REPRESENTATIONS OF L2 MOTIVATIONAL SELF SYSTEM WITH BEGINNING
CHINESE LANGUAGE LEARNERS AT COLLEGE LEVEL IN THE UNITED
STATES: HERITAGE AND NONHERITAGE LANGUAGE LEARNERS

by

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Liberty University

A Dissertation Presented in Partial fulfillment
of the Requirements for the Degree of
Doctor of Education

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Representations of L2 Motivational Self System With Beginning Chinese language

Learners at College Level in the United States:
Heritage and Nonheritage Language Learners

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ABSTRACT

Yan Xie. REPRESENTATIONS OF L2 MOTIVATIONAL SELF SYSTEM WITH BEGINNING CHINESE LANGUAGE LEARNERS AT COLLEGE LEVEL IN THE UNITED STATES: HERITAGE AND NONHERITAGE LANGUAGE LEARNERS (Under the direction of Dr. Connie McDonald) School of Education, April 2011.

Dornyei (2005) proposed the L2 motivational self system in response to the need to develop the socioeducational model. This study further tests the validation of the L2 motivational self system by investigating beginning Chinese language learners at the college level in the United States. A questionnaire combining two published questionnaires was administered to 197 subjects, including heritage language learners and nonheritage language learners, and compared the motivational representations of the two types of learners. This is the first study to test the L2 motivational self system by investigating learners of a language other than English. Through a correlation analysis, the study found significant correlations between (a) integrativeness and the ideal L2 Self; (b) ideal L2 self and motivational strength; (c) ideal L2 self, ought-to L2 self, instrumentality-promotion, and instrumentality-prevention; and (d) ideal L2 self, international posture, and willingness to communicate. Through a MANOVA analysis, the heritage and nonheritage language learners were found different in six variables: motivational strength, ought-to L2 self, family influence, cultural interest, prevention, and international posture. The study supports previous studies on the theoretical legitimacy of the L2 motivational self system and suggests that applying the L2
motivational self system can be extended to a language other than English and to second-language settings.

Descriptors: L2 motivational self system, heritage, nonheritage
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LIST OF ABBREVIATIONS

Attitudes Toward Chinese Community (ATCC)
Attitudes Toward Learning Chinese (ATLC)
Chinese as a Foreign Language (CFL)
Cultural Interest (CI)
Chinese as a Second Language (CSL)
English as a Foreign Language (EFL)
Family Influence (FI)
Heritage Language Learners (HLLs)
Ideal L2 Self (ILS)
International Posture (INTP)
Nonheritage Language Learners (NHLLs)
Ought-to L2 Self (OLS)
Second Language (2L)
Willingness to Communicate (WTC)
CHAPTER ONE: INTRODUCTION

This chapter discusses the background of the study in light of language learning motivation development and the purpose and significance of the study. This chapter is divided into seven parts: background, problem statement, statement of the purpose, significance of the study, research questions, hypotheses, and identification of variables.

Understanding an individual’s motivation to learn a second language is foundational for instructors to enhancing learners’ motivation and increasing learning achievements. The interrelationship between motivation and achievements has been identified (Chihara & Oller, 1978; Cohen & Dornyei, 2002; Gardner, 1991; Gardner & Lambert, 1972; Lukamani, 1972). Motivational theories must provide accurate information on what constitutes learners’ motivation. A sound L2 motivational theory can help instructors to motivate learners, and thus help learners make optimal achievement. Motivational theories in L2 learning have developed through empirical studies. Dornyei (2005, 2009) proposed the L2 motivational self system as a correction and advancement of previous theories. Dornyei’s theory was undergoing tests and is waiting to be advanced. Corresponding to this need, the present study empirically tested the correlations supporting the L2 motivation self system.
**Background**

What is motivation? The early conception of motivation originated from behaviorism, which regarded need and drive as motivational instigators. However, the cognitive approach accounted for the significance of thought in the motivational process. In keeping with these two approaches, motivation is the function of thought and behavior interaction (Ames & Ames, 1984). Dornyei (2005) defined motivation as “the dynamically changing cumulative aroused in a person that initiates, directs, coordinates, amplifies, terminates and evaluates the cognitive and the motor processes” (p. 9).

Roughly speaking, there have been two developmental phases in the studies on L2 learning motivation (L2 motivation).

The first phase was dominated by the socioeducational model of Gardner (1985). This model had been the paramount theory for several decades in L2 motivational studies. It originated from studies with a Canadian background (Gardner & Lambert, 1959, 1972). The tenet underlying this model was that sociocultural environment influences learners’ attitudes toward the target language and target community and culture, which in return impact L2 motivation. The concepts proposed by the model include integrative and instrumental motivation, and the studies engaged in the two motivations provided the correlations with learning achievements. While integrative motivation refers to the purpose of identifying with the target community, instrumental motivation refers to the pragmatic ends, for example, career development, promotion, etc.
The second phase was characterized by the challenge to expand the socioeducational model. This phase witnessed a wealth of cognitive-situated and process-oriented studies (Dornyei, 1994a; Ely, 1986; Krudenier & Clement, 1986; Noels, Clement, & Pelletier, 1999). Even though challenges had emerged in the 1970s (Chihara & Oller, 1978), the large-scale questioning of the socioeducational model happened two decades later. The challenges pointed out the limitations of the socioeducational model (see Chapter Two for details), which included the deficiencies in terminology, concepts, and measurements (Dornyei, 1994b); the vagueness of the definition of integrative motivation (Crookes & Schmidt, 1991) and its power to predict learning achievements (Au, 1988; Chihara & Oller, 1978); as well as the lack of applicability in foreign-language settings (Dornyei, 1990b; Oxford, 1996).

Recently, Dornyei (2005) formulated the L2 motivational self system. This system attempts to solve the limitations of the socioeducational model. It consists of three components: the ideal L2 self (ILS), ought-to L2 self (OLS), and learning experiences. While the ideal self refers to what learners want to become through learning another language, ought-to L2 self is what they think they should become or avoid becoming through learning the language. The belief behind the L2 motivational self system originated from possible self theory, that is, the gap between ILS and the present self constitute the motivation in L2 learning. However, empirical studies (e.g., Dickinson, 1995; Jacobovitz, 1970; Kelly, 1969; MacIntyre, MacMaster, & Baker, 2001; Noels, 1997, 2009) have found that the components of L2 motivational self system correlate to
the socioeducational model and self-determination theory. For instance, ILS was found to correlate to integrativeness and intrinsic motivation, while OLS correlates to instrumentality and extrinsic motivation (Noels, 2009). It is noteworthy that the term L2 here could be referred to as another language—no matter if it is the second, third, etc.

In summary, through the two phases of development, L2 motivational self system has emerged, which incorporates the established social psychological and motivational theories. Although the framework anchors on the foundation of the conventional theories, how well L2 motivational self system gives account of L2 motivation is not fully answered. Testing the correlations supporting L2 motivational self system via more empirical studies is needed.

**Problem Statement**

The variables of the L2 motivational self system have been tested through studies on English as a foreign language (EFL) learners in Asia and Europe (Dornyei & Ushioda, 2009). In Dornyei and Ushioda, four findings were found supporting the system. However, it is unknown whether or not the findings hold true as to other languages in other countries.

The L2 motivational self system was formulated to solve the limitations of the socioeducational model, which had dominated the theoretical framework for three decades. The socioeducational model proposes two significant motivational factors: integrative motivation (or integrativeness) and instrumental motivation (Gardner, 1985; Gardner & Lambert, 1972). Scholars have agreed there are limitations to the model,
including nonapplicability in foreign-language settings (Dornyei, 1990b; Oxford, 1996),
the inappropriateness of polarizing integrativeness and instrumentality (Dornyei, 1994b; 
Ely, 1986), vague definition of integrativeness (Crookes & Schmidt, 1991), and
arbitrarily claiming the stronger predictive power of integrativeness to achievement as 
compared to instrumentality (Au, 1988; Chihara & Oller, 1978).

Corresponding to these limitations of the socioeducational model, the L2 
motivational self system argues that target language people and community are not 
readily available in foreign-language settings, and broader variables are necessary to 
replace integrative and instrumental motivation (Dornyei & Ushioda, 2009). The 
socioeducational model suggests that learners are motivated by wanting to become like 
the target language people. Since target language people are not available, the L2 
motivational self system suggests that such motivation is not realistic with foreign 
language learners in unicultural and monolingual settings (Taguchi, Magid, & Papi, 
2009). Instead, the L2 motivational self system redefines the integrative motivation 
proposed by the socioeducational model by suggesting that language learners have in 
mind an ideal picture of themselves called the L2-specific self that they are trying to 
reach by learning a language (Dornyei & Ushioda, 2009). Although the validity of the 
L2 motivational self system had been attested to in EFL setting, more empirical studies 
are important to test the findings supporting the system through investigating learners of 
a language other than English from other areas.
Statement of the Purpose

The purpose of this study is to investigate the L2 motivational self system through beginning Chinese language learners, including heritage language learners (HLLs) and nonheritage language learners (NHLLs) at the college level in the United States. This study also attempts to compare the differences between HLLs and NHLLs with respect to the variables included in the questionnaire: ILS, OLS, FI, promotion, prevention, ATLC, CI, ATCC, integrativeness, INTP and WTC. HLLs are those who have one or two parents from Chinese ethnicity, and the parent(s) speak Mandarin Chinese or another Chinese dialect at home or other places. NHLLs are those from a different ethnic background without prior knowledge of language and culture.

Why did the study include two groups of learners? HLLs connect learning with discovering their ethnic identities, and they have different family influence (FI) (Kim, 1981; Phinney, 1989; Trusty & Sandhu, 2002). For example, HLLs have the encouragement and/or pressure from parents to learn Chinese, and such FI also projects into L2 self, including the ideal and ought-to self. A test based on one-group data would fail to judge L2 motivational self system. Why did the study compare the two groups? The comparison between HLLs and NHHLs has been a significant topic in literature (He & Xiao, 2008). The present study allows a better understanding regarding the motivational comparison between the two groups because the comparison has not been conducted from the perspective of L2 motivational self system in previous literature.
Why did the study test L2 motivational self system in a non-EFL setting? The L2 motivational self system was originally applied in an EFL setting (Dornyei & Ushioda, 2009). However, there are at least two reasons that the study applied it to Chinese as a foreign language (CFL) or Chinese as a second language (CSL) settings. First, Chinese has increasingly become a global language and shares the global features of world English (Chinese-Language Composition, 2007). The L2 motivational self system points out that in EFL settings, the English community is not viewed by learners as attached to a specific English-speaking country, but as a global community of which the language and cultural capital were shared globally via multiple media (Dornyei, 2005, 2009). In the same manner, speakers of Chinese have settled around the world, which more or less renders the language, as well as the culture practices, international. Learners who are attached to integrative motivation are most likely to develop the motivation in the form of L2 specific self, including ILS and OLS in association with Chinese language usage. It is hard to grasp the fixed features of Chinese native speakers, which are dissimilar in different areas, for example, Mainland, Taiwan, and southern Asian island countries; therefore, they are not identified. It is realistic that the integrative motivation/integrativeness of Chinese HLLs and NHLLs is directed to the point of becoming ILS that learners define based on their experience and interest. In other words, ILS takes the place of Chinese communities and constituted a motivational factor among Chinese language learners. The effort to reduce the gap between ILS and the current L2
self generates motivation. Therefore, the L2 motivational self system is suggested functional in CFL and CSL settings.

Second, OLS is most likely to exist with HLLs. Parental expectations to maintain the heritage language are widely identified among Chinese families (e.g., Sung & Padilla, 1998). In addition, young people of college age have developed their ethnic identity to the point of internalization, which is the stage of maturity in the self-identity development process (Tse, 2000). At the stage of internalization, young Chinese are eager to pick up the heritage language, which is realized as the integral part of their ethnic identity (He, 2006; Wong & Yang, 2010). The failure to do so would result in incomplete identity. Therefore, with HLLs, OLS is influential in the learning process due to forces from other members in the community (e.g., parents, siblings, peers, and others) as well as the consciousness of learners to develop their ethnic identity.

In conclusion, the purpose of the present study is to test the correlations supporting the L2 motivational self system by investigating Chinese language learners, including HLLs and NHHLs in the United States, and compare the motivational representations between the groups. Chinese language learners unnecessarily connect learning to the motivation of integrating into Chinese community. However, they might be motivated to reach the competent L2 self. The efforts to reduce the gap between the current and future self constitute the motivation. For this reason, this study engages Chinese language learners to further test the findings supporting L2 motivational self system.
**Significance of the Study**

This study is significant for contributing to the knowledge of L2 motivational theories, thus helping teachers to better motivate learners for higher achievement. L2 motivational theories have undergone the shift from theoretical to educational orientation. The L2 motivational self system reflects this trend by applying the function of L2 self to enhance motivation. The L2 motivational self system was formulated based on the incorporation of different established theories, and it was designed to address motivation in settings where frequent and direct contact with target language community was not available (e.g., foreign language learning settings). Dornyei and Ushioda (2009) found that the L2 motivational self system was capable of breaking through the limitations of the socioeducational model when applied in foreign-language settings. However, the studies supporting the L2 motivational self system were all embedded in the setting of learning EFL.

This study tests the findings supporting the L2 motivational self system by investigating Chinese language learners at the college level in America. This was the first study investigating the learners of a language other than English regarding L2 motivational self system. Moreover, the comparison of HLLs and NHLLs had long been significant in literature due to the importance of distinguishing the features of the two kinds of learners for better addressing learning needs (He & Xiao, 2008). Previous studies (e.g., Lü, 2007) had not adopted the perspective of the L2 motivational self system. The present study would contribute to a better understanding of this issue.
because it was the first one to conduct a comparison in the framework of L2 motivational self system.

The theoretical significance of the study would also lead to contributions to language education. By applying the L2 motivational self system, teachers must keep in mind to help learners envision a vivid ILS. This goal is mostly in favor of communicative language teaching because it provides embodied learning experiences that constitute the foundation on which learners start to envision what ILS they want to become. The desire to reduce the gap between the ideal and current self would result in the increase of motivation given that the personalized goal of achieving ILS makes learning relevant, volitional, and autonomous (Deci & Ryan, 1985).

This study is significant not only because it theoretically contributes to the understanding of the L2 motivational self system but also because it operationally helps Chinese teachers, and hopefully teachers of other languages, to implement communication-based teaching from a new perspective—the perspective of L2 self-perception. For the theoretical and pedagogical implications, see the Implications section in Chapter Five.

**Research Questions**

Once again, the variables of L2 motivational self system include ILS, OLS, and learning experience. Learning experience has long been agreed upon, so the major part of testing the L2 motivational self system is to test ILS and OLS. Taguchi, Magid, and Papi (2009) found a strong relationship as stated in Research Question 1, and the stronger
relationship between ILS and motivational strength stated in Research Question 2. Taguchi et al. also validated the L2 motivational self system by verifying the two relationships through SEM analysis. They argued that integrativeness was a local factor under ILS, which suggested ILS was more inclusive. The study of Taguchi et al. also indicated that ILS was a better predictor of motivation. T. Kim (2009) in her qualitative study found the significant relationship stated in Research Question 3. The finding demonstrates that ILS and OLS integrated instrumental motivation. In other words, the L2 motivational self system addresses one limitation of the socioeducational model as mentioned above. Noels (2009) affirmed the relationships stated in Research Question 4 through SEM analysis. Since INTP and WTC were two factors identified important to learning outcomes, the study suggests that the L2 motivational self system could reflect motivation-achievement relationship. In summary, identification and/or verification of these relationships led to the conclusion that the L2 motivational self system could legitimately take the place of the socioeducational model in foreign-language settings.

The present study would test the correlations outlined in the first four research questions. Plus comparing HLLs and NHLLs, the present study developed five research questions.

1. What is the relationship between integrativeness and ideal L2 self with beginning Chinese language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

2. Is the relationship stronger between ideal L2 self and motivational strength than between integrativeness and motivational strength with beginning Chinese
language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

3. What is the relationship of instrumentality to ideal L2 self and ought-to L2 self with beginning Chinese language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

4. What is the relationship among ideal L2 self, international posture, and willingness to communicate with beginning Chinese language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

5. What differences are there of motivational representations between beginning Chinese heritage language learners and nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

**Hypotheses**

Corresponding to the research questions, the present study holds 20 null hypotheses.

1. There is no significant relationship between ideal L2 self and integrativeness with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

2. There is no significant relationship between ideal L2 self and integrativeness
with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

3. The relationship between ideal L2 self and motivational strength is no different from that between integrativeness and motivational strength with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

4. The relationship between ideal L2 self and motivational strength is no different from that between integrativeness and motivational strength with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

5. Instrumentality has no significant relationship with ideal L2 self and ought-to L2 self with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

6. Instrumentality has no significant relationship with ideal L2 self and ought-to L2 self with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

7. There is no significant relationship among ideal L2 self, international posture, and willingness to communicate with beginning Chinese nonheritage language
learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

8. There is no significant relationship among ideal L2 self, international posture, and willingness to communicate with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

9. There is no significant difference in measurement (motivational strength) between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

10. There is no significant difference in ideal L2 self between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

11. There is no significant difference in ought-to L2 self between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

12. There is no significant difference in family influence between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the
L2 motivational self system.

13. There is no significant difference in instrumentality-promotion between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

14. There is no significant difference in instrument-prevention between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

15. There is no significant difference in attitudes toward learning Chinese between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

16. There is no significant difference in cultural interest between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

17. There is no significant difference in integrativeness between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.
18. There is no significant difference in attitudes toward Chinese community between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

19. There is no significant difference in international posture between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

20. There is no significant difference in willingness to communicate between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

Identification of Variables

This section elaborates the key variables of the study by providing the definitions. The key variables included heritage learners, instrumental motivation, integrative motivation, ILS, OLS, WTC, and INTP. The complete variables are provided in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Variables in the Study</th>
</tr>
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<tbody>
<tr>
<td>Heritage status</td>
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<tr>
<td>Motivational components</td>
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<tr>
<td>HLLs</td>
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**Heritage learners.** HLLs are those from ethnic background who bring some prior knowledge of language and culture to learning experience; NHLLs are those from a different ethnic background without prior knowledge of language and culture. This definition has been criticized for arbitrariness (Lee, 2005). According to Lee (2005), beyond ethnicity, two considerations are necessary to take into account. First, language proficiency must be considered. Even though people were likely to believe that HLLs had higher proficiency than NHLLs, this was not the case with many second- and postsecond-generation immigrants. Therefore, some immigrant students did not like to be perceived as HLLs, which would not allow excuse for low proficiency. Second, the
sociopsychological factor must be considered. Learners of heritage ethnicity might not have higher proficiency but had heritage motivations such as knowing their culture better and identifying with the community as well as developing ethnic identities.

Therefore, language proficiency and motivation were both indicators of HLLs. The definition should balance the two but more importantly address the purpose of this study. According to Van Deusen-Scholl (2003), HLLs refer to students whose home language was one other than English (could be accompanied by English to a small scale), but who used English in all educational settings as well as most out-of-home interactions. This definition embraces the factors of proficiency level and ethnic roots. Sociopsychological ties were most important in differentiating motivations, so ethnicity and parents’ home language must be considered to identify HLLs.

To sum up, the present study concisely defines HLLs as those who have one or two parents from Chinese ethnicity, and the parent(s) speak Mandarin Chinese or another Chinese dialect at home or other places. This definition captures the impact of racial and linguistic identity on motivations, which emphasizes both sociopsychological effect and language proficiency. This definition also takes the cultural exposure into account which could accompany parents’ use of Chinese language at home.

**Ideal L2 self (ILS).** Adopting the definition of Dornyei (2005), the study views ILS as the desired self that learners want to become through learning the Chinese language. It refers to “the L2-specific facets of one’s ideal self” (Dornyei, 2005, p. 105).
The gap between ILS and the current self stimulates the desire to bridge it, which constitutes the motivation of language learning.

**Instrumental motivation.** Instrumental motivation is identified to be triggered by utilitarian purposes (e.g., career development, promotion, economic interests, etc.). It is noteworthy that integrative and instrumental motivation are seldom mutually exclusive. Learners are often driven by both motivations. On one hand, their interest to learn another language is triggered by positive attitudes toward the target language community; on the other hand, they recognize the benefit of language proficiency to increase their career opportunities. The correlation of integrativeness and instrumentality was .06 in Yashima’s (2000) study of Japanese EFL learners. The dual goals were most typical in learning a language with high ethnolinguistic vitality, such as English (Yashima, 2009).

Cultural and language interdependence document the coexistence of integrativeness and instrumentality. If the interest in target language culture and society is absent, the instrumental purposes could hardly be fulfilled. Utilitarian benefits often occur through interaction with the target language speakers and community. To sum up, the present study defines instrumental motivation as motives originating from pragmatic purposes in relation to welfare—directly or indirectly. The study recognizes that instrumentality and integrativeness are rarely mutually exclusive.

**Integrative motivation/integrativeness.** Gardner’s early definition of integrative motivation recognized the end to identifying with the target community and gaining the membership of it. Gardner (1985, 2001; Gardner & McIntyre, 1991) emphasized that
integrative motivation should not be confused with integrative orientation. According to him, orientation was preactional while motivation was actional. However, the process-oriented perspective in motivational theories counts orientation/goals because motivation is understood as the process consisting of preactional, actional, and postactional stages.

In later studies, integrative motivation no longer coupled with identification with the target community or gaining membership into it. The well-accepted feature of integrative motivation was the positive attitudes toward the target language, culture, and community. However, the degree of openness to foreignness varied with different subjects, and so integrative motivation was defined differently with different studies corresponding to the subjects’ level of nonethnolinguistic attitudes.

In sum, the present study defines integrative motivation in terms of the interest in Chinese language and culture and even, but not necessarily, the intention to identify with Chinese people. It is noteworthy that the study agrees that motivation is a developmental entity, so it includes integrative orientation as an integral part of integrative motivation. Additionally, integrative motivation and integrativeness are interchangeable in the literature. The study aligns with the literature and does not distinguish the two terms.

**International posture (INTP).** By adopting the definition of Yashima (2009), the present study views INTP as how one relates oneself to international communities. INTP was applied in L2 motivational studies given that it coupled with the L2 motivational self system to correct the deficiencies of integrative motivation. Just as integrativeness and instrumentality were rarely separated, INTP related to both. In other
words, learners relate themselves to international communities for integrative and instrumental purposes.

The behaviors triggered by high INTP includes the willingness to talk with foreigners, attention to international affairs, tendency to help new arrivals from other countries, understanding of foreign social values, tolerance to differences, and openness to foreign culture such as music, movies, food, etc.

**Ought-to L2 self (OLS).** By adopting Dornyei’s (2005) definition, the present study views OLS as the self that learners believe they should become or avoid becoming through learning Chinese. It measures attributes one believes one ought to possess “in order to avoid possible negative outcomes” (Dornyei, 2005, p. 106). The negative outcomes include disappointing others and losing friends. For instance, HLLs avoid displeasing their parents. OLS is directed to external forces from other members of the community, while ILS is geared toward self-positive aspirations.

**Willingness to communicate (WTC).** The present study uses Yashima’s (2009) instrument, so it adopts her definition by viewing WTC as the extent to which learners are willing to use Chinese language to initiate communications and/or join communication conducted in this language. The concept of WTC was originally raised in L1 communication literature (Burgoon, 1976). Due to its relationship with language anxiety, it was embraced in L2 communication literature in the studies of achievements and motivation (Liu & Jackson, 2008; MacIntyre, Baker, Clement, & Donovan, 2003; McCroskey, 1987; Yashima, Zenuk-Nishide, & Shimizu, 2004). Learners with high
WTC tend to be motivated. “The major motivation to learn another language is to develop a communicative relationship with people from another cultural group” (MacIntyre, 2008, p. 566).

In conclusion, this chapter discussed that it is necessary to further test the L2 motivational self system. With this purpose, the researcher tests four correlations found in the previous studies that support the system. In the next chapter, the researcher reviews the literature associated with this purpose. The literature review discusses the socioeducational model, self-related theories, and the L2 motivational self system.
CHAPTER TWO: LITERATURE REVIEW

This chapter reviews literature in relation to the study. The review focuses on the socioeducational model, self-related theories, and the L2 motivational self system. This chapter has three sections: introduction, the review of literature, and summary. The review of literature includes the socioeducational model and critiques on it, self-determination theory, the L2 motivational self system, and self theories relative to it.

Chapter One provided the background of the present study and discussed its significance. The study attests to the findings supporting the L2 motivational self system, which was a newly proposed theory and needed further examination from empirical studies. This system was potentially to replace the socioeducational model in foreign language-settings if its validity and reliability were sufficiently recognized. Although the L2 motivational self system had support from the studies on EFL learners, the present study will examine the findings which supported the L2 motivational self system by studying Chinese language learners in America—the first study of a language other than English. The author reviews the literature that is associated with the purpose of the study. Through the review, a holistic but focused picture of the theoretical background of the L2 motivational self system is presented and the study’s need recognized.

Introduction

Motivational theories have relevance in sociopsychological theories. Corresponding to the different orientations, there are five main L2 motivational theories:
(a) socioeducational model, (b) expectancy-value theories, (c) self-determination theory, (d) neurobiology theory, and (e) self-identity-related theories. In this section, the author focuses on the socioeducational model, self-determination theory, and self-identity-related theories because they all lay the theoretical foundation for the L2 motivational self system and are mostly relevant to the purpose of the study. First, the socioeducational model and critiques are reviewed so that the need for an advanced theory is appreciated. Then the review discusses the concept of the newly established L2 motivational self system and its theoretical foundation. Finally, the studies supporting the L2 motivational self system are reviewed and the supportive findings recognized. The need to further test the L2 motivational self system is appreciated.

**Review of Literature**

The socioeducational model had dominated the research agenda for three decades before large-scale criticism arose in the 1990s. Corresponding to the criticisms, the model underwent revision (Gardner, 1985, 2001; Gardner & Lambert, 1959, 1972). However, the need for a restructured theory was still not addressed. The L2 motivational self system, under such circumstances, emerged. While the system was approved by a number of empirical studies, further studies are important because multiple contexts should be engaged in supporting this theory.

**Socioeducational model.** The socioeducational model captured the societal and cultural influences on attitudes and motivation in L2 learning. The model has its theoretical roots in sociopsychological concepts developed by Arsenian (1945),
Markwardt (1948), Nida (1956), and Whyte and Holmberg (1956). These earlier articles tapped into the topics of acculturation, psychological identification, intergroup contact, and attitudes. Based on these studies, the socioeducational model suggests that the social and cultural environment in which learners grow up influence their attitudes and motivation, which in return influence their achievement.

The socioeducational model embraces two linguistic and two nonlinguistic variables: (a) the social milieu and individual differences and (b) language acquisition and outcomes. Individual differences constitute the core of the socioeducational model, which include intelligences, language aptitude, motivation, and situational anxiety. Among these individual differences, motivation has been studied, and integrative motivation was the focus. The socioeducational model represents motivational framework as follows (see Figure 1).
Motivation in the socioeducational model proposes integrative and instrumental motivation. Integrative motivation is complex, consisting of integrativeness, attitudes toward the learning situation, and motivation. Integrativeness refers to integrative orientation, interest in foreign language, and attitudes toward L2 community. Attitudes toward the learning situation include evaluation of L2 teacher and L2 course. Motivation is defined as the desire to learn (cognition) and motivation intensity (effort). This complex model opened the avenue to include community and ethnocentric orientation.

*Figure 1. The socioeducational model of integrative motivation.*
As mentioned above, the socioeducational model underwent improvements since it was designed. The main expansions were witnessed in the areas of motivation behavior, achievement, and language attitudes (Gardner, Tremblay, & Masgoret, 1997; Tremblay & Gardner, 1995). The motivation behavior integrated goal theory, valence, and self-efficacy; the achievement was broadened beyond test scores by connecting persistence, attention, and motivational intensity; and language attitudes took into account the immediate situation-specific attitudes.

However, in spite of these developments, Gardner (1985, 2001) insisted there was a distinction between motivation and orientation. He pointed out the nondiscrimination of the two was one reason causing the conflicting findings. However, the distinction of the two has been rejected by other scholars (e.g., Dornyei, 1994b), who claimed that the antecedents of motivation, such as orientation or goals, are an integral part of motivation.

The instrument that the socioeducational model used is Attitudes and Motivational Test Battery (AMTB). AMTB is made up of 13 components and 138 items—served as the main instrument of the socioeducational model. The components are “attitudes toward the French community”, “interest in foreign languages”, “attitudes toward European-French people”, “attitudes toward learning French”, “integrative orientation”, “instrumental orientation”, “French class anxiety”, “parental encouragement”, “motivational intensity”, “desire to learn French”, “orientation index”, “evaluation of the French teacher”, and “evaluation of the French course”. Some of these
items also entail criticism, for example, the absence of clarity between intended and actual behaviors (Dornyei, 1994b).

**Criticism of the socioeducational model.** Research on the socioeducational model, established and developed by Gardner and his associates, was primarily conducted among language learners in Canada. Gardner and Lambert (1972) identified the participants as integratively and instrumentally oriented and found the more significant relationship of integrative orientation to achievement. This finding supports that positive attitudes toward the target language community are associated with higher achievement in contrast to negative attitudes. In later studies (e.g., Gardner, 1985, 1996; Gardner et al., 1997), the individual-group relationship was repeatedly found significant. However, critiques pointed out that the other significant influences were left out. Therefore, the findings elicited challenges as well as interest in retesting the socioeducational model. Criticisms were mainly around four aspects: dichotomy of integrative and instrumental motivation, predictive power of integrative and instrumental motivation, foreign- and second-language settings, and the definition of integrativeness.

**Dichotomy of integrative and instrumental motivation.** First, the socioeducational model left people with the impression that integrative and instrumental motivation is dichotomous. However, the studies (e.g., Chihara & Oller, 1978; Lukamani, 1972; Oller, Hudson, & Liu, 1977) did not find an absolute distinction between the two motivational types. Ely (1986) found instrumental item loaded on integrative motivation, while integrative did not load on integrative cluster. This finding supposes the interplay
of instrumental and integrative motivation and the ambiguity of the integrativeness. Although Gardner and his associates (Gardner & MacIntyre, 1993; Gardner et al., 1997) never failed to clarify that their studies did not indicate the dichotomy of the two types of motivation, when it came to the misunderstanding of quite a few scholars, Gardner (2001) regretted the measurement choice in his study of 1972. Ironically, Gardner and his associates were found to address integrative motivation in their studies and largely ignored the instrumental because they never included and elaborated on other motivational constructs. According to Oxford (1996), only one study by the Gardner group in the last 34 years had considered instrumental motivation. Dornyei (1994b) explained that it could be ascribed to the sample used. In Gardner and his associates’ studies, the subjects were typically young school learners, for whom job promotion and salary-related reasons were not relevant. However, their studies did not include short-term pragmatic benefits, which did exist among young school learners (e.g., better grades, admitted to be good university, etc.).

Predictive power of integrative and instrumental motivation. Contradictory results arose on the predictive power of instrumental and integrative motivation. Gardner and Lambert (1972) found that integrative orientation was more likely to lead to better learning outcomes than the instrumental. However, some studies found that instrumental motivation was equivalent or even more powerful in predicting achievement (Chihara & Oller, 1978; Lukamani, 1972; Oller et al., 1977). Lukamani (1972) concluded, first, that instrumental motivation was significantly correlated to the proficiency but integrative
motivation was not; and, second, instrumental rather than integrative motivation was significant. Oller et al. (1977) found that neither integrative nor instrumental motivation was significantly correlated to ESL achievement (although highly integratively motivated learners showed more achievement than low integratively motivated ones). Chihara and Oller (1978) found the results unexplainable. Thus, they doubted the validity of Spolsky’s (1969) self-rating scale and Gardner’s socioeducational model. Au (1988) refuted that integrative motivation could lead to higher achievement and argued that integratively motivated learners were unnecessarily active learners. Gardner and MacIntyre (1991) did not find that integrative motivation learners were more hard-working than those instrumentally motivated, but they found that instrumental motivation similarly helped produce achievements. However, according to Gardner and McIntyre, instrumental motivation tends to maintain until goals are achieved, while integrative motivation is expected to continue due to its relation to positive attitudes.

Although Gardner (2001) pointed out that the conflicts were caused by the authors’ confusion of motivation with orientation, he invited more challenges at this point. Other literature has pointed out it was problematic to separate goal/reasons from motivation (Dornyei, 1994a; Oxford & Shearin, 1994).

*Foreign- and second-language settings.* The third criticism was that the socioeducational model was not applicable to foreign-language settings. Integrative orientation was based on the studies mostly conducted in the second language environment, especially in Canada (e.g., Gardner, 1985; Gardner & Lambert, 1971).
However, in foreign-language settings where frequent contact with the target language group was absent, integrative orientation in its strict or loose sense might not exist among learners (Clement & Kruidenier, 1983; Dornyei, 1990a, 1990b, 2003; Oxford, 1996; Oxford & Shearin, 1994). Although Dornyei (1990b) found integrative orientation existing in foreign-language settings, the meaning of integrativeness was already differently conceptualized.

On the other hand, instrumental motivation was prominent in foreign-language settings (Samimy & Tabuse, 1992). Clement and Kruidenier (1983) identified four motivational constructs: instrumentality, travel, knowledge, and friendship. They concluded that integrative motivation in the Gardnerian sense was not significant in a unicurcultural environment; it was false to treat “bookish” (p. 288) or intercultural interest as integrative motivation; and the traditional integrative motivation required two conditions to exist: immediate intercultural contacting environment and significance of the target language. These findings were supported by Kruidenier and Clement (1986), who suggested excluding integrative motivation from measurement. However, Belmechri and Hummel (1998) refuted exclusion of integrativeness. Their study in a monolingual setting suggested the existence of integrative motivation. Even so, they did not make their point any different from Kruidenier and Clement because they defined integrative motivation as the positive attitudes toward learning the language and the target language community. Kruidenier and Clement, having no problem with positive attitudes, however, had a tighter definition, which defined integrativeness as the intention to
identify with the target community. In fact, the instrument used in the studies of Clement and Kruidenier should be considered with caution, because it was adapted from that of Chihara and Oller (1978), as well as Spolsky (1969); the former had defaulted the different conception of integrative motivation and, thus, failed to retrieve findings conforming to Gardner and his associates.

To be sure, the socioeducational model was not appropriate for foreign-language settings in which conditions of integrative motivation were not available. Motivation difference between second- and foreign-language acquisition had been discussed (Crookes & Schmidt, 1991; Dornyei, 1990a, 1990b). Dornyei (1990a, 1990b) asserted that integrative motivation was based on attitudes toward target language culture and community. Because foreign language learners had few opportunities to experience target language communities, integrative motivation was not realistic for them. Gardner (1985, 2001) also recognized this point because he counted positive attitudes toward target language group or community as integrative motivation regardless of the desire to assimilate into it. Warden and Lin (2000) claimed that integrative motivation in membership sense was absent in their subjects who learned EFL in Taiwan. They demonstrated that the learning setting was an important factor for the existence and/or existing manner of integrative motivation.

**Problem in defining integrativeness.** The fourth criticism was that it was difficult to define integrativeness or integrative orientation. Integrativeness was the key concept in the socioeducational model. Gardner and Lambert (1972) defined integrative
orientation as the intention to identify with a target language group and gain membership eventually. According to them, a student has integrative orientation if the student “wishes to learn more about the other cultural community because he is interested in it in an open-minded way, to the point of eventually being accepted as a member of that other group” (p. 3). However, Gardner (2001) changed his definition of the term. He described integrative orientation as follows:

The variable integrativeness reflects a genuine interest in learning the second language in order to come closer to the other language community. At one level, this implies an openness to, and respect for other cultural groups and ways of life. In the extreme, this might involve complete identification with the community. (p. 5)

Note the difference in the two descriptions. In the earlier one, integrative orientation is directed to the end of identifying with the other group. However, in the latter one, identification with the other group is an extreme result and unnecessarily always happened. Crookes and Schimdt (1991) provided a more open definition. According to them, integrative motivation was positive attitudes toward the target language community, which features interest in meeting and interacting with members of the target language group or potentially led to integration into that group.

The vagueness of integrativeness has been pointed out by other studies. Clement and Kruidenier (1983) articulated that Gardner’s definition lacked operation; Ely (1986), in his study on Spanish learners in the United States, found that conversing with Spanish
speakers seemed integrative but loaded with instrumental motivation. It indicated that the definition of integrative motivation was subject to ambiguity and nonoperation. Belmechri and Hummel (1998) suggested the replacement of integrative motivation with positive motive because their study showed strong positive attitudes toward language, culture, and community—but not integrative motivation.

To sum up, the vagueness of integrativeness was largely ascribed to the different bottom lines of integration level accepted by different researchers. In the original sense, the level was set at the point of identification with the target language group. In a loose sense, it was bookish interest in the target language society and language or metaphorical integration (Clement & Kruidenier, 1983; Dornyei, 2003, 2005). However, in foreign-language settings, integrative motivation in the original sense was rarely evident.

**The author’s critique on three early studies.** The results of the studies by Lukamani (1972), Oller et al. (1977), and Chihara and Oller (1978) have been frequently cited but rarely warranted. For example, Clement and Kruidenier (1983) mentioned the findings of these three earlier studies disparage from those of Gardner and his associates, but Clement and Kruidenier did not analyze the validity of the refuted findings. Since the three earlier studies had relevance to the concept of “ideal self,” the common ground that the L2 motivational self system shared, the author believes it is meaningful to have a deeper review of the three studies. By doing so, the author emphasizes the significance of the L2 motivational self system because it had improved the combination of self theory and motivational theory compared to the three studies. To be brief, the author proposes
that there are at least three fallacies in the three studies, which were associated with the subjects, instruments, and concept.

In subjects, Lukamani (1972) used 60 Marahi-speaking people; all were female, coming from the suburban area of Bombay. The heavy homogeneity limited the generalizability of the results. Moreover, the reference group was English-speaking Indians. In spite of the fact that the living standard and modernity of English-speaking Indians were relatively high, they could not stand for typical English-speaking communities (e.g., the United States, Britain, etc.). Lukamani assumed that participants, if not intending to identify with English-speaking Indians, would not desire to identify with English-speaking Westerners, or vice versa. This assumption is untenable.

Obviously, attitudes toward Indian English speakers did not always conform to attitudes toward Western English speakers. In the study of Oller et al. (1977), the subjects were 44 college students: 40 from Taiwan, 3 from Hong Kong, and 1 born in America. Taiwan was more economically developed than the mainland, and so the subjects were not typical of Chinese ESL learners. The representation of instrumentality could be different between Taiwanese and Mainland Chinese. In the study of Chihara and Oller (1978), they used 123 Japanese adult English learners attending YMCA classes at different levels. The adults already had their self-identity shaped; and they did not have direct contact with the English language and culture in Japan. Therefore, integrative motivation seemed hardly applicable.
The second fallacy is inherent in the instruments used. All three studies used an indirect method of the Spolsky identity rating scale and a direct method with the motivation questionnaire. The rating scale included the ratings on self, ideal self, Marathi-speaking community, and English-speaking Indian community. The data were used to extract motivation. Positive attitudes toward the English-speaking Indian community were viewed as integrative motivation. The three studies all presumed that attitudes were motivation. However, it should be noted that integrative motivation was characterized by positive attitudes, but positive attitudes did not always lead to integrative motivation. In addition, in the indirect measurement, there was no clarity of instrumental and integrative items. The study of Oller et al. (1977) found low interest in the participants permanently staying in the United States, and thus low integrative motivation. The intention of staying in the United States could be either integrative, instrumental, or both. As to the direct questionnaire, the questions did not align with the original definitions of motivation by Gardner and his associates. In the original sense, integrative motivation recognizes the intention to identify with the target language group. Moreover, questions overlapped in different motivational categories. For instance, in the study of Lukamani (1972), overlapping was possible between “getting a good job” (instrumental) and “becoming more modern” (integrative) and between “getting access to international books, journals, etc.” (instrumental) and “acquaintance with people in touch with the latest trends in thought and behavior in the west” (integrative).
It seemed that the authors intended to use indirect method to assess integrative motivation and the direct method for instrumentality. As argued above, attitudes that the indirect method measured did not necessarily lead to integrative motivation. In addition, the direct method for measuring instrumentality could possibly get integrativeness measured. Lukamani (1972) found integrative attitudes toward both the English speakers and Marahi group. This finding suggests bidirectional integration (i.e., the integrativeness toward both groups). However, Lukamani explained the conflict away by claiming that higher ratings on English speakers were due to the higher rating on instrumental items. This explanation exposed the lack of clarity between the two types of items.

The third limitation was the misconception of dichotomy of integrative and instrumental motivation. Lukamani (1972) indicated that if learners rated higher on English speakers, they were integratively motivated; if they rated higher on the Marahi group, they were instrumentally motivated. However, the authors missed that the high rating on English speakers could not be caused by integrativeness, and the high rating on Marahi group could be caused by disinterest to assimilate into English speakers. However, disinterest unnecessarily meant the instrumentality. Furthermore, Lukamani claimed that integrative motivation contributed to better and more complete human beings. This claim seemed to degrade the instrumental motivation in this function.

The three studies all recognized that the perception of ideal self was the indicator of motivation. However, attitudes toward self did not directly reflect motivation. To
manifest motivation, it is necessary to specify the aspect of ideal self. Dornyei (2005) identified that ideal L2 self was what integrative motivation directed to. He argued that in foreign language learning situation, target community was virtual, so learners tried to identify with ILS instead.

**Dornyei’s critique on the socioeducational model.** Dornyei (1994b) further analyzed three reasons that cause confusion in the socioeducational model: terminology, measurement, and concepts. The first cause of confusion resided in two terminologies. The first term was *integrative*. In the integrative motivation model, there are three components at three different levels using the word integrative: integrativeness, integrative motive/motivation, and integrative orientation. The three terms have been interchangeable in L2 literature. The second term causing confusion was *motivation* as a subcomponent of integrative motivation. Dornyei claimed to have difficulty in grasping this classification because motivation is a broader term and so the relationship should be reversed.

The second cause of confusion lay in two measurements. The first measurement was the motivational intensity. It measured behaviors, which meant that behaviors predicted motivation. It was hard for Dornyei (1994b) to fit it in psychology’s view that regarded the opposite, that is, motivation led to behaviors. The second measurement was the motivation. It had three components: desire to learn, motivation intensity, and attitudes toward learning French. Desire to learn measured the attitudes toward learning French, motivation intensity measured the intended behavior similar to desire, and
attitudes toward learning French measured affective dispositions and intended behaviors. Therefore, the whole measurement of motivation lacked clear content structure. Rather, it was a mixture of intended and actual behaviors as well as general attitudes.

The third cause of confusion lay in the conceptual issues. The first concept was the distinction of motivation and orientation. According to Dornyei (1994b), in the Gardnerian sense, motivation is separated from orientation. However, L2 literature has regarded them as interchanged. Motivational psychology treats goals/reasons as a central element of motivation. They are actually inseparable because motivation to do something is often the reason to do it. “This separation thus concerns ‘motivation’ as a technical term defined by Gardner and not motivation in the broader sense, referring to the total sum of one’s motives and behavioral intent/commitment” (Dornyei, 1994b, p. 518). The second conceptual issue causing confusion was related to the above one. Putting motivation under integrative motivation raises the question whether motivation was restricted to integrative motive or can be generalized to instrumental motivation. If instrumental motivation could also include motivation and attitudes to learning situation, there should be common ground that integrative and instrumental motivation share.

**Integrative/instrumental versus intrinsic/extrinsic.** Since the call for expanding the socioeducational model was in the air, self-determination theory was integrated to supplement the socioeducational model. MacIntyre et al. (2001) argued that the socioeducational model included a large number of variables. To expand the model, it was critical to map out the theoretical territory by comparing the similarity of the
socioeducational model with other theories. Gardner (1985, 1996) warned not to mistake the intrinsic/extrinsic and integrative/instrumental motivation for related concepts. He was right that both integrative and instrumental motivation are extrinsic. However, studies have shown the correlation between intrinsic/extrinsic and integrative/instrumental motivation (Noels, 1997; Noels et al., 1999; Noels, Pelletier, & Vallerand, 2000). The correlation was further confirmed by MacIntyre et al.

Soh (1987) identified the parallel between intrinsic-integrative motivation as well as extrinsic-instrumental motivation. However, the parallel was effective only when integrativeness was defined as positive attitudes toward people, language, and culture. In a similar vein, Gardner and MacIntyre (1991) recognized the stronger link between instrumentality and extrinsic motivation. They found when the material reward was taken away, instrumental motivation drops; but integrative motivation continued due to its correlation to positive attitudes. Some studies, on the other hand, did not discriminate instrumental and extrinsic motivation (Dickinson, 1995; Jacobovitz, 1970; Kelly, 1969). Noels (2001, 2003) pointed out the two paradigms are correlated but not parallel. Integrative motivation is correlated to the more self-determined orientations. According to her, the socioeducational model represents intergroup propensities, while intrinsic/extrinsic motivation is propensities of immediate situation. Noels (2003) suggested a framework incorporating the socioeducational model and self-determination theory. The incorporative framework includes two motivational substrates: one pertaining to intergroup relationship and the other to immediate situation.
However, Dornyei (2005) emphasized the relationship between the two paradigms is still inconclusive. He attempted to design a theoretical framework that integrated self theory and meanwhile documented the essentials of the socioeducational model and self-determination theory. The result was the birth of the L2 motivational self system.

**L2 motivational self system.** Dornyei (2005) pointed out that the significance of the socioeducational model was inherent in its embracing attitudinal approach.

Indeed, I believe the most important milestone in the history of L2 motivation research has been Gardner and Lambert’s discovery that success in L2 learning is a function of the learners’ attitudes towards the linguistic-cultural community of the target language, thus adding a social dimension to the study of motivation to learn a L2. (p. 519)

To affirm and develop the legacy of the socioeducational model, Dornyei and Csizer (2002) concluded that new theories should not contradict the “the large body of relevant empirical data accumulated during the past four decades” (p. 456). Based on this plan, Dornyei (2005) formulated the L2 motivational self system, which attempts to address the integrativeness in the form of “psychological and emotional identification” (p. 96) and other significant issues. The L2 motivational self system is the interface of three theories: self theory, the socioeducational model, and self-determination theory. As aforementioned, it is composed of three components: ILS, OLS, and language learning experience.
**Theoretical concept.** The L2 motivational self system integrates possible self theory into language motivational theories. As the self-concept (self-knowledge) theory advances, possible self theory interprets motivation by accounting for how behaviors were motivated due to the effort to reduce discrepancy between now self and possible self (Markus & Nurius, 1986). Dornyei (2005) argued that it is important to redefine the integrative motivation because the integrative motivation in Gardnerian tradition does not do justice to the context where frequent and direct interlinguistic and intercultural contact is absent. By adopting the perspective of possible self theories, the L2 motivational self system treats integrativeness as the motive to reduce the discrepancy between current L2 self and the desired self (ILS). In other words, the target to integrate is ILS rather than the target language people. This theory interprets integrative motivation in a broader sense. It allows exploration in foreign-language settings.

**Self-determination theory and the L2 motivational self system.** According to Dornyei (2005, 2009), the formulation of the L2 motivational self system drew on two studies embedded in self-determination theory: Noels (2003) and Ushioda (2001). Noels asserted that self-determination theory is powerful for the understanding of L2 motivation and recommended it for improving the socioeducational model. Self-determination theory (e.g., Deci & Ryan, 1985; Grolnick, Deci, & Ryan, 1997; Noels et al., 2000; Vallerand, 1997) studies the autonomy of people to regulate a behavior. This theory displays the strength of autonomy along the continuum with intrinsic and extrinsic motivation at the two ends. Intrinsic and extrinsic motivation are most likely to relate to
L2-specific self and, therefore, could be addressed through the L2 motivational self system.

Intrinsic motivation refers to performing an activity for the activity itself because pleasure and satisfaction are inherent in it. Intrinsic motivation can be experienced in three ways (Vallerand, 1997): motivation to know, motivation toward accomplishment, and motivation to experience stimulation. Much possibly, to become knowledgeable, to make accomplishments, and to experience positive emotion are all constituents of ILS proposed in L2 motivational self system.

The four types of extrinsic motivation are external, introjected, identified, and integrated regulation in the order of strength level of autonomy (Deci & Ryan, 1985). These types of motivation were extrinsically triggered and could constitute OLS proposed by the L2 motivational self system. Evidently, learners perceive what they ought to become at the end of learning another language; the perception takes into account the external influences, such as to avoid the loss of rewards and discouraging important others.

The four types of extrinsic motivation bear different degrees of autonomy. External regulation is most extrinsic with strong accompaniment of rewards and constraints. If people view behavior as important for them and thus behave out of choice, their motivation is regarded as identified regulation. Under identified regulation, they choose their behavior from personal reasons because they perceive the significance of
valued goals. They advance into integrated regulation when they behave on a large scale as a result of their own choice.

The above developmental transition from one to the other stage is also witnessed in the L2 motivational self system. It is not arguable that OLS can transfer to ILS if high internalization of external influences is achieved (T. Kim, 2009). According to Dornyei (2009), the four types of extrinsic motivation are linked to the L2 motivational self system, e.g. external and introjected are linked to OLS, and identified and integrated to ILS. However, the L2 motivational self system is positioned to integrate various established theories for the purpose of advancing the socioeducational model, so it is nevertheless the new version of any existing theory.

**L2 motivational self system and three self-related theories.** Self-concept is the function of both societal and personal context. Motivational theories related to self-concept adopt approaches to integrate the two. Basically, there are three approaches: intergroup model, acculturation model, and identity investment. Following is the discussion of the three models in relation to the L2 motivational self system and/or the socioeducational model.

First is the intergroup model. Intergroup model is directed to bilingual or multilingual settings. In such settings, the socioeducational model has been established. Giles and Byrne (1982) proposed that the intergroup comparative social status impacts the shape of social identity and self-conception as well as the acquisition of heritage and dominant language on the part of people of subordinate ethnicity. Giles and Byrne
identified the limitation of the socioeducational model of Gardner, saying that the socioeducational model excludes the conception of self-identification and intergroup relationship. However, the intergroup paradigm of Giles and Byrne is unable to focus on personal characteristics mediating the process of self-identification. Therefore, intergroup theory is supplemented by studies regarding individual roles (Allard & Landry, 1994; Bourthis, Giles, & Rosenthal, 1981; Harwood, Giles, & Bourthis, 1994). These studies have provided instruments in measuring personal characteristics, such as the questionnaire of subjective vitality (Bourthis et al.), belief on ethnolinguistic vitality (Allard & Landry, 1994) and vitality assessment (Harwood et al., 1994).

In contrast, L2 motivational self system was initiated by being applied to monolingual context, where the target language group could not be frequently and directly accessed; and its primary purpose was not to address ethnonolinguistic vitality and group boundaries. However, learning another language definitely involved learning about the people and culture. Intergroup relationship was still more or less engaged in monolingual setting. For example, in monolingual setting, the perception toward target language community was engaged in the shaping of ILS and OLS of learners. This was particularly true in EFL setting because English and the culture could be accessed easily and experienced frequently, which helped make concrete perception toward English community, which in return helped the envisioning of L2 specific self (Donryei, 2005; Yashima, 2009).
Second is the acculturation model. Schumann (1978, 1986) defined acculturation as the “social and psychological integration of the learner with the target language group” (p. 29). Social and psychological distance is detrimental to language acquisition. This model emphasizes the significance of bridging the gap between individualistic and societal perspectives in developing language proficiency. Gardner (1985) commented that that acculturation model is “language non-acquisition” (p. 137).

The L2 motivational self system is associated with the acculturation model. ILS is rarely culture-free given that acquiring a language includes acquiring the culture. OLS is more or less bound to the comparison between the target and native group; and learning experience is surely under the impact of the social and psychological distance.

Third is the investment theory. This theory explains that behaviors are determined by the meaning people impose on situations. “Whether or not persons will invest themselves in a particular activity depends on what the activity means to them” (Maehr, 1984, p.123). In the application to language learning, Norton Peirce (1995) proposed L2 investment theory, which treats the learning of another language as an investment in social identity, which is the function of symbolic and material resources as well as the elements of cultural capital.

L2 investment theory identifies the problem caused by the socioeducational model. To criticize the socioeducational model, Norton Peirce (1995) demonstrated that investment rather than motivation more captures the desire to learn another language and the relationship of subjects to the target language. According to Norton Peirce, the
socially and historically constructed relation between learners and languages cannot be quantified in terms of instrumental and integrative motivation. To understand the learning of another language, investment theory better captures the complex, dynamic, and changing nature of motivation by tapping into the interaction of power relationship, site of struggles, and social identity. Furthermore, Norton Peirce advocated that consideration of social identity and power relation distinguished investment theory from the instrumentality of the socioeducational model. The former considers learners as subjects of complex identity and multiple desires of the changing social world, while the latter treats learners as of “unitary personality” and motivation as “the property of learners”—“the fixed personality trait” (Norton Peirce, 1995, p. 17).

It is evident that L2 investment theory captures the aspect of self-identity, but the L2 motivational self system positions self-identity to L2 specific self (i.e., ILS and OLS). The former addresses the context in which subjects are the ethnic minority and learn the language of the mainstream. Conversely, the latter addresses the context where learners stay in their home land and do not have the struggle of entering into the mainstream group. The L2 motivational self system shares the ground of self identity but makes the variables measureable through questionnaire data collection (Al-shehri, 2009; Taguchi et al., 2009).

In conclusion, the L2 motivational self-system connects the aforementioned established theories. In spite of providing solutions to the problems of the socioeducational model, the L2 motivational self system is not likely to put a period to
the problems. According to MacIntyre, Makinnon and Clement (2009), self-related issues are relatively uncatchable and subject to partiality and inconsistence in definition and measurements. Therefore, possible self is changeable over time and with goals. Two more factors exacerbate the limitation of the L2 motivational self system. They are cultural variation and self-identification. In different cultural milieu, learners learning the same language could definitely envision a different L2 self. Moreover, self-identification is dependent on intergroup relationship, which entails the process to be complicated. Caution is necessary for users because the L2 motivational self system is unable to consider these variables.

Need to further test the L2 motivational self system. A recent monograph (Dornyei & Ushioda, 2009) provided findings that the L2 motivational self system was a stronger framework to interpret integrative motivation based on the finding that integrative motivation in the socioeducational model is a local motive under ILS (Csizer & Kormos, 2009; Ryan, 2009; Taguchi et al., 2009). Second, integrative motivation is more significantly correlated with motivational strength (Al-shehri, 2009; Taguchi et al., 2009). Third, instrumental motivation could merge into OLS and ILS, depending on the level of self-determination (T. Kim, 2009). This finding lends support to the refutation of integrative and instrumental dichotomy and, thus, is meaningful because polarization of the two motivational types has long been a misconception left by the socioeducational model. Fourth, INTP—or how learners relate themselves to the world—projected into ILS (i.e., what they wanted to become through learning the target language). The higher
level of INTP generates higher communication desire and more use of the target language, which in return leads to proficiency (Yashima, 2009). All of these findings combine to validate the L2 motivational self system theoretically and operationally.

To be brief, the monograph (Dornyei & Ushioda, 2009) validated the L2 motivational self system in three ways. First, it approved the theoretical cooperation of the L2 motivational self system with the established theories. Second, it provided the results supporting the superiority of the L2 motivational self system over the socioeducational model. Third, L2 motivational self system was recognized implicational in language education. However, the supportive studies were all conducted in an EFL setting, and so further tests through multiple studies are needed.

Summary

Motivation is a significant individual difference, which impacts achievements. The close correlation between motivation and proficiency determines the significance of motivational studies in language acquisition. The socioeducational model has dominated the researches for three decades by serving as the prominent theoretical framework. When it was widely recognized that the socioeducational model needed to be fixed, the resurgence of motivational studies occurred in the 1990s, and it caused a “motivational renaissance” (Gardner & Tremblay, 1994). As a result, the L2 motivational self system emerged.

The L2 motivational self system incorporated self-related theories and motivational theories, and it reflected three trends of L2 motivational development: shift
from social psychological line (socioeducational model) to cognitive-situated and process-oriented direction, empower theories with implicational values, and extend to monolingual settings. Although the L2 motivational self system has embraced the three trends, further tests are needed for utilizing the system appropriately in future studies and advancing it to a better framework.

In conclusion, this chapter reviewed the literature related to the study purpose. Through the review, critiques on the socioeducational model were provided, the theoretical foundation of the L2 motivational self system was discussed, and the findings were identified, which support the L2 motivational self system in previous studies. In the next chapter, the researcher discusses the methodology of the study, which includes participants, setting, instrumentation, procedures, study design, and data analysis.
CHAPTER THREE: METHODOLOGY

The literature review provided the background of L2 motivational self system and discussed that the system attempted to solve the limitations of the socioeducational model. In this chapter, the author elaborates the study methods used for testing the hypotheses. This chapter includes seven parts: introduction, participants, setting, instrumentation, procedures, research design, and data analysis.

Introduction

As discussed in Chapter One, the purpose of the study is to examine the correlations supporting the validity of the L2 motivational self system through the subjects of Chinese language learners. The study also attempts to compare the differences between HLLs and NHLLs. The L2 motivational self system attempted to reconceptualize integrative motivation and provide a framework for studies in foreign-language settings. The major findings validating the L2 motivational self system are, first, integrative motivation should be interpreted under a broad frame of ILS; second, instrumentality is supposed to merge into ILS and OLS; third, ILS is more powerful to predict motivational strength than integrative motivation; and fourth, there are strong correlations among INTP, ILS, and WTC (Yashima, 2002, 2009; Yashima et al., 2004).

Participants

The participants (see Table 2) were 197 Chinese language learners from 16 classes of six universities in Virginia, Missouri, Massachusetts, New York, and Florida.
NHLLs included 108 subjects, and HLLs included 89 subjects. The participants were beginning-level Chinese language learners. They studied Chinese as an elective course and came from a variety of majors (e.g., international business, government, education, religion, information system, communication, computer, math, psychology, interior design, law, history, ESL, nursing, etc.).

Table 2

Demographics of the Participants

<table>
<thead>
<tr>
<th>Status</th>
<th>Female</th>
<th>Male</th>
<th>Age M</th>
<th>Age SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHLLS</td>
<td>53</td>
<td>55</td>
<td>19.75</td>
<td>1.78</td>
</tr>
<tr>
<td>HLLS</td>
<td>47</td>
<td>42</td>
<td>19.82</td>
<td>2.33</td>
</tr>
</tbody>
</table>

Setting

Among the six universities, two are located in Virginia, one in Missouri, one in New York, one in Massachusetts, and one in Florida. The locations are all metropolitan areas and have a considerable Chinese population, which enables accessibility to the Chinese community. Intercultural and interlinguistic interactions are familiar in these locations.

Among the six schools, three are private and are three public. The six schools have diverse students from different countries. The schools grant teachers the autonomy to conduct surveys during class time. The survey was communicated to the teachers, who in return gave permission to the researcher.
Among the 16 classes, 5 were purely HLLs and 11 were mixed with HLLs and NHLLs. The classes were offered in lecture format. All the instructors were professionally trained and well familiar with L2 acquisition theories and pedagogies. Sixty-three percent of them earned the M.A. in Teaching Chinese as a Foreign Language, and 37% of them earned the Ph.D. in Second Language Acquisition. They all prioritized building up the communicative ability of learners by using learner-oriented methodologies.

**Instrumentation**

The instrument (Cronbach’s alpha = .855; see Appendix A) consisted of two validated questionnaires. One questionnaire (Taguchi et al., 2009) included 10 scales, and the Cronbach’s alpha of 8 scales was over .70. In another questionnaire titled “Scales used to explore international posture and WTC” (Yashima, 2009), the Cronbach’s alpha of all scales was over .79.

Due to the different population in which the instrument was being used, a few minor changes were made. In the present questionnaire, the word *English* was changed to *Chinese*. A question of “I study Chinese to earn foreign language credits required by my school” (see Appendix A, question 31) was added unto the item of “Instrumentality (promotion)”. It is very common that college students in the U.S. have to meet foreign language requirements, and studying Chinese can earn them foreign language credits. Moreover, the item of “instrumentality (prevention)” in the original questionnaire of Tachugi et al. (2009) focused on how much students were afraid of failing a proficiency
test in the study of Tachugi et al. However, Chinese is not the demanded course for non-major students in America, so the fear of failing proficiency tests does not seem to consist of their motivation to learn Chinese. Therefore, the present questionnaire focused on how much the learning of Chinese would influence their study of major (see Appendix A, question 32), career (see Appendix A, question 33), and relationships with others (see Appendix A, question 35). These revisions facilitated the reliability and validity of the study. Even though these revisions changed the instrument slightly, the reliability for measuring the underlying construct was well established by Taguchi et al. and Yashima (2009).

A field test was conducted by interviewing five students for their feedback and consulting with two experts in the area of teaching CFL. A field test is “a process of testing a research instrument with a small number of persons, in order to identify ambiguities or other problems before the final form is prepared” (Ary, Jacobs, & Razavieh, 2002, p. 560). The five students were beginning level Chinese language learners from a university of Virginia. The researcher personally administered the questionnaire to the five students. They answered the question one at a time. After answering each question, they told the researcher whether or not they understood the question, whether or not the question was appropriate for them, and whether or not they had more than one answer. As a result, all the students were not clear whether “grade” in the first part referred to the Chinese course grade or the general college grade. The researcher consulted with two experts. They felt the questionnaire was well adapted, but
were similarly confused about what the “grade” referred to. In addition, they also suggested asking whether or not students speak one or more Chinese dialects. As a result, the researcher replaced “grade” with “the level of your course” (in Part 1), and added “Do you speak the dialect(s) at home” or “at other places” (in Part 1).

The present instrument study consisted of two parts. The first part was the background information. The second included 61 statements of 12 scales: criterion measures and 11 motivational components. Each statement was based on a 6-point Likert scale: strongly disagree (1 point), disagree (2 points), slightly disagree (3 points), slightly agree (4 points), agree (5 points), and strongly agree (6 points). The criterion measures assessed motivational strength through six statements, such as “I am working hard at learning Chinese,” and “If my teacher would give the class an optional assignment, I would certainly volunteer to do it.” All subscale is at In order to reduce the subjectivity of answers, the headers of the 11 motivational variables (e.g., ILS, OLS, FI, etc.) were moved from the questionnaire, and the statements were randomly ordered. The 11 motivational components were elaborated as follows.

**Ideal L2 self (ILS).** This item had seven statements (7, 9, 11, 15, 17, 18, and 9) to elicit whether or not and how learners were able to envision themselves as proficient Chinese users. Sample questions were “I can imagine myself living in Chinese speaking areas and using Chinese effectively for communicating with the locals” and “Whenever I think of my future career, I imagine myself using Chinese.”
Ought-to L2 self (OLS). This item included six statements (8, 10, 12, 13, 14, and 16) such as “Learning Chinese is necessary because people surrounding me expect me to do so” and “My parents believe that I must study Chinese to be an educated person.”

Family influence (FI). This item captured the impact from family background. Five statements (20, 22, 24, 28, and 30) were provided, including “My parents encourage me to study Chinese” and “Studying Chinese is important to me in order to bring honor to my family.”

Instrumentality. Instrumentality was twofold: promotion and prevention. Promotion-based instrumentality was discovered to be associated with more self-determined forms of motivation. There were seven statements (21, 23, 25, 26, 27, 29, and 31); for example, “Studying Chinese can be important to me because I think it will someday be useful in getting a job” and “I study Chinese to earn foreign language credits required by my school.” Prevention-based instrumentality (instrumentality prevention) consisted of five statements (32, 33, 34, and 35), illustrating the negative results learners try to avoid by learning Chinese. For instance, “I would feel ashamed if I got bad grades in Chinese” and “Knowing no Chinese can negatively influence my career.”

Attitudes toward learning Chinese (ATLC). This item had five statements (36, 38, 40, 42, and 44), which manifested the learning experience—the third component of the L2 motivational self system. Subjects were asked about their attitudes toward class atmosphere and other feelings about them, such as “I like the atmosphere of my Chinese classes” and “I think time passes faster while studying Chinese.”
**Cultural interest (CI).** This component was an expression of integrative motivation. There were four statements (37, 39, 41, and 43) regarding interest in Chinese prints, music, and videos. Samples were “I like the music of Chinese-speaking countries” and “I like Chinese magazines, newspapers, and/or books.”

**Attitudes toward Chinese community (ATCC).** There were three statements (45, 46, and 47), for example, “I like meeting people from Chinese-speaking countries.” According to Gardner (1985), attitudes mediated motivation to bring achievement.

**Integrativeness.** There were three statements (48, 50, and 52) under integrativeness. Integrative motivation had been reconceptualized and no longer rigorously conditioned the identification with L2 people or entering into membership of L2 community. Integrativeness subsumed three statements. Two examples were “I want to become similar to the people who speak Chinese” and “I like Chinese people.”

**International posture (INTP).** International posture (INTP) subsumed six statements (49, 51, 54, 55, 57, and 59) regarding international concern. The globalization of the world had documented the impact of INTP on learning another language. Sample statements were “I want to make friends with international students studying in the U.S.” and “I would feel somewhat uncomfortable if a foreigner moved in next door.”

**Willingness to communicate (WTC).** There were five statements (53, 56, 58, 60, and 61) reporting the willingness to use Chinese in different contexts. WTC had been found related to INTP and language proficiency (Yashima, 2009). Sample statements
included “I volunteer to respond to or ask questions in Chinese class” and “I like to speak Chinese with international students who speak Chinese at school.”

**Procedures**

To conduct the research, the researcher secured the approval of the original authors (see Appendix B) to use their questionnaire and obtained approval of the Institutional Review Board (see Appendixes C and D). As mentioned above, the researcher conducted an interview with five students, and meanwhile, she sent it to two experts for advice. The questionnaire was further revised based on the feedback. All revisions were made in the background part of the questionnaire.

The author contacted the instructors known and unknown to her. She identified the unknown instructors through searching university Chinese program websites. She communicated them via email. She communicated with the known instructors via email and/or phone calls. The communications between the researcher and the instructors went back and forth. The researcher communicated the purpose of the study to the instructors of different universities. The researcher also communicated nondisruption and benefits of the study (Ary et al., 2002) to the instructors. By nondisruption, the author guaranteed the study would be anonymous and voluntary and that the data would be stored confidentially. By benefits, she agreed to provide the results of the study on the instructors’ request. The results would help the instructors understand their students in terms of L2 motivational self system and, thus, better motivate them in the future. Finally, 13 instructors from 6 universities agreed to administer the survey to their classes.
The researcher sent paper questionnaires and postage-prepaid return envelopes to 12 instructors via regular mail and sent questionnaires via email to 1 instructor. On the request of the instructors, she attached a cover letter to the first page of the questionnaire, which re-elaborated the study purposes, anonymity, voluntariness, confidentiality, benefits, and significance of accurate and complete answers. The instructors scheduled the survey according to their course schedule. Since they had different timing to conduct the survey, the questionnaires were completed at different points of the semester—the beginning (four instructors), middle (seven instructors), and end (two instructors). All instructors distributed and administered the questionnaires during regular class time. The instructors returned the completed questionnaires via regular mail to the researcher. Finally, 201 questionnaires were returned, and 197 (98%) were used because 4 (2%) left many questions unanswered.

**Design of the Study**

The study implemented two nonexperimental research designs because the independent and dependent variables were already existing fact and not in the control of the researcher (Ary et al., 2002). The first design was a correlational study (Ary et al., 2002; Howell, 2008) in order to find correlations between and among variables. Examining the relationship between ILS and integrativeness (Research Question 1) confirmed the connection of the L2 motivational self system with the socioeducational model. Investigating the relationship of ILS and integrativeness to motivational strength (Research Question 2) would determine whether ILS or integrativeness has stronger
relationship with motivational strength. Exploring the relationship of instrumentality to ILS and OLS (Research Question 3) can discover how instrumentality and L2 self relate to each other, and therefore further test the connection of the L2 motivational self system with the socioeducational model. Studying the relationship of ILS to INTP and WTC (Research Question 4) can examine the legitimacy of the L2 motivational self system in terms of whether or not it addressed motivation-achievement interrelationship. The second design was causal comparative (Ary et al., 2002) to compare the differences of NHLLs and HLLs (Research Question 5). The research questions are reiterated as below:

1. What is the relationship between integrativeness and ideal L2 self with beginning Chinese language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

2. Is the relationship stronger between ideal L2 self and motivational strength than between integrativeness and motivational strength with beginning Chinese language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

3. What is the relationship of instrumentality to ideal L2 self and ought-to L2 self with beginning Chinese language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

4. What is the relationship among ideal L2 self, international posture, and willingness to communicate with beginning Chinese language learners at the
college level in the United States when measured by an instrument of the L2 motivational self system?

5. What differences are there of motivational representations between beginning Chinese heritage language learners and nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system?

**Data Analysis**

The researcher ran a Pearson correlation to test null hypotheses 1 through 8. Null hypothesis 9 through 20 was tested via MANOVA. A $p < .05$ level of significance was adopted to determine if the null hypotheses could be rejected. The analytical software used in the analysis was SPSS GP 16.0. The null hypotheses were reiterated as below.

1. There is no significant relationship between ideal L2 self and integrativeness with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

2. There is no significant relationship between ideal L2 self and integrativeness with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

3. The relationship between ideal L2 self and motivational strength is no different from that between integrativeness and motivational strength with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.
4. The relationship between ideal L2 self and motivational strength is no different from that between integrativeness and motivational strength with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

5. Instrumentality has no significant relationship with ideal L2 self and ought-to L2 self with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

6. Instrumentality has no significant relationship with ideal L2 self and ought-to L2 self with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

7. There is no significant relationship among ideal L2 self, international posture, and willingness to communicate with beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

8. There is no significant relationship among ideal L2 self, international posture, and willingness to communicate with beginning Chinese heritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

9. There is no significant difference in measurement (motivational strength) between beginning Chinese heritage language learners and beginning Chinese nonheritage
language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

10. There is no significant difference in ideal L2 self between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

11. There is no significant difference in ought-to L2 self between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

12. There is no significant difference in family influence between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

13. There is no significant difference in instrumentality-promotion between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

14. There is no significant difference in instrument-prevention between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument
of the L2 motivational self system.

15. There is no significant difference in attitudes toward learning Chinese between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

16. There is no significant difference in cultural interest between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

17. There is no significant difference in integrativeness between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

18. There is no significant difference in attitudes toward Chinese community between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

19. There is no significant difference in international posture between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.
20. There is no significant difference in willingness to communicate between beginning Chinese heritage language learners and beginning Chinese nonheritage language learners at the college level in the United States when measured by an instrument of the L2 motivational self system.

In conclusion, this chapter provided the methods of data collection, the setting of the study, the study design, as well as the statistics used for analysis. In the next chapter, the researcher provides the results regarding each research question.
CHAPTER FOUR: RESULTS

This chapter provides the results of the statistical analysis. The results include the correlation statistics for Research Questions 1 and 4, and MANOVA statistics for Research Question 5. Research Questions 1 to 4 are based on the purpose of the study to attest to the correlations supporting the L2 motivational self system, and Research Question 5 is to address the motivational differences between the NHLLs and HLLs.

Given the differences of HLLs and NHLLs, the study recognizes it significant to display the results of the two groups separately. The perception of Chinese language on the part of HLLs is the perception of heritage language, different from the NHLLs who mostly perceive it as a foreign language. The perception difference must impact the formulation of L2 self. Moreover, the HLLs grew up in the environment of Chinese parents’ influences, so the variable of FI should bear different features from NHLLs. Given the different language perception and FI, the differences of HLLs should also be evidenced in ILS and OLS. Therefore, to achieve a reliable evaluation of the L2 motivational self system, this chapter presents the results from each group separately. The results are presented in the order of research questions and the tables of scores are provided corresponding to each question.
Research Question 1 Results

The first research question investigated the relationship between ILS and integrativeness. As discussed above, this investigation was to test if the L2 motivational self system related to the socioeducational model.

The scatter plots show that the relationship for both NHLLs and HLLs is linear (see Figure 2 and 3). The histograms of NHLLs show that the distribution of ILS is negative skewness because the significance of skewness (-3.05) is less than -2; and the distribution of integrativeness is normal because the significance of skewness (-1.74) is bigger than -2 (see Figure 4 and 5). The histograms of HLLs show that the distribution of ILS is normal (significance of skewness = -1.13, >-2) and that of integrativeness is negative skewness (significance of skewness = -3.93, <-2) (see Figure 6 and 7).

Figure 2. Scatter plot of ILS with integrativeness for NHLLs.
Figure 3. Scatter plot of ILS with integrativeness for HLLs

Figure 4. Histogram of ILS for NHLLs.
Figure 5. Histogram of integrativeness for NHLLs.

Figure 6. Histogram of ILS for HLLs.
Figure 7. Histogram of integrativeness for HLLs

A Pearson correlation was run. The correlation between ILS and integrativeness is significant for both groups, while with the HLLs it is stronger. Therefore, null hypothesis 1 and 2 are rejected. The results are presented in Table 3.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>ILS</th>
<th>Integrativeness</th>
<th>r</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
</tr>
<tr>
<td>NHLLs ($N = 108$)</td>
<td>4.25</td>
<td>.98</td>
<td>4.80</td>
</tr>
<tr>
<td>HLLs ($N = 89$)</td>
<td>4.31</td>
<td>.96</td>
<td>4.59</td>
</tr>
</tbody>
</table>

*Note.* **$p < .01$**
Research Question 2 Results

The second question studied whether ILS or integrativeness has stronger relationship with motivation. The scatter plots of NHLLs show the relationship is linear for ILS-measurement, and not linear for integrativeness-measurement (see figure 8 and 9). The scatter plots of HLLs show that the relationship is linear for both ILS-measurement and integrativeness-measurement (see figure 10 and 11). The histograms show that the distribution of motivational strength is negatively skewed for NHLLs (significance of skewness = -3.06, <-2), and normal for HLLs (significance of skewness = -1.87, >-2) (see Figure 12 and 13).

Figure 8. The scatter plot of ILS with measurement for NHLLs.
**Figure 9.** Scatter plot of integrativeness with measurement for NHLLs.

**Figure 10.** Scatter plot of ILS with measurement for HLLs.
Figure 11. Scatter plot of integrativeness with measurement for HLLs

Figure 12. Histogram of measurement for NHLLs.
Figure 13. Histogram of measurement for HLLs.

The researcher ran a Spearman correlation for NHHLs because the distribution of motivational strength and ILS is not normal, and a Pearson correlation for HLLs because all distributions are normal. The results show that ILS of NHLLs has stronger correlation than integrativeness with motivation. Therefore, null hypothesis 3 is rejected. With HLLs, the correlation between ILS and motivation is very close to the correlation between integrativeness and motivation. Therefore, null hypothesis 4 is not rejected. The results are presented in Table 4.
Table 4

Correlation of ILS and Integrativeness With Motivation for NHHLs and HLLs

<table>
<thead>
<tr>
<th>Motivation</th>
<th></th>
<th>ILS</th>
<th>Integrativeness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>NHLLs (N = 108)</td>
<td>4.85</td>
<td>.69</td>
<td>.42** (Spearman)</td>
</tr>
<tr>
<td>HLLs (N = 89)</td>
<td>4.62</td>
<td>.76</td>
<td>.28** (Pearson)</td>
</tr>
</tbody>
</table>

Note. **p < .01

Research Question 3 Results

Research Question 3 studied the relationship of instrumentality to ILS and OLS. This question could further examine whether or not the L2 motivational self system relates to the socioeducational model. The scatter plots show the relationships are linear for both NHLLs (see Figure 14, 15, 16, 17, 18 and 19) and HLLs (see Figure 20, 21, 22, 23, 24, and 25). The histograms of NHLLs show that the distribution of promotion (significance of skewness = -1.78, >-2) and prevention (significance of skewness = - .13, >-2) is normal while that of OLS is not normal (significance of skewness = 2.46, >+2) (see Figure 26, 27, and 28); the histograms of HLLs show the distribution of OLS (significance of skewness = .52, <+2) and prevention (significance of skewness = .75, <+2) is normal while that of promotion is not normal (significance of skewness = - 2.87, <-2) (see Figure 29, 30, and 31).
Figure 14. Scatter plot of ILS with OLS for NHLLs.

Figure 15. Scatter plot of ILS with promotion for NHLLs.
Figure 16. Scatter plot of ILS with prevention for NHLLs.

Figure 17. Scatter plot of OLS with promotion for NHLLs.
Figure 18. Scatter plot of OLS with prevention for NHLLs.

Figure 19. Scatter plot of prevention with promotion for NHLLs.
Figure 20. Scatter plot of ILS with OLS for HLLs.

Figure 21. Scatter plot of ILS with OLS for HLLs.
Figure 22. Scatter plot of ILS with prevention.

Figure 23. Scatter plot of OLS with promotion for HLLs.
Figure 24. Scatter plot of OLS with prevention for HLLs.

Figure 25. Scatter plot of promotion with prevention for HLLs.
Figure 26. Histogram of OLS for NHLLs.

Figure 27. Histogram of promotion for NHLLs.
Figure 28. Histogram of prevention for NHLLs.

Figure 29. Histogram of OLS for HLLs.
The researcher ran a Pearson correlation for both groups given that number of normality equals the non-normality for NHLLs, and exceeds non-normality for HLLs. The mean and standard deviation of OLS and instrumentality are presented in Table 5.
For the NHLLs, the correlation of ILS with promotion and prevention is significant; and the correlation of OLS with promotion and prevention is also significant. Therefore, the null hypothesis 5 is rejected. The results are presented in Table 6.

Table 5

*Mean and Standard Deviation of OLS and Instrumentality*

<table>
<thead>
<tr>
<th>OLS</th>
<th>Instrumentality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Promotion</td>
</tr>
<tr>
<td></td>
<td>M</td>
</tr>
<tr>
<td>NHLLs (N = 108)</td>
<td>2.25</td>
</tr>
<tr>
<td>HLLs (N = 89)</td>
<td>3.46</td>
</tr>
</tbody>
</table>

Table 6

*Correlation of Instrumentality to ILS and OLS for NHLLs*

<table>
<thead>
<tr>
<th>ILS</th>
<th>OLS</th>
<th>Promotion</th>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OLS</td>
<td>.28**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Promotion</td>
<td>.54**</td>
<td>.35**</td>
<td>-</td>
</tr>
<tr>
<td>Prevention</td>
<td>.37**</td>
<td>.58**</td>
<td>.49**</td>
</tr>
</tbody>
</table>

*Note. N = 108, and **p < .01.*
With the HLLs, the correlation of ILS with promotion and prevention is significant; and the correlation of OLS with promotion and prevention is also significant. Therefore, the null hypothesis 6 is rejected. The results are presented in Table 7.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>ILS</th>
<th>OLS</th>
<th>Promotion</th>
<th>Prevention</th>
</tr>
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<tbody>
<tr>
<td>ILS</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OLS</td>
<td>.43**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promotion</td>
<td>.63**</td>
<td>.53**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td>.38**</td>
<td>.48**</td>
<td>.47**</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note. N = 89, and **p<.01.*

**Research Question 4 Results**

Research Question 4 studied the correlation of ILS to WTC and INTP. As mentioned above, WTC and INTP are two significant influences of learning achievement. This question could further test the L2 motivational self system through finding the relationship of ILS to outcome-related factors. The scatter plots show that the relationships are linear for both groups (see Figure 32, 33, 34, 35, 36, and 37). The histograms of NHLLs show that the distribution of WTC is normal (significance of skewness = -1.35, >-2), and of INTP is negatively skewed (significance of skewness = -3.52, <-2) (see Figure 38 and 39). The histograms of HLLs show that the distribution of
INTP (significance skewness = 0.74, <+2) and WTC (significance of skewness = -0.78, >-2) is normal (see Figure 40 and 41).

**Figure 32.** Scatter plot of ILS with INTP for NHLLs.

**Figure 33.** Scatter plot of ILS with WTC for NHLLs.
Figure 34. Scatter plot of INTP with WTC for NHLLs.

Figure 35. Scatter plot of ILS with INTP for HLLs.
Figure 36. Scatter plot of ILS with WTC for HLLs.

Figure 37. Scatter plot of INTP with WTC for HLLs.
Figure 38. Histogram of INTP for NHLLs.

Figure 39. Histogram of WTC for NHLLs.
The researcher ran a Spearman correlation for NHLLs because two out of the three distributions are not normal, and ran a Pearson correlation for HLLs because all distributions are normal. The mean and standard deviation of INTP and WTC are presented in Table 8. The correlation of ILS with INTP and WTC for NHLLs is significant (see Table 9). Therefore, the null hypothesis 7 is rejected. The results suggest
that the L2 motivational self system is an effective framework because it manifests learning outcomes.

Table 8

*Mean and Standard Deviation of INTP and WTC with NHLLs and HLLs*

<table>
<thead>
<tr>
<th>Variable</th>
<th>INTP</th>
<th>WTC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>NHLLs (N = 108)</td>
<td>4.91</td>
<td>.78</td>
</tr>
<tr>
<td>HLLs (N = 89)</td>
<td>4.34</td>
<td>.76</td>
</tr>
</tbody>
</table>

Table 9

*Correlation of ILS to INTP and WTC for NHLLs*

<table>
<thead>
<tr>
<th>ILS</th>
<th>INTP</th>
<th>WTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILS</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>INTP</td>
<td>.58**</td>
<td>-</td>
</tr>
<tr>
<td>WTC</td>
<td>.47**</td>
<td>.50**</td>
</tr>
</tbody>
</table>

*Note. N = 108, and **p < .01.*

The correlation of ILS with INTP and WTC for HLLs is significant (see Table 10).

Therefore, the null hypothesis 8 is rejected. The results further support that the L2 motivational self system is achievement reflective.

Table 10

*Correlation of ILS to INTP and WTC for HLLs*
Research Question 5 Results

Research Question 5 studied the differences of motivational components between NHLLs and HLLs. The 11 components are motivational strength, ILS, OLS, FI, instrumentality (promotion and prevention), ATLC, cultural influence (CI), ATCC, integrativeness, INTP, and WTC. The MANOVA was run to elicit the scores. The mean and standard deviation of the 11 motivational components for NHLLs and HLLs was presented in Table 11.

Table 11
The Mean and Standard Deviation of Motivational Components for NHLLs and HLLs

<table>
<thead>
<tr>
<th>Components</th>
<th>NHLLs $(N = 108)$</th>
<th>HLLs $(N = 89)$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Motivation Strength</td>
<td>4.85</td>
<td>.70</td>
</tr>
<tr>
<td>ILS</td>
<td>4.25</td>
<td>.98</td>
</tr>
<tr>
<td>OLS</td>
<td>2.25</td>
<td>.91</td>
</tr>
<tr>
<td>FI</td>
<td>2.90</td>
<td>1.00</td>
</tr>
<tr>
<td>Instrumentality (promotion)</td>
<td>4.26</td>
<td>.98</td>
</tr>
<tr>
<td>Instrumentality (prevention)</td>
<td>3.12</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Note. $N = 89$, and **$p < .01$. 
The results of MANOVA analysis show that NHLLs and HLLs are significantly different in six variables at the $p < .05$ level: motivation, OLS, FI, prevention, CI, and INTP. Therefore, null hypothesis 9, 11, 12, 14, 16, and 19 are rejected. Null hypothesis 8, 10, 13, 15, 17 and 18 are not rejected. The results are presented in Table 12.

Table 12

<table>
<thead>
<tr>
<th></th>
<th>$F$</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>4.76*</td>
<td>.024</td>
<td>.58</td>
</tr>
<tr>
<td>ILS</td>
<td>.21</td>
<td>.00</td>
<td>.07</td>
</tr>
<tr>
<td>OLS</td>
<td>67.38**</td>
<td>.26</td>
<td>1.00</td>
</tr>
<tr>
<td>FI</td>
<td>40.84**</td>
<td>.17</td>
<td>1.00</td>
</tr>
<tr>
<td>Promotion</td>
<td>.91</td>
<td>.01</td>
<td>.16</td>
</tr>
<tr>
<td>Prevention</td>
<td>5.81*</td>
<td>.03</td>
<td>.67</td>
</tr>
</tbody>
</table>

94
<table>
<thead>
<tr>
<th>Variables</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement</td>
<td>.604</td>
</tr>
<tr>
<td>ILS</td>
<td>.950</td>
</tr>
<tr>
<td>OLS</td>
<td>.017</td>
</tr>
<tr>
<td>FI</td>
<td>.247</td>
</tr>
<tr>
<td>Promotion</td>
<td>.175</td>
</tr>
</tbody>
</table>

*Note.* $p < .05,$ and $p < .01.$

Levene’s Test of Equality of Error Variances (see Table 13) show that OLS has a $p = .017$ for the Levene Statistic. It is less than $p$ value of .05, so the two groups are not equal in the OLS. However, the Levene Statistic is not sufficiently large, so other analysis method may be required.

Table 13

*Levene’s Test of Equality of Error Variances*
In conclusion, this chapter displayed the results regarding the five research questions. The results show there are significant correlations regarding Research Questions 1 through 4. As to Research Question 5, the results show that the NHLLs and HLLs are significantly different in six motivational variables. The next chapter discusses each research question, the implications of the study in light of related literature, limitations of the study, and suggestions for future research.
CHAPTER FIVE: DISCUSSION

In this chapter, the researcher discusses the results of each research question, proposes implications of the study theoretically and pedagogically, elaborates on the limitations of the study, provides suggestions for future research, and draws a short conclusion. This chapter is divided into five parts: summary of the findings, discussion, implication of the study, limitations of the study and recommendations for future studies, and the conclusion.

The purpose of the study was to further test the findings supporting the L2 motivational self system proposed by Dornyei (2005). In relation to the two types of participants known as NHLLs and HLLs, the study also compared the differences of the two groups in terms of motivational self system. The results could provide valuable knowledge about the L2 motivational self system because the participants are Chinese language learners, while the previous studies all chose EFL learners. Meanwhile, the study explored the differences of NHLLs and HLLs in a framework that had not been adopted until now. To this end, the researcher developed an instrument from combining two established questionnaires—one by Taguchi et al. (2009) and the other by Yashima (2009).

The participants were 197 Chinese language learners at the beginning level from 16 classes of six universities in Virginia, Missouri, Massachusetts, New York, and Florida. Due to the differences of NHLLs and HLLs in terms of FI and other factors caused by FI (Kim, 1981; Oh & Fuligni, 2010), the study analyzed the data of the two
groups separately. Through the procedure of correlation and MANOVA, the study provides answers to the five research questions. These answers form the foundation to better understand the L2 motivational self system.

Summary of the Findings

Research Question 1 explored the relationship of integrativeness and ILS. The purpose was to find whether or not the L2 motivational self system conceptually relates to the socioeducational model. The results show that ILS and integrativeness have significant correlation for both NHLLs and HLLs, but the correlation for HLLs was even stronger. The correlation for NHLLs and HLLs was .41 and .51 (\(p < .01\)), respectively.

Research Question 2 was designed to compare ILS and integrativeness in terms of the correlation with motivational strength. The purpose was to find which factor is more strongly correlated with motivational strength so that the L2 motivational self system is to be compared with the socioeducational model. The results support that ILS had stronger correlation (.42, \(p < .01\)) than integrativeness (.26, \(p < .01\)) with motivational strength for NHLLs. For the group of HLLs, the correlation was much closer because ILS-motivation correlation was .28 (\(p < .01\)) and the integrativeness-motivation correlation was .29 (\(p < .01\)).

Research Question 3 examined the relationship of L2 self with instrumentality. There are two aspects of L2 self: ILS and OLS. There are two dimensions of instrumentality—promotion and prevention. Given that the dichotomy of instrumentality and integrativeness was the negative impression left by the socioeducational model, the
purpose of this question was to find if the L2 motivational self system relates to instrumentality. If it is found that instrumental motivation correlates significantly with L2 self, the results could further support the legitimacy of the L2 motivational self system. The results for this question show that ILS and OLS have stronger correlation with the two dimensions of instrumentality for both groups. For NHLLs, the correlation of ILS with promotion and prevention is significant at .54 and .37 ($p < .01$), respectively, while the correlation of OLS with the two dimensions is significant at .35 and .58 ($p < .01$), respectively. For HLLs, the correlation of ILS-promotion and ILS-prevention is significant at .63 and .38 ($p < .01$), respectively, while the correlation of OLS-promotion and OLS-prevention was significant at .53 and .48 ($p < .01$), respectively.

Research Question 4 was designed to investigate if ILS has significant correlation with INTP and WTC for both groups. The purpose of this question is to find if the L2 motivational self system is a system linking to learning outcomes. Given the established findings that INTP and WTC correlate learning achievements, this question is able to check the ability of the L2 motivational self system to reflect learning outcome. The results of this question show that for NHLLs, ILS-INTP and ILS-WTC correlation is significant at .61 and .47 ($p < .01$), respectively. For HLLs, the counterpart correlation was significant at .54 and .52 ($p < .01$), respectively.

Research Question 5 compared the motivational representations of the NHLLs and HLLs in terms of the L2 motivational self system. The purpose is to advance the understanding of the two types of learners. The results reflect that the two groups have
different motivational representations because they are significantly different in six variables: motivation \((p = .030)\), OLS \((p = .000)\), FI \((p = .000)\), prevention \((p = .016)\), CI \((p = .003)\), and INTP \((p = .000)\). These results lead to the following discussion.

**Discussion of the Results**

Corresponding to the study purpose, this section discusses the results of each research question. The study intended to further test the findings found in previous studies, and these findings were addressed in the present study in Research Questions 1 through 4. Given the differences of NHLL and HLL participants, the study also compared the motivational representations of the two types of learners through Research Question 5.

**Research Question 1.** The repeated challenge to the socioeducational model has led to the emergence of the L2 motivational self system. This system was the answer to the escalating call to redefine integrative motivation, because problems arose when it was applied to a foreign-language setting. In a foreign-language situation, there is no target language group for learners to join; thereby, integrative motivation is nulled under such a circumstance. Dornyei (2005) proposed ILS to be applied to foreign-language settings because the L2 motivational self system suggests that the competent L2 self is more the target people to which learners tried to approximate.

In this question, the result of the significant correlation between ILS and integrativeness (.41 for NHLLs and .51 for HLLs) demonstrates that the L2 motivational self system incorporates integrativeness in theoretical fabric. This finding is consistent
with the studies of Taguchi et al. (2009) and Ryan (2009). In Taguchi et al.’s study, the correlation was significant at .59, .51, and .53, respectively, with the EFL learners in Japan, China, and Iran. In the study of Ryan, the correlation was .59 with the EFL learners in Japan. In the two studies, the samples used were larger and possibly resulted in the bigger correlation than the present study. The finding of this study suggests that the L2 motivational self system serves as a bridge between the concepts within the socioeducational model and possible self theory. This finding credits the L2 motivational self system in terms of theoretical soundness.

As discussed above, the L2 motivational self system is founded on the basis of established theories of self-determination theory (Noels, 2003; Ushioda, 2001) and personality psychology on possible self and self-discrepancy (Higgins, 1987), as well as the socioeducational model of Gardner (1985). The result of Research Question 1 demonstrates that the L2 motivational self system is the synthesis of different frameworks and legitimate in theoretical fabric. The theoretical soundness of the L2 motivational self system results from the system formulation process of drawing upon the repeated empirical findings in previous studies (Dornyei, 2005). As a result, the L2 motivational self system provides a developmental model of L2 motivational theories.

The higher correlation of integrativeness and ILS on the part of HLLs shares the view that Chinese HLLs connect the perception of what a competent L2 self is with the behavior of integrating into the community of their race. In other words, ILS of HLLs incorporates the dimension of acculturation. Therefore, to achieve ILS they perceive,
Chinese HLLs have determined they must assimilate into the community of their ethnicity. The two behaviors are inseparable and underpin the concept that language is an inherent element of self-identity.

**Research Question 2.** The result of Research Question 2 displays that ILS, compared to integrativeness, has stronger relationship with motivational strength for the NHLLs; but for the HLLs, ILS and integrativeness have close relationship with motivational strength. The correlation is .42 (ILS-motivation) and .26 (integrativeness-motivation) on the part of NHLLs, while it is .28 (ILS-motivation) and .29 (integrativeness-motivation) for HLLs. This finding repeats the result of the study of Tachugi et al. (2009), in which the counterpart correlation was .68 versus .64 (EFL in Japan), .64 versus .55 (EFL in China) and .61 versus .58 (EFL in Iran). Additionally, the result is also consistent with the study of Csizer and Kormos (2009) in which ILS was found significantly correlated with motivational behavior. Combining with the result of Research Question 1, it is suggested that ILS could take the place of integrativeness, which is “simply one local manifestation of a much more complex, powerful construct (the L2 motivational self system)” (Ryan, 2009, p. 137).

However, the close relationship of ILS and integrativeness to motivation on the part of HLLs suggests that the L2 motivational self system is unequally valid depending on the background of learners. The stronger correlation of ILS and intended efforts is not tenable with Chinese HLLs at the college level in America. As discussed above, on the part of HLLs, integrativeness and ILS are rarely separable because acculturation with
Chinese people is an integral part in the process to fulfill ILS. While Chinese language is more a foreign language to learn for NHLLs, it is more a second language for HLLs in terms of their close affinity with the Chinese community biologically and sociopsychologically. This result further suggests that the L2 motivational self system is more favorable to foreign-language settings.

The significant link in NHLLs between ILS and motivational strength is not surprising. The data of this study and the results of Taguchi et al. (2009) provide evidence that ILS correlates with the factor of promotion more than prevention. On the continuum of self-determination, promotion directs toward intrinsic motivation and prevention toward extrinsic. Therefore, ILS approximates to intrinsic more than extrinsic. In light of the correlation of ILS with intrinsic motivation, it becomes doubt-free that ILS is a stronger predictor variable to trigger intended efforts.

On the other side of the same coin, it is not surprising that OLS of NHLLs is not correlated to motivation (see Appendix E) because it approximates to extrinsic more than intrinsic motivation. This finding was also identified in the studies of Ryan (2009) and Csizer and Kormos (2009). Moreover, the present study repeated the study of Ryan in that OLS is largely under FI, which lends support to Ryan’s contention that OLS was socially constructed.

OLS of HLLs, similarly, significantly correlates with FI (see Appendix F) but unfolds a different picture in relation to motivation. For the group of HLLs, OLS significantly correlates with motivation. Why? OLS had significant relationship with
integrativeness, ILS, promotion, and prevention. This result assures that external and internal influences are intertwined and throw affect altogether on intended efforts. Therefore, the motivational influence of OLS is increased because of its bound relationship with other motivation predictor factors.

**Research Question 3.** The result of this question supports that the L2 motivational self system is related to the socioeducational model. L2 self (including ILS and OLS) has significant and positive correlation with instrumentality (including promotion and prevention) for both NHLLs and HLLs. Due to the impression of dichotomy of integrativeness and instrumentality left by the socioeducational model, this result further suggests the advance of the L2 motivational self system on the basis of the socioeducational model. The study of Taguchi et al. (2009) found ILS is positively and significantly correlated with promotion though not with prevention. The result of Taguchi et al. lends support to the result of this research question that instrumentality is related to the L2 self in Dornyei’s model. The correlation of integrativeness and ILS was found in Research Question 1, and the correlation between L2 self and instrumentality was affirmed in this question. Thus, the L2 motivational self system is an inclusive model in terms of correlating to integrativeness and instrumentality. In this sense, the L2 motivational self system better reflects the reality of motivational construct in L2 learning than the socioeducational model did.

Even though the relationship addressed in this research question is confirmed with both NHLLs and HLLs, the two groups obtained different values in each correlation. For
HLLs, both ILS and OLS explain more of variance in promotion than in prevention. ILS explains 40% of promotion and 14% of prevention, and OLS explains 28% of promotion and 23% of prevention. However, for NHLLs, ILS explains more of variance in promotion (29%) than in prevention (14%), while OLS, in contrast, explains more of variance in prevention (34%) than in promotion (12%). This result suggests that for HLLS, both ILS and OLS are promotion-focused; but for NHLLs, ILS is more promotion-focused and OLS prevention-focused. Taguchi et al. (2009) found a correlation between ILS and promotion among EFL learners, and so ILS explained the significant part of variance of promotion but not prevention. This result was consistent with the present study; however, the present study also found an explanation of prevention by ILS.

Up to this end, there are two noteworthy points. First, in Dornyei’s theory, L2 self is related to instrumentality, and so better reflects the reality that different motivations are commonly under the influence of pragmatic motives. Dornyei, Csizer, and Nemeth (2006) stated that instrumentality could be promotion- and prevention-focused, depending on the internalization. T. Kim (2009) asserted that instrumentality could be merged into ILS and OLS, depending on the level of internalization. This study, going a step further, found that L2 self—including ILS and OLS—directly correlate with instrumentality, including promotion and prevention, and further attest the advancement of the L2 motivational self system over the socioeducational model.
Second, the weight of instrumentality is reflected differently in L2 self, depending on learners’ background (i.e., NHHLs or HLLs). The difference between NHLLs and HLLs could be explained by the tighter relationship in HLLs between external and internal influence. For this group, ILS, OLS, promotion, and prevention are largely interdependent. The learners merge what others want them to become to what they want to become. Pleasing others is part of pleasing selves. From the perspective of Vygostky’s (1976b) sociocultural theory, T. Kim (2009) identified that OLS and ILS reflect the inter- and intrapsychological plane of L2 self-development. Therefore, it could be argued that inter- and intrapsychology are mutually embedded for HLLs, which results in the larger values of correlation among ILS, OLS, promotion, and prevention for HLLs. This suggests that the transition of HLLs from interpsychological OLS into intrapsychological ILS is assisted by their Chinese FI.

**Research Question 4.** The result of this question documents that the L2 motivational self system is connected and reflected in learning outcome. Two influencers of proficiency identified in a variety of studies (e.g., Yashima, 2002, 2009; Yashima et al., 2004) are INTP and WTC. In this study, the positive and significant correlation was found for ILS with INTP and WTC. These correlations attest to the ability of the L2 motivational self system to reflect achievement. It is suggested that learners knowing clearly what they want to become through learning Chinese (ILS) are more able to relate themselves to the Chinese community across the world (INTP) and vice versa. In return, WTC is enhanced through the effort to fulfill ILS and INTP. In other words, ILS, INTP,
and WTC are three interdependent factors. The L2 motivational self system captures this interrelationship, enabling it to effectively address learning outcomes. The result regarding this question supports Yashima’s (2009) finding, who argued that INTP leads to WTC and the ability of learners to visualize possible self using another language.

The L2 motivational self system could well explain the repeated finding in previous studies that INTP, WTC, and proficiency are significantly correlated. In this theory, ILS is correlated with a range of important L2 learning motivational factors, including integrativeness, instrumentality, ATLC, ATCC, INTP, and WTC (see Appendix E). The multi correlations empower the variable of ILS with the ability to reinterpret integrativeness and embraces instrumentality and attitudes as well as learning experience. In other words, the L2 motivational self system does advance L2 motivational theory by incorporating and developing the conventional theories.

Even though ILS is central to learning achievement, it is nevertheless free of OLS influence. In this study, ILS and OLS shows significant correlation for both NHLLs and HLLs. However, for NHLLs in this study, OLS was weakly related to INTP and not related to WTC; while for HLLs, it significantly correlated to both. This disparity is not surprising given the convenient and frequent exposure of HLLs to the Chinese community. It suggests that NHLLs in America, in spite of the high INTP, have less accessibility to communicative opportunities with native speakers. To further the suggestion, it is pertinent to create communicative environment in teaching to enhance INTP and activate WTC potential of NHLLs.
**Research Question 5.** The result of this question reveals the differences of NHLLs and HLLs in the framework of the L2 motivational self system. In this framework, the two groups are different in motivational strength, FI, CI, OLS, INTP, and prevention. NHLLs are higher in motivational strength and INTP while HLLs are higher in FI, CI, OLS and prevention. This result shows that INTP is very significant to the strength of motivation.

Previous studies have agreed that HLLs position the learning of Chinese as the development of self-identity (He, 2006; Norton, 2000; Oh & Fuligni, 2010; Wong & Yang, 2010), which implies that OLS is part of self-identity development. To fulfill OLS, HLLs have to please other people such as family members. Learning Chinese for HLLs is largely due to the home background; in other words, FI is internalized into their intended efforts to learning Chinese.

The differences of the two groups in the frame of the L2 motivational self system could be interpreted from the perspective of Asian minority-identity development theory. J. Kim (1981) identified five stages of Asian minority self-identity development: (a) ethnic awareness, (b) White identification, (c) awakening to social political consciousness, (d) redirection to Asian-American consciousness, and (e) incorporation. The stages were coded with other names in different studies. For example, Phinney (1989) categorized the process into three stages from diffusion to exploration to achieved ethnic identity. Different studies, though coding with different names of different stages, all unanimously recognized that the stages were sequential and progressive, which illustrates that Asian...
minorities in America had struggled to internalize racial identity in the process of self-identity development. The subjects of the study were college students and had matured into the highest or near-highest stage. In their young age, the influences from family members and Chinese community could be rejected by them, and these influences formulated extrinsic factors in the learning of Chinese language at their early age. However, at the stage of internalization, they realized that the learning of Chinese was an integral part of self-identity development.

The results of this research question also lend support to the studies that analyzed the factors facilitating subjects’ movement from one stage to another. Based on the studies (Kim, 1981; Phinney, 1989; Trusty & Sandhu, 2002), self-identity development was grounded in FI for Asian minority children. The attitudes toward the primary ethnicity were nurtured early on from childhood, depending on the amount and cultural type that family conveyed. The attitudes toward ethnicity nurtured by FI were determinant of the future attitudes toward in-groups and out-groups.

FI, prevention and CI interplay to constitute the motivation of HLLs. While the three variables of NHLLs are less strong, their motivational strength is largely supported by INTP. The researcher argues that L2 learning be considered in the analysis of self-identity development.
Implications

In this section, the researcher provides the implications of the present study based on the discussion. The implications of this study are recognized in both theory and pedagogy.

**Theoretical implications.** There have been considerable discussions regarding L2 motivation theories on how thoroughly they reflect learners’ motivation and how far they could enhance teaching effectiveness. This study contributes to the growing body of literature in the following ways.

This study, while joining the previous studies to legitimate the L2 motivational self system as the substitute of the socioeducational model, has unique contributions. This study is the first one to apply the L2 motivational self system to language learners other than English. The results of the study suggest that the L2 motivational self system is applicable in CFL settings and, thus, broadens the applied context to outside the EFL. Moreover, it is suggested that it is fairly applicable in second-language settings given that HLLs of this study were fairly exposed to the target language and culture and purpose to use the language in family and community, which makes the learning of Chinese share the features of second-language acquisition. While overgeneralization is not meant, this study recommends scholars utilize the L2 motivational self system to investigate the motivation of learning a language other than English in both foreign- and second-language settings.
This study advances the research agenda comparing NHLLs and HLLs. Being framed in the L2 motivational self system, this study opens the avenue of applying L2 self to understand the relationship between language learning and self-identity of HLLs. In previous studies, it was the tradition to connect heritage-language learning with self-identity exploration. This study introduces ILS and OLS into the investigation of the tradition. By considering the two aspects of L2 self, this study demonstrates that L2 self mediates the interrelationship between language learning and self identity development. In this significance, including L2 self makes it possible to refine the understanding of ethnic identity development because ILS and OLS project into the process of primary ethnicity internalization. By introducing the application of the L2 motivational self system to HLLs, this study sets an example of using L2 self to investigate the interrelationships between minority ethnic identity development and language learning.

**Pedagogical implications.** As Yashima (2009) stated that competency is always the focus of learning another language, the new competency indicated a different L2 self. The present study found that ILS was a dynamic factor because it significantly relates to motivational strength, INTP, and WTC. Therefore, the study suggests language teachers use ILS and correlating factors to enhance motivation and achievements. The first step is to help learners visualize ILS. Visualizing and achieving of ILS are embedded in learning activities. According to Dornyei (2005) and Yashima, the more embodied and personalized the learning experience is, the more likely learners could visualize ILS. ILS
is never abstract but always embedded in the communication with native speakers. Keeping this in mind, three educational initiatives are recommended.

The first initiative recommended is to connect the learning with the Chinese community. Yashima (2010) strongly recommended that EFL be connected to English community, real or imagined. In America, Chinese communities are accessible to different degrees in a variety of areas. In the areas where the community is quite available, such as eastern and western coastal areas and some middle-west areas, learning activities could be designed to involve learners in the community. In the areas where Chinese communities are not influential or do not exist, teachers could well create virtual community for learning to occur. The reason behind the use of Chinese community is that real experiences are the starting point from which learners visualize what they want to become by learning Chinese: “using the language for some meaningful knowledge creation. . . . becomes the basis of a future possible self” (Yashima, 2009, p. 152).

However, suppose HLLs have already been engaged in Chinese communities to a large extent, teachers should make the interaction with the community advanced. Taking Chinese festivals as an example, HLLs would benefit from exploring the depth of the festivals, for instance, being introduced to historical literatures.

The second initiative recommended is to take thematic teaching into consideration. Thematic teaching allows themes to play an important role in learning materials, so that learning activities pinpoint different aspects of life around different themes. Learners can explore their relationship with the topics by using Chinese in an embodied and
personalized way. Thus, learning tends to be the active process because learners are encouraged in relating themselves to native speakers in different aspects of life. They are provided with a source of imagination on what their ILS is like. Possibly, the grammar-based curriculum, even though the communicative teaching methods are engaged in classroom, is not motivating as thematic curriculum given that it does not contextualize the learning in topics. Now, most Chinese textbooks are designed to include different topics, but few have intended to serve thematic curriculum because most topics are just titles of conversations. While teachers per se writing textbooks is not realistic, it is recommended that the use of textbooks be adjusted based on the needs of thematic teaching.

Relevant to the above two initiatives, the third initiative recommended is to adopt the five Cs of the *Standards of Foreign Language Learning in the 21st Century* stipulated by the American Council of Teachers of Foreign Languages (ACTFL, 1999). The five Cs are communication, culture, connections, comparisons, and communities. ACTFL’s definition of the 5 Cs follows: use the language for communication in real life situations (communication), understand culture (culture), connect language learning to other subject matters (connections), compare and contrast languages and cultures (culture), and extend learning experiences to home and communities (communities). Communication and communities were already discussed in the above initiatives. Therefore, connection is focused here.
Connection with different subject matters is important for language learning. This initiative has been witnessed in K-12 Chinese language courses, largely due to the stimulation of the StarTalk teacher training programs each summer across America under the full financial support of the Office of Chinese Language Council International (known colloquially as Hanban), an agency of the People’s Republic of China government. However, the significance of the practice is still far from being acknowledged at colleges. The present study lends support to connecting Chinese learning to other subject matters. Connection will enrich learning activities, which is an occasion when learners are able to visualize the ideal communicative self by using Chinese for different subject matters. “The possible self needs to be associated with relevant procedural knowledge” (Dornyei, 2005, p. 117). By connecting to different subjects, Chinese language can be used to mediate thoughts and interpersonal relationship between learners and native speakers. Using Chinese in such way can enhance the ability to visualize ILS and implement the first initiative.

The above initiatives are proposed with the realization that the more embodied the learning experience is, the more likely learners are able to envision ILS. Since envisioning and achieving ILS is a mutually inclusive process, it is pertinent to ask how far the attaining of ILS is to be guaranteed if ILS is envisioned? According to Dornyei (2005), a vivid and concrete ideal L2 self is realizable. The three initiatives will enable ILS to be realized, because these initiatives associate real-life-based and detailed communicative proficiency goals with the ideal communicative L2 self. Moreover, once
ILS is envisioned, it does not end in nothing. The present study confirms the correlation among ILS, INTP, WTC, and motivational strength. Therefore, ILS and these variables can interact to enhance each other. The interactive cycle results in developing Chinese proficiency. Achieving proficiency, in turn, joins the cycle to keep the interaction active. It is always recommended that educators provide embodied learning experience for learners so that they are able to envision a vivid and concrete ILS.

Limitations and Recommendations for Future Studies

This section elaborates the limitations of the present study and recommends suggestions for future studies. The limitations are inherent in the sample, instruments, and the quantitative and cross-sectional method. Based on these limitations, suggestions for future research are recommended.

This study involved 197 Chinese language learners at the beginning level in U.S. colleges located in five states. It is cautioned not to overgeneralize the findings to other levels and locations. Second, the study adopted the established questionnaires with little revision. Given that Chinese language learners in America could be different from EFL learners across the world, the questionnaires might fail to capture some unique features of the subjects in the measurement. Also, the study did not analyze one of the tripartite variables of the system—learning experiences—because the purpose of the study was to test the correlations found in previous studies that support the L2 motivational self system. If the dimension of learning experience was tested, sufficient results could be elicited, and thus give a more holistic evaluation to the L2 motivational self system.
Finally, the study is quantitative and cross-sectional. The interpretation of the findings could lack triangulation unless qualitative method and longitudinal procedure are engaged.

According to these limitations, future research could focus on differentiated samples, locations, languages, and a revised instrument, as well as the integration of longitudinal and qualitative methods. Future studies can choose a larger sample to get the findings retested. The samples need to be differentiated. The present study investigated college students and compared NHLLs and HLLs, but future studies can choose a single group and compare between levels. Regarding NHLLs, one suggestion is to investigate NHLLs from middle school, who possibly represent a different picture of L2 self because they, compared to college students, have different social experiences and consciousness of L2 significance. The other suggestion is to study NHLLs of different levels at college. L2 self is a factor changing over time, and the pattern of change may be reflected in the differences of level—elementary, intermediate, and advanced. Regarding HLLs, it is recommended that different ages (e.g., middle school and college students) be compared—ages that represent different stages of ethnic identity development. Comparison studies of the different levels of HLLs motivation were witnessed (e.g., Wen, 1997). However, in the framework of the L2 motivational self system, studies will allow the understanding of how L2 self mediates motivation for learners at different identity development stages.
Regarding the location, future studies can compare learners in foreign-language settings such as in America and those in second-language settings such as studying abroad in China. The present study supports the use of the L2 motivational self system in second-language settings. However, the legitimacy of this result needs to be tested by investigating NHLLs studying abroad in China.

The study is the first one to investigate the learners of language other than English. Future studies can focus on other languages (e.g., Spanish, French, Japanese, Arabic, etc.). By doing so, it will be clearer how far L2 motivational self can expand to the other languages of different ethnolinguistic vitality. Studies can also include the variable of learning experience in the analysis. In addition to test the correlations, it is also needed to test the validity of the L2 motivational self system via advanced analysis.

Last but not least, longitudinal studies are desperately needed. As Dornyei (2001) realized, lack of longitudinal studies is a gap in L2 motivation research. By conducting longitudinal studies, researchers will make up this gap on one hand and further test the validity of the L2 motivational self system on the other. Moreover, qualitative studies are significant because the analysis method adopted by qualitative studies can make more interpretations available, which can verify the interpretations of quantitative studies. All the above suggestions are provided for the purpose of sufficiently testing the L2 motivational self system and, hopefully, bring about developments.
Conclusion

The emergence of the L2 motivational self system is a logical result to the need to improve the socioeducational model. The L2 motivational self system was established on the foundation of conventional theories in which it combined social psychological and motivational theories. The purpose of the L2 motivational self system is to provide a self theory-related framework to redefine integrative motivation, which has dominated motivational studies for decades, and thus allow ILS to replace integrativeness in foreign-language settings. This study lent support to previous studies regarding the research questions. It found the strong correlation of ILS with integrativeness, and the former had better explanatory power toward motivated behavior. Up to this point, the present study supports the view of previous studies that integrativeness merges into ILS and was a local factor under the bigger frame of ILS—in other words, ILS may well replace integrativeness in measurements. In addition, the interrelationship among ILS, OLS, and instrumentality suggests that the L2 motivational self system does not dichotomize integrative and pragmatic motives, which was a problem recognized in the socioeducational model. In relation to the predictive power of achievement, ILS correlated with INTP and WTC. The interdependence of the three variables provides an explanation on the achievement predictive power of ILS.

This study, joining previous studies, supports the L2 motivational self system. It recommends the L2 motivational self system to be used to explore the motivation of learners, who learn a language other than English. Thus, this study also suggests the
extended use of the L2 motivational self system to second-language settings. With the limitations recognized, recommendations were provided for future studies.
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Dear Chinese language learners:

My name is Yan Xie, a doctoral student at Liberty University, VA. I am doing a research on the motivations of Chinese language learners at college level. Your contribution of data will help me complete the study. The main purpose of the study is to help teachers better understand the motivation of Chinese language learners in the U.S., and thus increase learners’ achievement through enhancing motivation. The participation is anonymous, confidential and voluntary. Your contribution is highly appreciated.

Thanks a lot for completing the survey.

Sincerely,

Yan Xie
A Survey on L2 motivational self system with Chinese language learners in the U.S.

The following questions make a motivational survey on Chinese language learners. It includes two sections. There are no “wrong” or “right answers”. The purpose is for the researcher to understand the constructs of learning motivation of Chinese language learners in the U.S. It is anonymous, confidential and voluntary. Please answer as accurately as you can. Your contribution is highly appreciated. THANKS!

I. General information
Please fill in each blank because an unfilled blank will make your data unusable.
Major: ______
Gender: ______
Age: ______
Level of your course: ______ (beginning, intermediate or advanced)
Is this your first year to study Chinese at this university? ______ Yes
______ No
Have you studied Chinese at other universities before? ______ No
______ Yes. If yes, please check the following:
_____ As an undergraduate
_____ As others. Please specify: _________
_____ how long
Your mother’s ethnicity: Chinese ______ Yes
______ No
Your father’s ethnicity: Chinese ______ Yes
______ No
Your father speaks a Chinese dialect at home _____ Yes. Please specify:_____
______ No
At other places _____ Yes. Please specify: ______
______ No
Your mother speaks a Chinese dialect at home _____ Yes. Please specify:_____
______ No
At other places _____ Yes Please specify: ______
______ No

Do you understand any Chinese dialect? ______Yes. Please specify: ______
______ No
Do you speak the dialect(s) at home _____ Yes. Please specify: ______
______ No
At other places _____ Yes Please specify: ______
______ No
II. Please read the following statements/questions carefully and check BEFORE the number most applicable to you.

1=“Strongly disagree”, 2=“Disagree”, 3=“Slightly Disagree”, 4=“Slightly agree”, 5=“Agree”, and 6=“Strongly agree”.

1. If a Chinese course was offered in the future, I would like to take it.
   
   1   2   3   4   5   6

2. I am working hard at learning Chinese.
   
   1   2   3   4   5   6

3. I am prepared to expand a lot of effort in learning Chinese.
   
   1   2   3   4   5   6

4. I think that I am doing my best to learn Chinese.
   
   1   2   3   4   5   6

5. Compared to my classmates, I think I study Chinese relatively hard.
   
   1   2   3   4   5   6

6. If my teacher would give the class an optional assignment, I would certainly volunteer to do it.
   
   1   2   3   4   5   6

7. I imagine myself as someone who is able to speak Chinese.
   
   1   2   3   4   5   6

8. Learning Chinese is necessary because people surrounding me expect me to do so.
   
   1   2   3   4   5   6

9. I can imagine myself living in Chinese speaking areas and using Chinese effectively for communicating with the locals.
   
   1   2   3   4   5   6

10. Studying Chinese is important to me in order to gain the approval of my peers/teachers/family/boss.
    
    1   2   3   4   5   6

11. I can imagine a situation where I am speaking Chinese with native Chinese speakers.
    
    1   2   3   4   5   6
1=“Strongly disagree”, 2=“Disagree”, 3=“Disagree Slightly”, 4=“Slightly agree”, 5=“Agree”, and 6=“Strongly agree”.

12. My parents believe that I must study Chinese to be an educated person.

1 2 3 4 5 6

13. I have to study Chinese, because if I do not study it, I think my parents will be disappointed with me.

1 2 3 4 5 6

14. I consider learning Chinese important because the people I respect think that I should do it.

1 2 3 4 5 6

15. I can imagine myself speaking Chinese as if I were a native speaker of Chinese.

1 2 3 4 5 6

16. Studying Chinese is important to me because other people will respect me more if I have a knowledge of Chinese.

1 2 3 4 5 6

17. Whenever I think of my future career, I imagine myself using Chinese.

1 2 3 4 5 6

18. The things I want to do in the future require me to use Chinese.

1 2 3 4 5 6

19. I can imagine myself writing Chinese emails fluently.

1 2 3 4 5 6

20. My parents encourage me to study Chinese.

1 2 3 4 5 6

21. Studying Chinese can be important to me because I think it will someday be useful in getting a job.

1 2 3 4 5 6

22. My parents encourage me to take every opportunity to use Chinese (i.e. speaking and reading).

1 2 3 4 5 6
1=“Strongly disagree”, 2=“Disagree”, 3=“Disagree Slightly”, 4=“Slightly agree”, 5=“Agree”, and 6=“Strongly agree”.

23. Studying Chinese is important to me because Chinese proficiency is necessary for promotion in the future.
1 2 3 4 5 6

24. My parents encourage me to practice my Chinese as much as possible.
1 2 3 4 5 6

25. Studying Chinese is important to me because I would like to spend a period living in Chinese speaking areas.
1 2 3 4 5 6

26. Studying Chinese is important to me because with Chinese I can work globally.
1 2 3 4 5 6

27. Studying Chinese can be important for me because I think I will need it for further studies on my major.
1 2 3 4 5 6

28. My parents/family/believe that I must study Chinese to be an educated person.
1 2 3 4 5 6

29. Studying Chinese is important to me in order to achieve a special goal.
1 2 3 4 5 6

30. Studying Chinese is important to me in order to bring honors to my family.
1 2 3 4 5 6

31. I study Chinese to earn foreign language credits required by my school.
1 2 3 4 5 6

32. Knowing no Chinese can negatively influence my study of major.
1 2 3 4 5 6

33. Knowing no Chinese can negatively influence my career.
1 2 3 4 5 6

34. I would feel ashamed if I got bad grades in Chinese.
1 2 3 4 5 6
1=“Strongly disagree”, 2=“Disagree”, 3=“Disagree Slightly”, 4=“Slightly agree”, 5=“Agree”, and 6=“Strongly agree”.

35. My relationship to some people surrounding me can be negatively influenced if I have no knowledge of Chinese.

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36. I like the atmosphere of my Chinese classes.

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37. I like the music of Chinese-speaking countries.

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38. I find learning Chinese really interesting.

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40. I always look forward to Chinese classes.

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41. I like Chinese magazines, newspapers, and/or books.

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42. I really enjoy learning Chinese.

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43. I like TV programs made in Chinese speaking countries.

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44. I think time passes faster while studying Chinese.

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45. I like to travel to Chinese speaking countries.

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46. I like meeting people from Chinese-speaking countries.

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47. I like to know more about people from Chinese speaking countries.

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1=“Strongly disagree”, 2=“Disagree”, 3=“Disagree Slightly”, 4=“Slightly agree”, 5=“Agree”, and 6=“Strongly agree”.

48. I want to learn more about Chinese culture and art.
1                              2                         3                        4                  5                      6

49. I want to make friends with international students studying in U.S.
1                              2                         3                        4                  5                      6

50. I want to become similar to the people who speak Chinese.
1                              2                         3                        4                  5                      6

51. I would feel somewhat uncomfortable if a foreigner moved in next door.
1                              2                         3                        4                  5                      6

52. I like Chinese people.
1                              2                         3                        4                  5                      6

53. I like to speak Chinese with friends or acquaintances outside school.
1                              2                         3                        4                  5                      6

54. I want to participate in a volunteer activity to help foreigners living in the surrounding community.
1                              2                         3                        4                  5                      6

55. I am interested in an international career.
1                              2                         3                        4                  5                      6

56. I choose to speak Chinese when I am given a chance to talk freely in a Chinese class.
1                              2                         3                        4                  5                      6

57. I often read and watch news about foreign countries.
1                              2                         3                        4                  5                      6

58. I volunteer to respond to or ask questions in Chinese class.
1                              2                         3                        4                  5                      6

59. I have thoughts that I want to share with people from other parts of the world.
1                              2                         3                        4                  5                      6
1=“Strongly disagree”, 2=“Disagree”, 3=“Disagree Slightly”, 4=“Slightly agree”, 5=“Agree”, and 6=“Strongly agree”.

60. I like to speak Chinese with international students who speak Chinese at school.

   1                              2                         3                        4                  5                      6

61. I try to talk when I have a chance to speak Chinese in Chinese classes.

   1                              2                         3                        4                  5                      6

THANKS A LOT!
APPENDIX B: PERMISSION FROM AUTHORS TO USE THEIR QUESTIONNAIRES

RE: Hello from Michael
Taguchi Tatsuya [ae6t11@nottingham.ac.uk]

You replied on 02/06/2013 4:42 PM

Sent: Wednesday, May 29, 2013 3:49 AM
To: Qi, Yan
Cc: Michael Nagji [mmagji@hotmail.com]; m_psj2010@yahoo.com

Dear Yan Ke,

Thank you for your interest in our study. Please feel free to use the questionnaires in the anthology book. These include only parts of items and questions in actual questionnaires. If you are more interested in the questionnaires, please consult this book: Dornyei, Z. (2001), Questionnaires in second language research: Construction, administration, and processing (2nd ed.). New York, NY: Routledge. This book contains the full versions of the three questionnaires in English but also the languages used in each country.

Good luck for your research.

With best wishes,

Tatsuya Taguchi
From: Michael Magid [magidm@umnid@30981mid.com]
Sent: 25/05/2010 (X) 16:23
To: as293@nottingham.ac.uk; m_pap000@yahoo.com
Subject: RE: Hello from Michael

Dear Tatuya and Mostafa,

I hope that you are both doing well! I have received the following e-mail from Yan Xie, a PhD candidate at Liberty University in Virginia. She would like to have our permission to modify the Chinese questionnaire that we used in our study for a study that she would like to conduct on Americans who are learning Chinese at American universities. She told me that she needs this permission for copyright purposes and that she will include give us credit for the questionnaire. She also e-mailed Zoltan and he told me this should be fine. I would like to give her my permission and ask you to please e-mail her with your permission, so that she can begin conducting her study. Her e-mail address is: yxie@liberty.edu Have a good week!

Best wishes,

Michael
From: Yan Xie [mailbox@yjcie@liberty.edu]
Sent: Thu 5/20/2010 12:45 PM
To: jamie@brttingham.ac.uk
Subject: request to use the questionnaire you designed

Dear Michael:

My name is Yan Xie, a doctoral candidate at the School of Education, Liberty University, Lynchburg, Virginia, U.S.A. I am doing research on the L2 motivational self-system with Chinese language learners from American universities. I am very interested to further test the validity of the L2 motivational self-system by investigating Chinese language learners' Chinese as an international language even though not as much as English. However, from the perspective of self-theories, my study may help better understand Chinese language learners' motivation. The paper you co-wrote with Tatsuya Tajuchi and Mustafa Rapi in 2009 created an instrument on the L2 motivational self-system. I intend to integrate your questionnaire in my study. To do so, I will replicate most of the questions in the questionnaire of your study. Definitely, I will give you credits in the references.

Therefore, I am asking for your support by giving me permission to use it.

I should have also emailed to the first author Tatsuya Tajuchi and the third author Mustafa Rapi for consulting permission. However, I searched and just found your email address. I hope you will forward my request to them on behalf of me.

I am very interested in the study of investigating American Chinese language learners in terms of their motivation from the perspective of L2 motivational self-system. Your unanimous grant is highly appreciated.

Thanks a lot! Looking forward to your reply.

Sincerely

Yan Xie (unofficial name: Amy)
Student ID: 2148186
Re: request to use the questionnaire you designed

Yashima Tomoko [yashima@kansai-u.ac.jp]

You replied on 5/24/2010 2:34 PM.

Sent: Monday, May 24, 2010 9:20 AM
To: Yan Xin

Dear Ms. Yan Xin,

Thank you for your e-mail and interest in my study.
Please go ahead and use my questions. I would be most interested in the results of your study. I have a full questionnaire written in Japanese, which I usually send to researchers when requested. Unfortunately, I do not have an English version, but please use the questions I publish in Desnoei & Ushioda’s volume.

I wish you have the best of luck in your research.

Best wishes,

Tomoko Yashima
Dear Prof. Yoshima:

My name is Yan Xie, a doctoral candidate at the School of Education, Liberty University, Lynchburg, Virginia, U.S.A.

I am doing a research on the L2 motivational self system with Chinese language learners from American universities. Given that the international posture has strong correlation with WTC and the ideal L2 self, I am very interested to further test the validity of the L2 motivational self system by integrating into my study your questionnaire in the article "International Posture and the Ideal L2 Self in the Japanese ELF Context" (Durryel & Ushioda Eds., 2000). To do so, I will replicate most of your questions in my study. Definitely, I will give you credits in the references.

Chinese is an international language even though not as much as English. However, from the perspective of self theories, my study may help better understand Chinese language learners’ motivation.

To be short, I am asking for your support by giving me permission to use your questionnaire in the aforementioned article. Your grant is highly appreciated!!

Looking forward to your reply.

Thanks again!!

Sincerely

Yan Xie (unofficial name: Amy)

Student ID: 21462166
APPENDIX C: INSTITUTIONAL REVIEW BOARD APPROVAL


Institution Review Board

Sent: Tuesday, July 06, 2010 3:22 PM
To: Xie, Yang; McDonald, Conney; Garzon, Fernando L.
Cc: Institution Review Board
Attachments: [Annual Review Form.doc (25 KB) Open as Web Page]; [Change in Protocol.doc (25 KB) Open as Web Page]

Dear Yan,

We are pleased to inform you that your above study has been approved by the Liberty IRB. This approval is extended to you for one year. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. Attached you’ll find the forms for those cases.

Thank you for your cooperation with the IRB and we wish you well with your research project. We will be glad to send you a written memo from the Liberty IRB, as needed, upon request.

Sincerely,

Fernando Garzon, Psy.D.
IRB Chair, Liberty University
Center for Counseling and Family Studies Liberty University
1971 University Boulevard
Lynchburg, VA 24502-2269
APPENDIX D: INSTITUTIONAL REVIEW BOARD APPROVAL TO CHANGE PROTOCOL

RE: Change in Protocol Form

Garzon, Fernando

You replied on 11/18/2010 5:27 AM.

Sent: Wednesday, November 17, 2010 11:55 PM
To: Yan, Yan; Martin, Tiffany
Cc: REB, REB

Yan,

I have reviewed your revision and it is approved. God bless you in your project. On a side note, I am learning Mandarin myself. :)

Dr. Garzon

Fernando Garzon, Psy.D.
REB Chair
Associate Professor
Liberty University
1971 University Blvd.
Lynchburg, Va 24502
(434) 556-4054
## APPENDIX E: Pearson CORRELATION MATRIX OF NHLLS

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*Note. N = 108.*

*Correlation is significant at the 0.05 level.

**Correlation is significant at the 0.01 level.
APPENDIX F: Pearson Correlation Matrix of HLLs

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*Correlation is significant at the 0.05 level.
**Correlation is significant at the 0.01 level.

Note. N = 89.