work on Chinese crossword puzzles.

After the survey was collected, the researcher obtained the participants' semester average from Ms. L. A code number was assigned to each participant. The list pairing the participant's name to the assigned code number was kept separate from all research materials and remains available only to the principal investigator. After the data were entered into SPSS for computation, all personal information was deleted from the data set. No one was able to match the questionnaire with any specific respondent.

All the paper materials remain in a locked cabinet, while the electronic files remain password protected. Both the paper and electronic files will be kept for a minimum of three years after completion of the study. After that, the researcher will shred the paper materials and destroy the electronic files. Every effort was made to maintain the confidentiality of the participants in this study within legal limits.

An Excel sheet was created to input the participants' scores on the variables of integrative motivation, instrumental motivation, attitudinal motivation, and semester average of Chinese. Then the Excel file was exported to SPSS for statistical procedures. Two statistical tests were employed in this study.

First, factor analysis was run using SPSS to identify how many latent variables underlie the 30-item survey. Another purpose of factor analysis was to define the substantive content or meaning of the factors (i.e., latent variable) that accounted for the variation among the 30 items. A third purpose of factor analysis was to check the reliability for subscales. The overall Cronbach's Alpha needed to be greater than .8 to indicate good reliability. For each item, its Cronbach's Alpha if the item were deleted was compared with the overall Cronbach's Alpha. If the Alpha of items deleted was greater than the overall Alpha, then that item was deleted.

After factor analysis, a new excel sheet was created and exported to SPSS. This new excel sheet included only the scores on the remaining items for each latent variable. Then, multiple linear regression was calculated using SPSS since it seemed to predict an outcome variable from several predictors. The dependent variable in this study was the Chinese learning outcomes, as measured by each student's semester average, of the community college participants. Independent variables (predictors) were the motivation attributes, and in this study, they included integrative motivation, instrumental motivation, and attitudinal motivation toward the learning situation.

## **Chapter IV**

### **Results and Data Analysis**

Results of this study included two parts. The first part was factor analysis of instruments, which was used to identify the latent variables (i.e., motivational orientations) underlying the 30-item survey. The second part was multiple linear regression analysis, which was employed to investigate the relationship among and between the identified variables and community college students' Chinese learning outcomes. This part answered the research question: To what degree and in what manner will students' Chinese learning outcomes be predicted by the following variables: integrative motivation; instrumental motivation; and attitudes toward the learning situation?

#### **Factor Analysis of Instruments**

##### **Descriptive Statistics of the Items**

The means of the 30 items range from 2.99 to 4.72.

For the item of "The teacher is sufficiently proficient to have the knowledge and skills to teach the language," it has the highest mean (4.72). For the items of "It will make me a knowledgeable person" and "The teacher's feedback is encouraging," it has the second highest mean (4.42). For the item of "It will enhance my understanding of Chinese culture and society," it has the third highest mean (4.40).

For the item of "My parents suggested me learn it," it has the lowest mean (2.99). For the items of "My friends/siblings took Chinese and they recommended me to learn Chinese" and "It is part of or close to my culture," it has the second lowest mean (3.14).

For the item of “I need the class to fulfill my institution’s requirements,” it has the third lowest mean (3.52).

### **Correlation Matrix**

Correlation matrix contained the Pearson correlation coefficient between all pairs of items. This correlation matrix was used to check the pattern of relationships. For item 16 (“My friend/siblings took Chinese and they recommend the Chinese class to me”), the majority of the significance values were greater than .05. This meant a problem could arise because of singularity in the data: check the determinant of the correlation matrix and, if necessary, eliminate the variable causing the problem. The determinant was listed at the bottom of the matrix. For these data its value was .8941 E-008, which was less than the necessary value of .00001. Hence, item 16 was eliminated prior to conducting additional analyses.

### **KMO and Bartlett’s Test**

Table 2

#### *KMO and Bartlett’s Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.907
Bartlett's Test of Sphericity	Approx. Chi-Square	2379.516
	df	406
	Sig.	.000

This table showed several important parts of the output: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s test of sphericity. The KMO statistic varies between 0 and 1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of



correlations (hence, factor analysis is likely to be inappropriate). A value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors. Kaiser (1974) suggested that values greater than .5 should be viewed as acceptable. Furthermore, values between .5 and .7 are mediocre, values between .7 and .8 are good, and values between .8 and .9 are superb. For these data, the value was .907, which fell into the range of being superb. So, we should be confident that factor analysis was appropriate for these data. The sample size was adequate to yield distinct and reliable factors.

Bartlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix (no relationships between items). For factor analysis to work effectively, we need some relationships between variables and if the R-matrix were an identity matrix then all correlation coefficients would be zero. Therefore, we want this test to be significant (i.e., have a significance value less than .05). A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis. For these data, Bartlett's test was highly significant ( $<.001$ ), and therefore factor analysis was appropriate.

### **Factor Extraction: Total Variance Explained**

Before extraction, SPSS had identified 29 linear components within the data set. The Eigenvalues associated with each factor represented the variance explained by that particular linear component, and SPSS also displayed the Eigenvalue in terms of the percentage of variance explained. So, factor 1 explained 37.102% of the total variance. Factor 2 explained 7.250% of the total variance. Factor 3 explained 6.007% of the total variance. Factor 4 explained 4.135% of the total variance. Factor 5 explained 3.942% of

the total variance. Factor 6 explained 3.650% of the total variance. It was clear that the first few factors explained relatively large amounts of variance (especially factor 1), whereas subsequent factors explain only small amounts of variance.

SPSS then extracted all factors with Eigenvalues greater than 1, which left us with six factors. The Eigenvalues associated with these factors were again displayed (and the percentage of variance explained) in the columns labeled Extraction Sums of Squared Loadings. The values in this part of the table were the same as the values before extraction, except that the values for the discarded factors were ignored.

### **Component Matrix**

The component matrix before rotation contained the loadings of each variable onto each factor. By default SPSS displayed all loadings; however, the researcher requested that all loadings less than .4 be suppressed in the output.

At this stage SPSS had extracted six factors. Factor analysis is an exploratory tool and so it should be used to guide the researcher to make various decisions. One important decision is the number of factors to extract. By Kaiser's criterion we should have extracted six factors, and this was what SPSS did. However, this criterion is accurate when there are fewer than 30 variables, and communalities after extraction are greater than .7, or when the sample size exceeds 250 and the average communality is greater than .6. The communalities indicated that only six exceeded .7. The scree plot was also helpful in guiding the researcher in making decisions about the factor structure.

### Scree Plot

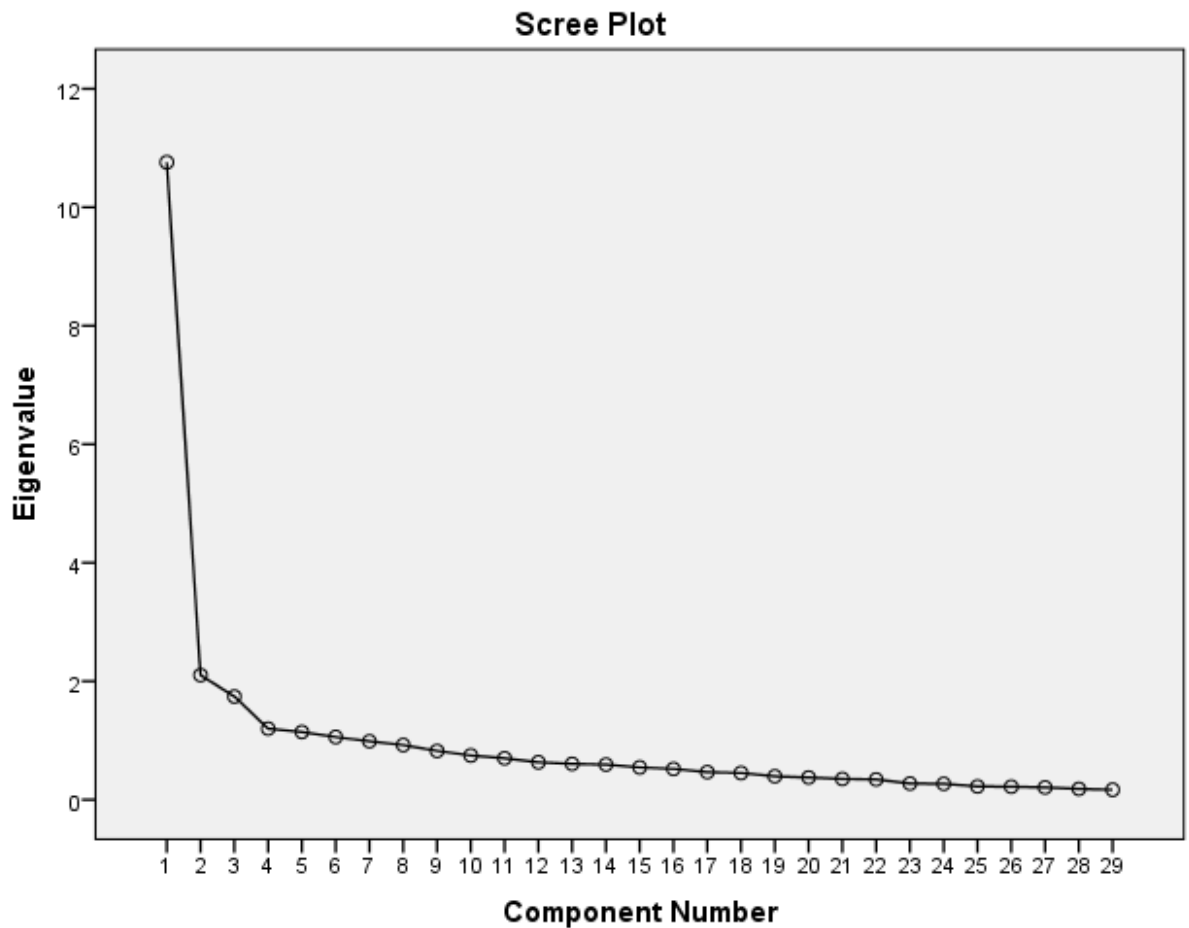


Figure 1. The scree plot.

The scree plot was shown in Figure 1. This curve began to tail off after three factors. Therefore, we could justify retaining three factors. Consequently, the researcher decided to rerun the analysis by asking SPSS for three factors.

### Rotated Component Matrix

Based on the rotated component matrix, we could see there were three distinct, discrete factors. Variables loaded very highly onto two factors. The suppression of loadings less than .4 and ordering variables by loading size also made interpretation

considerably easier because scanning the matrix to identify substantive loadings did not have to be undertaken. Ideally, any variable should load highly on only one factor and have zero, or close to zero loadings on all other factors.

### **Interpretation**

The next step was to examine the content of questions that loaded onto the same factor to try to identify common themes. The items that loaded highly on factor 1 seemed to relate to attitudinal motivation. Therefore, the label for this factor was “attitudinal motivation.” The items that loaded highly on factor 2 seemed to all relate to “integrative motivation.” The items that loaded highly on factor 3 seemed to all relate to “instrumental motivation.”

This analysis revealed that the questionnaire was composed of three subscales: attitudinal motivation, integrative motivation, and instrumental motivation.

### **Reliability for Subscale 1 (Attitudinal Motivation)**

Table 3

#### *Reliability Statistics for Attitudinal Motivation*

Cronbach's Alpha	N of Items
.871	7

The overall Cronbach's Alpha in Table 3 was excellent (.871) because it was above .8, and indicated good reliability.

Table 4

*Item-Total Statistics for Attitudinal Motivation*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Item 24	25.62	13.474	.739	.842
Item 21	25.71	12.983	.726	.842
Item 25	25.76	13.672	.629	.855
Item 28	25.32	15.280	.557	.867
Item 23	25.93	12.932	.623	.857
Item 22	25.83	12.853	.713	.843
Item 27	26.06	12.246	.632	.860

For each item in Table 4, the Cronbach's Alpha if an item were deleted was less than the overall Cronbach's Alpha (.871). Therefore, all these items were retained.

**Reliability for Subscale 2 (Integrative Motivation)**

Table 5

*Reliability Statistics for Integrative Motivation*

Cronbach's Alpha	N of Items
.878	8

The overall Cronbach's Alpha in Table 5 was excellent (.878) because it was above .8, and indicated good reliability.

Table 6

*Item-Total Statistics for Integrative Motivation*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Item 9	28.48	21.389	.655	.862
Item 15	28.44	21.198	.543	.881
Item 13	28.25	23.028	.600	.868
Item 17	28.25	21.491	.747	.852
Item 7	28.45	21.612	.714	.856
Item 11	28.16	22.569	.669	.861
Item 3	28.19	23.003	.661	.862
Item 5	27.90	23.540	.633	.866

For item 15 in Table 6, the Cronbach's Alpha if an item were deleted (.881) was greater than the overall Cronbach's Alpha (.878). Therefore, item 15 was deleted. For the rest of the items in the table, the Cronbach's Alpha if the item were deleted was less than the overall Cronbach's Alpha (.878). Hence, all these items were retained except item 15.

**Reliability for Subscale 3 (Instrumental Motivation)**

Table 7

*Reliability Statistics for Instrumental Motivation*

Cronbach's Alpha	N of Items
.804	7

The overall Cronbach's Alpha in Table 7 was good because it was greater than .8, and indicated a good reliability.

Table 8

*Item-Total Statistics for Instrumental Motivation*

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Item 10	24.76	13.069	.597	.768
Item 8	25.30	12.623	.549	.778
Item 4	24.60	14.603	.525	.785
Item 6	24.98	12.274	.628	.761
Item 12	24.89	13.875	.404	.804
Item 14	24.88	13.472	.497	.786
Item 18	24.71	13.383	.614	.767

For item 12 in Table 8, the Cronbach's Alpha if an item were deleted (.804) equaled the overall Cronbach's Alpha (.804). Therefore, item 12 was deleted. For the rest of the items in the table, the Cronbach's Alpha if an item were deleted was less than the overall Cronbach's Alpha (.804). Hence, all these items were retained except item 12.

### **Multiple Linear Regression Analysis**

According to the results of the factor analysis, three motivational orientations were identified: integrative motivation, instrumental motivation, and attitudinal motivation. To answer the research question: (To what degree and in what manner will students' Chinese learning outcomes be predicted by the following variables: integrative motivation; instrumental motivation; and attitudes toward the learning situation?),

multiple linear regression was run using SPSS. In this model, the three motivational orientations were utilized as predictors of students' Chinese learning outcomes. Integrative motivation, instrumental motivation, and attitudinal motivation were independent variables; students' semester average of Chinese served as the dependent variable.

### **Variance in Semester Average that can be Explained**

Table 9

#### *Regression Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.287 <sup>a</sup>	.082	.065	11.640	.082	4.695	3	157	.004

*Note.* a. Predictors: (constant), attitudinal motivation, instrumental motivation, integrative Motivation

R square is a measure of how much of the variability in the outcome is accounted for by the predictors. For this model, R square was calculated as .082, which means that integrative motivation, instrumental motivation, and attitudinal motivation accounted for 8.2% of the variation in semester average. F-ratio of 4.695 was significant as  $p = .004$  (less than .05).



### Values of B and Beta

Table 10

#### *Regression Coefficients<sup>a</sup>*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	61.107	7.233		8.448	.000
1	Integrative Motivation	-.490	.328	-.187	-1.494 .137
	Instrumental Motivation	.561	.381	.174	1.471 .143
	Attitudinal Motivation	.791	.288	.277	2.744 .007

*Note.* a. Dependent variable: semester average

Table 11

#### *Descriptive Statistics for motivational orientations*

	Mean	Std. Deviation	N
Semester Average	84.91	12.036	161
Integrative Motivation	28.44	4.604	161
Instrumental Motivation	24.89	3.725	161
Attitudinal Motivation	30.04	4.217	161

According to Table 10 and Table 11, for integrative motivation,  $B = -.490$ ,  $Beta = -.187$ .  $B = -.490$ . This value indicated that as integrative motivation increased by one unit, semester average decreased by .490 units. This interpretation is true only if the effects of instrumental motivation and attitudinal motivation are held constant.

$Beta = -.187$ . This value indicated that as integrative motivation increased by one standard deviation (4.604), semester average decreased by .187 standard deviation. The standard deviation for semester average was 12.036 and so this constituted a change of 2.251 ( $.187 * 12.036$ ). This interpretation was true only if the effects of instrumental motivation and attitudinal motivation held constant. As  $T = -1.494$ ,  $p = .137$  (greater than .05), integrative motivation did not seem to predict semester average.

For instrumental motivation,  $B = .561$ ,  $Beta = .174$ .  $B = .561$ . This value indicated that as instrumental motivation increased by one unit, semester average increased by .561 units. This interpretation was true only if the effects of integrative motivation and attitudinal motivation held constant.

$Beta = .174$ . This value indicated that as instrumental motivation increased by one standard deviation (3.725), semester average increased by .174 standard deviation. The standard deviation for semester average was 12.036 and so this constituted a change of 2.094 ( $.174 * 12.036$ ). This interpretation was true only if the effects of integrative motivation and attitudinal motivation held constant. As  $T = 1.471$ ,  $p = .143$  (greater than .05), instrumental motivation did not seem to predict semester average.

For attitudinal motivation,  $B = .791$ ,  $Beta = .277$ .  $B = .791$ . This value indicated that as attitudinal motivation increased by one unit, semester average increased by .791

units. This interpretation was true only if the effects of integrative motivation and instrumental motivation held constant.

Beta = .277. This value indicated that as attitudinal motivation increased by one standard deviation (4.217), semester average increased by .277 standard deviation. The standard deviation for semester average was 12.036 and so this constituted a change of 3.334 (.277 \* 12.036). This interpretation was true only if the effects of integrative motivation and instrumental motivation held constant. As  $T = 2.744$ ,  $p = .007$  (less than .05), attitudinal motivation was useful in predicting semester average.

### **Zero-Order Correlation, Partial Correlation, and Part Correlation**

The zero-order correlations are the simple Pearson correlation coefficients. The partial correlations represent the relationships between each predictor and the outcome variable, controlling for the effects of the other two predictors. The part correlations represent the relationship between each predictor and the outcome, controlling for the effect that the other two variables have on the outcome. In this Model, there was a nonsignificant relationship between integrative motivation and semester average ( $p = .137$ , greater than .05); there was a nonsignificant relationship between instrumental motivation and semester average ( $p = .143$ , greater than .05); and there was a significant relationship between attitudinal motivation and semester average ( $p = .007$ , less than .05).

### Null Hypothesis Testing

Table 12

*ANOVA<sup>a</sup> for Regression*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1908.345	3	636.115	4.695	.004 <sup>b</sup>
	Residual	21271.258	157	135.486		
	Total	23179.602	160			

*Note.* a. Dependent variable: semester average b. Predictors: (constant), attitudinal motivation, instrumental motivation, integrative motivation

As shown in Table 12, in this Model, as F-ratio is 4.695, p is .004 (less than .05), we were able to reject the null hypothesis. So this Model was useful in predicting the outcome variable (semester average).

### Multiple Regression: Final Results

According to the data analysis above, below is the report of the multiple regression model.

Table 13

*Report of the Multiple Regression Model*

	<i>B</i>	<i>SE B</i>	$\beta$
Step 1			
Constant	61.11	7.23	
Integrative	-0.49	0.33	-.19**
Instrumental	0.56	0.38	.17**
Attitudinal	0.79	0.29	.28*

*Note.*  $R^2 = .08$  for Step 1 ( $p < .05$ ). \*  $p < .05$ , \*\*  $p > .05$ .

For this model, the regression equation was:

$$\text{Semester Average} = 61.11 + (-.49 * \text{Integrative}_i) + (.56 * \text{Instrumental}_i) + (.79 * \text{Attitudinal}_i)$$

In summary, the multiple regression model with all the motivational orientations, was significant in predicting the outcome variable. Dörnyei's attitudinal motivation was a significant predictor of the semester average. Gardner's motivational orientations (integrative and instrumental motivations) were not significant in predicting the semester average.

## **Chapter V**

### **Discussion and Conclusion**

#### **Summary of the Study**

The major purpose of this study was to investigate how motivational orientations influence the Chinese learning outcomes of non-heritage students in U.S. community colleges. This study integrated the classical theoretical model of integrative and instrumental motivations by Gardner (1985), with Dörnyei's framework of L2 motivation (1994a), which specifically focuses on attitudinal motivation in the foreign language classroom. A 30-item survey was developed as the instrument to examine 161 participants' motivational orientations at T College. Factor analysis and multiple linear regression were employed as the major statistical tests in this study. The value of KMO (.91) indicated patterns of correlations were relatively compact and the sample size was adequate to yield distinct and reliable factors. Bartlett's test was highly significant ( $<.001$ ), indicating that R-matrix was not an identity matrix, and therefore factor analysis was appropriate. Three factors were identified from the process of analysis, namely attitudinal motivation, integrative motivation, and instrumental motivation. The overall Cronbach's Alphas for these three subscales were .871, .878, and .804, respectively and each indicated a good reliability. Furthermore, the results demonstrated that the multiple linear regression model with all the three motivational orientations was significant ( $p = .004$ ) in predicting the students' Chinese learning outcomes. The regression equation was: Chinese learning outcomes =  $61.11 + (-.49 * \text{Integrative}_i) + (.56 * \text{Instrumental}_i) + (.79 * \text{Attitudinal}_i)$

## **Discussion of the Results**

### **Motivational Orientations**

Three motivational orientations were identified through the process of factor analysis: attitudinal motivation, integrative motivation, and instrumental motivation. First, this result is consistent with the criticism of Gardner's dichotomous model discussed previously (Clement & Kruidenier, 1983; Crooks and Schmidt, 1991; Dörnyei, 2003; Keblawi, 2006). Although integrative and instrumental orientations of Gardner's socio-educational model are regarded as the major and indispensable factors of L2 motivation, integrative and instrumental orientations cannot be all but only part of the learning equation. The identification of attitudinal motivation verified Dörnyei's claim (1994b, p.519) that the components at the learning situation level (i.e., attitudinal motivation) actually formed an independent motivational factor labeled "evaluation of the learning environment". The variety of relevant motivation types identified in this study is in accordance with Dörnyei's claim (1994) that L2 motivation is an eclectic, multifaceted construct.

Second, as Dörnyei (1994a) commented on the three levels of his framework of L2 motivation:

It is at this stage no more than a theoretical possibility because of many its components have been verified by very little or no empirical research in the L2 field. In fact, only the components at the language level and the self-confidence construct at the learner level have been analyzed systematically, notably by Gardner, Clement, and their associates. (p. 282)

The identification of attitudinal motivation in this study verified Dörnyei's components at the learning situation level.

Third, Dörnyei argued that empirical research using extended research paradigms would help integrate old and new variables (Dörnyei, 1994b). This was indeed the case in the present study. This study integrated Gardner's dichotomous model with Dörnyei's extended theoretical model. Integrative and instrumental motivations are traditionally used motivational variables, and they are validated and widely used in educational motivation and language acquisition research. Therefore, it was expected that integrative and instrumental motivations should have emerged in this study and that attitudinal motivation should have been defined and specified to them. The result of the factor analysis in the present study was in accordance with the belief of Dörnyei (1994a).

### **Relationships between Motivational Orientations and Chinese Learning Outcomes**

The results of this study demonstrated that the multiple linear regression model with all the motivational orientations, was significant ( $p = .004$ ) in predicting the Chinese learning outcomes of the non-heritage community college students. However, for this model  $R$  square was .082, which means that integrative motivation, instrumental motivation, and attitudinal motivation only accounted for 8.2% of the variation in students' Chinese learning outcomes. There might be many factors that can explain this variation, but this model, which included only integrative motivation, instrumental motivation, and attitudinal motivation explained 8%, meaning that 92% of the variation in students' Chinese learning outcomes is left unexplained. Therefore, there must be other variables that have an influence also. There are a multitude of variables acting on the individual, and not just the ones under investigation can be considered to be



comprehensive of all the influences on students engaged in Chinese language instruction. As Gardner contends (2001), some other variables such as the cultural background of the students, the relation between the own language group and the target language group, could logically influence the results.

It was revealed that there was a significant relationship between attitudinal motivation and students' Chinese learning outcomes and that attitudinal motivation was a significant predictor of the students' Chinese learning outcomes. This result confirmed the findings of previous studies that the attitudes toward the learning situation are also an important factor to affect a learner's overall performance in language acquisition and that positive attitudes toward the learning situation will likely produce greater enjoyment, desire, and effort expended in learning the language.

The results also revealed that neither integrative nor instrumental motivation was significant in predicting the Chinese learning outcomes. In another word, there was a nonsignificant relationship between integrative/instrumental motivations and students' Chinese learning outcomes. The finding of the nonsignificant relationship between integrative motivation and Chinese learning outcomes was consistent with Dörnyei's claim. Dörnyei (1990) contended that integrative motivation might be less relevant for foreign language learners than for second language learners. According to him, foreign language learners do not have sufficient experience with the target community and they are therefore not committed to integrating into that group. Dörnyei (1990) also stated that integrative reasons are, for foreign language learners, determined more by attitudes and beliefs about foreign languages and cultures in general.

However, the finding of the nonsignificant relationship between instrumental motivation and Chinese learning outcomes was not consistent with the results of previous studies. Oxford (1996) claimed that instrumental motivation is meaningful for the learner who has had limited access to L2 culture, or foreign language settings. Lukmani (1972) demonstrated that in India instrumental motivation correlated significantly with English proficiency scores and that students with instrumental orientations scored higher in tests of English proficiency. Dörnyei (1990) discovered that instrumental motives significantly contributed to the motivation of young adults of English learner enrolled in a language school. The finding of this study might result from the learner attributes such as each learner's language aptitude and learning strategies, which also affect learning outcomes and even overpower the distinct effect of instrumental motivation. According to Gardner (2001), not all of the correlations were significant, as should be expected and that the results for any one study are affected by sampling fluctuations. The lack of a significant correlation may or may not mean that the variables are not related.

### **Implications**

As discussed in the previous chapters, Gardner's (1985) socio-educational model provided a fundamental research paradigm to investigate the role of attitudes and motivation in second language acquisition. Integrative and instrumental orientations of this model had been very influential in L2 motivation research. Dörnyei (1994a) expands motivation at the learning situation level by adding a number of specific components to Gardner's attitudes toward the learning situation, such as course-specific, teacher-specific, and group-specific. The findings of this study demonstrate that attitudes toward the learning situation correlates significantly with students' Chinese learning outcomes and

that attitudes toward the learning situation is a significant predictor of students' Chinese learning outcomes. This result carries very useful practical instructional implications concerning students' attitudinal motivation in the Chinese language classrooms. The implications will be discussed according to the three main types of motivational sources identified within the learning situation level.

### **Course-Specific Motivational Components**

Course-specific motivational components are related to the syllabus, the teaching materials, the teaching method, and the learning tasks and they are referred to as interest, relevance, expectancy, and satisfaction. Therefore, first, it is suggested that teachers make the syllabus of the Chinese course relevant by basing it on students' needs, and involving students in the actual planning of the course program. Second, increase the attractiveness of the course content by using authentic materials and make the Chinese class interesting. The quality of the learners' subjective experience is an important contributor to motivation to learn (Deci & Ryan, 1985). To increase students' interest and involvement in the tasks, teachers can adapt tasks to the students' interests and include problem-solving activities in the Chinese classroom. Third, increase student expectancy and facilitate student satisfaction. Teachers may familiarize students with the task type, give them detailed guidance about the procedures and strategies that the task requires, and make the grading criteria clear. To facilitate student satisfaction, teachers may encourage students to create finished products that they can perform or display and make them proud of themselves after accomplishing a task.

### **Teacher-Specific Motivational Components**

Teacher-specific motivational components are related to the teacher's behavior, personality and teaching style, and direct socialization of student motivation (modelling, task presentation, and feedback). To get students motivated in Chinese language learning, it is first suggested that the teacher develops a good relationship with the learners and set a personal example with his/her own behavior. A great deal of the students' learning effort is energized by the affiliative motive to please the teacher, and a good rapport between the teacher and the students is essential to any modern, learner-centered approach to education (Dörnyei, 1998).

Role models in general have been found to be very influential on student motivation (Pintrich & Schunk, 1996), and the most prominent model in the classroom is the teacher. The teacher may model student interest in Chinese language learning by showing students that he/she values foreign language learning as a meaningful experience that produces satisfaction and enriches his/her life. The teacher may also share his/her personal interest in foreign language learning with the students and take the students' learning achievement very seriously. Second, adopt the role of a teacher as a facilitator and guide rather than an all-knowing bestower of knowledge. Students are therefore encouraged to construct meaning through genuine linguistic interaction with others. Third, promote learner autonomy in the Chinese language classroom. When students take responsibility for their own learning and perceive that their learning successes or failures are to be attributed to their own efforts rather than to factors outside their control, students become autonomous language learners. Autonomous language learners are by definition motivated learners (Ushioda, 1996). Fourth, provide students with motivating

feedbacks. The teacher should make the feedbacks informational rather than controlling, point out the value of the accomplishment, and not overreact to errors.

### **Group-Specific Motivational Components**

Group-specific motivational components are related to the group dynamics of the learner groups. Cooperative learning technique is the first motivational strategy to be encouraged in the Chinese language classroom. As students work together in pairs and groups, they share information and help each other. They are a team whose players must work together in order to achieve goals successfully. Research has shown that cooperative learning promotes intrinsic motivation, heightens self-esteem, and lowers anxiety (Oxford, 1997). The second motivational strategy is to increase the group's goal-orientedness. Goal-setting can have exceptional importance in stimulating L2 learning motivation. The teacher may help the students set up the group goals and ask them to evaluate the extent to which they are approaching their goals. The third motivational strategy is to focus on individual improvement and progress and avoid any explicit or implicit comparisons of students to each other. The teacher should make evaluation private rather than public. This strategy can help to minimize the detrimental effect of evaluation on intrinsic motivation.

### **Preparing Chinese Language Teachers for American Schools**

As discussed previously, Chinese is perceived to be one of the most difficult languages to learn according to Walker (1989) and Walton (1989). It takes English-speaking Americans at least three times longer to learn Chinese than to learn French or Spanish (Silber, 1989). Given the complexity of learning Chinese for English native speakers, a learner of the Chinese

language must be highly motivated. Thus, in a Chinese language classroom, the teacher-specific motivational components play an even more important role than the other two motivational components at the learning situation level.

Although Chinese is still categorized as one of the less commonly taught foreign languages (LCTL) in the United States, student enrollment has been increasing rapidly at every level (Asia Society, 2010). This is a time of great opportunity for the Chinese programs to become a mainstream language in American schools. There is no precise way to estimate how many Chinese language teachers will be needed in the coming years. However, developing and equipping a strong corps of Chinese language teachers to teach in the United States classrooms has been a pressing issue.

Under the No Child Left Behind legislation, all classroom teachers in public schools had to obtain certification and be highly qualified to teach their subjects. As Chinese is a relatively new addition to the certification area, not all states have certification procedures in place to license teachers of Chinese and other less commonly taught languages. Even among states which offer such procedures, lack of consistency is a major problem. Some states allow the use of Oral Proficiency Interview (OPI) and Writing Proficiency Test (WPT) developed by ACTFL (American Council on the Teaching of Foreign Languages) while some states require proof of credits or a major in Chinese. The traditional approach to certification focuses on the number of credits in Chinese courses and this is obviously inappropriate for the candidates whose native language is Chinese. The absence or complexity of state-by-state teacher certification requirements has been widely recognized as a big challenge to produce more Chinese language teachers.

Another obstacle to producing more Chinese language teachers is the relatively small number of U.S. colleges that offer Chinese language certification program. However, schools of education face their own challenges too. One challenge is the lack of faculty members who are fluent in both Chinese and English, and have Chinese teaching experience in public schools. Another challenge is that it is hard to find Chinese language classrooms with master teachers who can supervise the clinical experience of new teachers. Lack of communication between higher education and schools have prevented the development of effective Chinese teacher preparation programs.

In order to meet the increasing demands of highly qualified Chinese language teachers in American schools, partnerships are required among all the critical stakeholders: schools, colleges, and states. Colleges and universities should work with interested schools to design a comprehensive program to recruit, train, certify, and support Chinese language teachers. As the critical leaders and innovators in the U.S. educational system, states should put in place a high-quality alternative route to teacher certification. This route should allow a large number of native speakers of Chinese with bachelor's degrees to get certified without the complex procedures. Schools and districts need to work with local higher education institutions to develop programs that train and certify effective Chinese language teachers. They also need to provide professional support for their existing Chinese language teacher as such teacher is often the only Chinese teacher in a school district.

### **Limitations and Suggestions for Future Research**

There are five limitations in this study. First, convenience sampling is used in this study. When nonrandom samples are used, it is usually difficult to describe the

population from which a sample was drawn and to whom results can be generalized.

Therefore, the results of this study are not generalizable to the entire population.

Second, as T College only offers Chinese I class, participants in this study are all from the beginning level. Motivations of students at beginning level might be different from that of students at intermediate/advanced levels. Hence, the results of this study are not generalizable to students at those levels.

Third, as a quantitative study, the sample size in this study is small. If the sample is too small, the results of the study may not be generalizable to the population. A sample that is too small can affect the generalizability of the study regardless of how well it is selected.

Fourth, this study makes use of survey techniques to gather data to investigate non-heritage community college students' motivational orientations toward Chinese language learning. According to Gardner (2001), the advantage of this type of studies is that they have ecological validity. The research participants are in the process of studying another language, and their reactions to the various tests represents their views and their accomplishments as of the time of testing. The disadvantage is that there are multitude of variables acting on the individual, not just the ones under investigation. Some other variables could logically influence the results.

Finally, multiple linear regression is employed in this study to examine the relationship between motivational orientations and Chinese learning outcomes. However, Dörnyei (2001) argues that relationship can at best be indirect since motivation is the antecedent of action rather than of achievement itself. Dörnyei and Otto's cyclic model



(1998) assumes that the relationship between motivation and achievement is not linear since motivation can affect achievement and vice versa.

Due to the limitations above, first, future research should include a larger sample and investigate the Chinese learners at different levels. Another approach to study the relationship between learner's motivation and outcomes is to employ qualitative methods, such as in-depth interview with the learners. Some researchers (Syed, 2001; Ushioda, 2001) suggested a shift from the quantitative research paradigm which heavily relies on self-report questionnaire and correlation studies. Ushioda (1996) argued that traditional quantitative research methods are not well suited for capturing fluctuations in motivation. Van Lier (1996) suggested including a qualitative inquiry research approach such as case studies and action research. The qualitative research methods can capture the dynamic characteristics of motivation and can complement quantitative research methods. Thus, mixed methods are suggested for future research in L2 motivation. One may obtain quantitative data from the survey and then follow up with a small number of respondents to probe and explore the results in more depth. Third, as Gardner and Lambert (1972) proposed that the attainment of an L2 is affected by a variety of sociocultural factors such as language attitudes, cultural stereotypes, and even geopolitical considerations, learners from different ethnic groups should possess different motivational orientations. Future research may be conducted to compare how motivation affects L2 learning among different ethnic groups. Finally, time and funding permitting, there is a need to conduct a longitudinal study. If a group of Chinese learners are followed for two years or more, we would be able to obtain rich data on motivations.

## **Conclusion**

Motivation is one of the key factors for any second language attainment, and this is especially true for Chinese language learning. Although Chinese is still categorized as one of the less commonly taught foreign languages (LCTL) in the United States, student enrollment has been increasing rapidly at every level. It is therefore critical to find out the relationship between motivational orientations and language learning outcomes of Chinese language learners. This study integrated Gardner's (1985) dichotomous model of integrative and instrumental motivations, with Dörnyei's (1994) framework of L2 motivations, which specifically focuses on attitudinal motivation in the foreign language classroom. The results of this study demonstrated that the multiple linear regression model with all the motivational orientations, was significant in predicting the Chinese learning outcomes of the non-heritage community college students. Furthermore, this study revealed that there was a significant relationship between attitudinal motivation and students' Chinese learning outcomes. These results were critical for language teachers to understand Chinese language learners' motivational drives and carried very important practical instructional implications in the Chinese language classrooms. The factor structure validated Gardner's AMTB (Attitude/Motivation Test Battery, 1985) in the context of Chinese language learning in U.S. community colleges. It also confirmed Dörnyei's attitudinal motivation (1994) at the learning situation level.

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## **Appendix A**

### **Survey on Chinese Language Learning and Motivation**

## Survey on Chinese Language Learning and Motivation

**Respondent's Name** \_\_\_\_\_ **Gender** M    F    **Age** \_\_\_\_\_

**Ethnicity**

- ☐ White                      ☐ Hispanic or Latino                      ☐ Black or African American  
☐ Native American or American Indian                      ☐ Asian / Pacific Islander  
☐ Other

**The Chinese Course Being Taken** \_\_\_\_\_ **Grade Level** \_\_\_\_\_

We would like to know the reason why you study Chinese, and your opinion about the effectiveness of the Chinese class you are taking. Please give your immediate reactions to each of the items. There are no right or wrong answers since different people have different opinions. Pick the statement which best indicates your feeling. 谢谢!

(SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree)

<b>I take Chinese classes because:</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
1. It will allow me to be at ease with people who speak Chinese.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I need the class to fulfill my institution's requirements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. It will allow me to meet and converse with more and varied people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. It will make me a knowledgeable person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. It will enhance my understanding of Chinese culture and society.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I think it will be useful in getting a good job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I will be able to participate more freely in the activities of Chinese cultural groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. It will enable me to compete effectively in the global economy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I will be able to enjoy Chinese classics, literature, music, and films.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I want to use Chinese when I travel to a Chinese-speaking country/area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. It will enable me to better understand and appreciate the Chinese way of life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. China is playing a more and more important role in the economic development of the world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. It fulfills my personal interests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I will feel proud if I can speak Chinese.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. I want to learn as many foreign languages as possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My friends/siblings took Chinese and they recommend the Chinese class to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree)

<b>I take Chinese classes because:</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
17. I want to learn about other cultures to better understand the world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. It is a language that is going to be very useful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. It is close to my culture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. My parents suggested me learn it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<b>I like my Chinese classes because:</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
21. The teacher makes learning fun.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. The course material is interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. The course tasks are at the proper level for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. The teacher's feedback is encouraging.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Learning is student-centered and interactive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. The group-work or paired-work is fun and helpful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I enjoy speaking Chinese with my classmates.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. The teacher is sufficiently proficient to have the knowledge and skills to teach the language.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. The tutorial sessions increase the learning opportunity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I can learn Chinese culture in/out side the classroom.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## **Appendix B**

### **Invitation Letter**



Dear Sir/Madam:

You are invited to participate in a research study titled “College Students’ Motivational Orientations and Chinese Language Learning”. This study is being conducted by Xiongying Deng and her research committee from the Department of Curriculum and Instruction at University of Houston. The purpose of this study is to investigate how motivation influences Chinese learning outcomes of college students in the United States.

In this study, you will be asked to complete a survey. Your participation in this study is voluntary and you are free to withdraw your participation from this study at any time. The survey should take only half an hour to complete.

This project has been reviewed and approved by the University of Houston Committees for the Protection of Human Subjects (713-743-9240). There are no risks associated with participating in this study.

While you will not experience any direct benefits from participation, information collected in this study may benefit the Chinese language teaching and learning in the United States colleges by better understanding the relationship between motivational orientation and language learning outcomes of Chinese language learners.

If you have any questions regarding the survey or this research project in general, please contact Xiongying Deng (xdeng@uh.edu) or her advisor Dr. F. Richard Olenchak (richardo@central.uh.edu).

Your participation is greatly appreciated.

Xiongying Deng, Doctoral Student, University of Houston  
Advisor: Dr. F. Richard Olenchak, University of Houston

**Appendix C**  
**Consent Form**



## **UNIVERSITY OF HOUSTON CONSENT TO PARTICIPATE IN RESEARCH**

**PROJECT TITLE:** College Students' Motivational Orientations and Chinese Language Learning

You are being invited to take part in a research project conducted by Xiongying Deng from the Department of Curriculum and Instruction at the University of Houston. This project is part of the candidacy paper and is being conducted under the supervision of Dr. F. Richard Olenchak.

### **NON-PARTICIPATION STATEMENT**

Taking part in the research project is voluntary and you may refuse to take part or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any research-related questions that make you uncomfortable. A decision to participate or not or to withdraw your participation will have no effect on your standing.

### **PURPOSE OF THE STUDY**

The purpose of the study is to investigate how motivation influences Chinese learning outcomes of college students in the United States. Your cumulative grades on your Chinese class will be used to be compared with the motivation types in analysis. After you sign the consent form, I will obtain your Chinese grades from your Chinese instructor. The entire study will last one semester (about five months). However, I will only need 40 minutes from you. The introduction of the study and distribution of the consent form will take you about 10 minutes. The survey will take you about 30 minutes.

### **PROCEDURES**

You will be one of approximately 30 subjects invited to take part in this project.

There will be 2 visits.

1st visit (About 10 minutes):

- Introduction of the principal investigator and the study
- Distribution of the cover letter and consent form
- Answering questions from the potential participants

2nd visit (About 30 minutes; this visit will be one week after the 1st visit)

- Collecting the consent form from the potential participants
- Passing out the survey and pencils to the voluntary participants
- Detailed instructions on completing the survey. Example question will be provided:  
*We would like to know the reason why you study Chinese, and your opinion about the effectiveness of the Chinese class you are taking. Please give your immediate reactions to each of the items. There are no right or wrong answers since different people have different opinions. Pick the statement which best indicates your feeling.*  
*(SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree)*

<b>I take Chinese classes because:</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>
I need the class to fulfill my institution's requirements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- Administering the survey
- Collecting the survey after the participants finish it

### **CONFIDENTIALITY**

Since your Chinese grades are used to be compared with the motivation types in analysis, the survey would not be anonymous to the principal investigator. The principal investigator will obtain your Chinese grades from your Chinese instructor. However, after the survey are collected, each participant will be assigned a code number. The list pairing the participant's name to the assigned code number will be kept separate from all research materials and will be available only to the principal investigator. Every effort will be made to maintain the confidentiality of the participants in this study within legal limits.

### **RISKS/DISCOMFORTS**

Participants will not experience any possible risks involved with participation in this project.

### **BENEFITS**

While you will not directly benefit from participation, your participation may benefit the Chinese language teaching and learning in the United States colleges by better understanding the relationship between motivational orientation and language learning outcomes of Chinese language learners.

**ALTERNATIVES**

Participation in this project is voluntary and the only alternative to this project is non-participation.

**COSTS**

No costs

**INCENTIVES/REMUNERATION**

No incentives/remuneration

**PUBLICATION STATEMENT**

The results of this study may be published in scientific journals, professional publications, or educational presentations; however, no individual subject will be identified.

**AGREEMENT FOR THE USE OF AUDIO/VIDEO TAPES**

Not applicable

**CIRCUMSTANCES FOR DISMISSAL FROM PROJECT**

Not applicable

**SUBJECT RIGHTS**

1. I understand that informed consent is required of all persons participating in this project.
2. I have been told that I may refuse to participate or to stop my participation in this project at any time before or during the project. I may also refuse to answer any

question.

3. Any risks and/or discomforts have been explained to me, as have any potential benefits.
4. I understand the protections in place to safeguard any personally identifiable information related to my participation.
5. I understand that, if I have any questions, I may contact Xiongying Deng at xdeng@uh.edu. I may also contact Dr. F. Richard Olenchak, faculty sponsor, at RichardO@Central.UH.EDU.
6. **Any questions regarding my rights as a research subject may be addressed to the University of Houston Committee for the Protection of Human Subjects (713-743-9204).** All research projects that are carried out by Investigators at the University of Houston are governed by requirements of the University and the federal government.

### **SIGNATURES**

***I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions to my satisfaction. I give my consent to participate in this study, and have been provided with a copy of this form for my records and in case I have questions as the research progresses.***

Study Subject (print name): \_\_\_\_\_

Signature of Study Subject: \_\_\_\_\_

Date: \_\_\_\_\_

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***I have read this form to the subject and/or the subject has read this form. An explanation of the research was provided and questions from the subject were solicited and answered to the subject's satisfaction. In my judgment, the subject has demonstrated comprehension of the information.***

Principal Investigator: Xiongying Deng, Doctoral Student of Curriculum and Instruction

Signature of Principal Investigator: \_\_\_\_\_

Date: \_\_\_\_\_