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Motivation of High School Students in a STARTALK Chinese Immersion Program: A

Mixed Methods Case Study

By

Fei Yu

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Educational Studies

Under the Supervision of Professor Aleidine J. Moeller

Lincoln, Nebraska

April, 2016

MOTIVATION OF HIGH SCHOOL STUDENTS IN A STARTALK CHINESE
IMMERSION PROGRAM: A MIXED METHODS CASE STUDY

Fei Yu, Ph.D.

University of Nebraska, 2016

Advisor: Aleidine J. Moeller

The focus of this dissertation was the development and dynamics of student learning motivation during and beyond a Chinese immersion program.

The need to conduct this study emerged as a result of the rise in popularity of Chinese language study and the increase in Chinese immersion programs in the United States. However, the number of students who continue their studies remains low. This seeming paradox was investigated by examining high school students' Chinese learning motivation in a STARTALK Chinese immersion program. The investigation was grounded in Gardner's socio-educational model (2006, 2010) and Dörnyei and Ottó's process-oriented model of student motivation (1998, 2005).

By adopting a mixed-methods approach, the researcher collected both qualitative data exploring participants' learning experiences and quantitative data focusing on statistical measurement of motivation. Data analysis revealed an increase in participants' Chinese learning motivation related to the engaging language instructional approaches and helpful, competent instructors in addition to the positive learning environment during the program. The analysis also revealed that participants' Chinese learning motivation slightly decreased one semester after the program due to less language exposure and lack of learning opportunities. It was concluded that the

evolution of participants' motivation was reasonably shaped by their learning experiences at different learning phases.

The insight into the dynamics and temporal nature of motivation in this study revealed potential ways to maintain and support students' Chinese learning motivation throughout their learning process.

ACKNOWLEDGEMENTS

This dissertation could not have been completed without the generous support and help of numerous people.

First and foremost, my utmost gratitude to my advisor, Dr. Aleidine Moeller, for giving me the opportunity to work for the federal Foreign Language Assistance Program (FLAP) Grant as a research assistant and for the STARTALK Grant as one of the Chinese instructors at the Chinese Summer Academy at University of Nebraska-Lincoln. She is the most wonderful advisor who I deeply respect; whose commitment and passion for education, as well as her expertise and professionalism, have marked me forever. She has become a role model and mentor to me both as a researcher and an educator who enables others to grow. Her unique blend of humanity, warmth, and intellectual creativity have impacted me tremendously during and beyond my graduate study.

I also want to express my sincere gratitude to my committee members: Dr. Jenelle Reeves for guiding me through my first research projects with student teachers; Dr. Theresa Catalano for sharing her research experiences and providing me insight in crafting my dissertation; and Dr. Eric Buhs for his thoughtful feedback and support. A special thank you goes to John Creswell for his valuable advice in coping with the mixed methods design. I would like to extend appreciation to my wonderful fellow graduate students and friends who supported me through this dissertation: Kristen Nugent and Sarah Osborn for conducting interviews with some participants; Sheri Hurlbut for collecting participants' information; Andrew Hustad for introducing the

research project to participants; Jia Lv for valuable feedback on my qualitative data analysis; Carolina Bustamante for sharing her dissertation chapters; Le Kang, Nan Chen, Amanda Wilson, and Megan Van Alstine for their assistance during the Academy. I also would like to thank the Nebraska Evaluation and Research (NEAR) Center for the assistance with the quantitative analysis.

I am particularly thankful to all participants in this study for their willingness to share their thoughts and ideas with me and allowing me a glimpse of their Chinese learning experiences. This dissertation would not have existed without them.

Finally and most importantly, my deepest appreciation and thanks go to my family. I would like to thank my Parents, Zhenglu and Aihua, for their tremendous love and support. Thank you, Min and Ting, my brother and sister, for your warmth and love. I am most grateful to my wonderful husband, Zhongqiang, for his motivation, reassurance, patience, love, and unfaltering support. Without him, I would never have got this far.

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Motivation of High School Students in a STARTALK Chinese Immersion

Program: A Mixed Methods Case Study

CHAPTER 1: INTRODUCTION

Background and Problems

A New National Initiative in Critical Need Language Education

After the Second World War, the national need for critical languages in the United States was first recognized and addressed when the U.S. government asked the American Council of Learned Societies (ACLS) to develop programs to teach several less commonly taught languages (LCTL). Although the urgency of this need was documented for more than fifty years, it waxed and waned with the change of national requirements and education policies (Jackson & Malone, 2009). Until recently, accompanying the globalization process, the focus of K-12 public education within the United States expanded “from preparing students to be citizens of a democracy to preparing them for global citizenship with the ability to navigate through language barriers and cultural differences” (Ferro, 2014, p.1). Meanwhile, as a result of international terrorism, language and cultural proficiency were identified as critical to national security to protect the U.S. from its enemies and cultivate international relations (Birckbichler 2007; Brecht 2007; Freedman 2004; Ruther 2003). Particularly, after the September 11 attacks in 2001, U.S. government support for learning foreign

languages¹ greatly increased, especially for critical need languages regarded as crucial to national security, such as Arabic, Chinese, Japanese, Korean, Persian/Farsi, Russian and Turkish. The urgent need in critical need languages was once again put on the agenda.

In 2006, STARTALK was born with the announcement from former President Bush to increase the number of critical language speakers in the United States. Funded through federal grants, STARTALK provides learning opportunities in critical need languages for students at levels K-16 and professional development for teachers of critical languages primarily through summer programs. Over the past years, STARTALK quickly expanded the number of programs growing from 34 in 2007 to 197 in 2014, the number of students increased over 7000, and the number of teachers over 3,000.² Critical languages taught in STARTALK programs also increased from two (Chinese and Arabic) to eleven (Arabic, Chinese, Dari, Hindi, Korean, Persian, Portuguese, Russian, Swahili, Turkish, and Urdu)³. Among these languages, Chinese has consistently been the most popular language for both student and teacher programs.

“Chinese Fever” in the United States

Because of its status as one of the critical languages and the rise of China’s

¹ In American K-12 school setting, the two terms, foreign language (FL) and second language (SL), are often equally used. Since the focus of this study is the learning of Chinese as a "foreign language(FL)" in the United States where Chinese is not spoken by the majority of people, the researcher primarily uses the term foreign language (FL) throughout the study. However, the term "second (SL)" is also used when the researcher has to respond to sources where the term is used, such as in Gardner's socio-educational model and some quotes/citations from books or articles. Thus, the two terms, foreign language (FL) and second language (SL), are used interchangeably in this study referring to any language other than the first language, either learned natralistically or with aid of formal instruction.

² See <https://startalk.umd.edu/>

³ Ibid.

economic growth in the past decade, Chinese has become the second most popular language in the U.S..⁴ According to the 2009 national K-12 foreign language report conducted by the Center for Applied Linguistics (CAL), Chinese instruction increased from 1% in 1997 to 4% in 2008 among secondary schools that teach foreign languages, and from 0.3% in 1997 to 3% in 2008 among elementary schools, making Chinese the fastest growing language (Rhodes & Pufahl, 2009). Chinese language programs also increased at a significant pace in the United States. According to reports from the Asia Society and College Board in 2008, there was an estimated 200 percent growth in Chinese language programs offered in K-12 schools in just four years. With the expansion of Chinese language and Chinese language programs, Chinese is increasingly viewed as a global “lingua franca” not only in the United States, but also all around the world (Ding, Sheng, & Saunders, 2006).

However, despite the growing popularity of Chinese in the United States, the number of students enrolling in Chinese is relatively low compared with the enrollment in commonly taught foreign languages. According to the national report released by CAL, among the schools that offered foreign languages, Chinese was only taught at 3% of elementary schools and 4% of secondary schools compared to Spanish that was taught at 88% of elementary schools and 92% of secondary schools, and French taught at 11% of elementary schools and 46% of secondary schools (Rhodes & Pufahl, 2009). One of the major reasons for the low enrollment is the logogram system in the Chinese language that is totally different from the phonogram

⁴ See <http://www.alsintl.com/blog/top-10-languages/>

system in English. According to the "Language Difficulty Ranking" list⁵ created by Foreign Service Institute (FSI) of the Department of State, Chinese is categorized as one of the most difficult languages to learn for English native speakers. FSI estimates that a student who learns Chinese needs to spend at least 88 weeks (2200 hours) to reach general professional proficiency in speaking and reading, compared to a student who learns Spanish or French who only needs to spend 23-24 weeks (575-600 hours) to reach the same level of proficiency.⁶ Due to such challenges, many native-English speakers choose to learn other foreign languages but not Chinese as suggested by some that "Chinese was too difficult for most Americans or that there was much more payoff for a Chinese person to learn English than for an American to learn Mandarin (Chinese)" (Sun, 2011, p.1). Even for those who chose to learn Chinese and enrolled in Chinese programs, the retention rate is still low (Wen, 1997). While there are no statistics data available specifically about retention rates in Chinese learning, the national data from both ACTFL (2010) and CAL (2010) showed that nationwide, enrollments of learners in foreign languages, particularly for learners in high schools, dramatically fall after they study a language for two years (Robinson, 2010), which is referred by Bartley (1970) as the "foreign language drop-out problem" (p. 386). The unbalanced relationship between students' enrollment in Chinese programs and the "Chinese fever" phenomenon in the United States demands greater attention from language teachers, educators and researchers to investigate students' Chinese learning motivation as it relates to retention.

⁵ See <http://www.effectivelanguagelearning.com/language-guide/language-difficulty>

⁶ Ibid.

Language Learning Motivation

As a psychological behavior of human beings, the term "motivation" is defined by Dörnyei and Ottó (1998) as:

the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalised and (successfully or unsuccessfully) acted out (p. 65).

Specifically, in the field of foreign language education, motivation is regarded as one of the key factors contributing to the successful acquisition of a foreign language (Dörnyei, 1994; Vaezi, 2008; Purdie, 2003; Kormos & Csizer, 2010; Dörnyei 1998; Gas & Selinker, 2001; McDonough, 1983; Ellis, 1997; Oxford & Shearin, 1994; Williams & Burden, 1999; Van Lier, 1996), and is widely accepted by educators as a key component in language learning models (Gardner, 1985a; Dörnyei & Ottó, 1998; Spolsky, 2000; Elyildirim & Ashton, 2006; Deci & Ryan, 1985; Dörnyei & Ushioda, 2009). According to Brown (2000), in foreign language learning, “a learner will be successful with the proper motivation” (p.160), which corresponds to what Gardner (2006) claims that “students with higher levels of motivation will do better than students with lower levels...if one is motivated, he/she has reasons (motives) for engaging in the relevant activities, expends effort, persists in the activities, attends to the tasks, shows desire to achieve the goal, enjoys the activities, etc” (p. 241-243).

Research on language education has long been associated with motivation (e.g.,

Gardner & Lambert, 1972; Gardner, 1985a; Gardner & MacIntyre, 1991; MacIntyre, Clement, Dörnyei, & Noel, 1998; Dörnyei, 2001a; Dörnyei, Csizer, & Nemeth, 2006; Kyriacou & Zhu, 2008). Foreign language learning motivation is generally identified as directly related to the goal of learning (Gardner, 2010; Chen, 2006), affecting learners' persistence in learning (Dörnyei, 2005; Masgoret & Gardner, 2003), influencing the learning behavior (Gardner, 1990; Ushioda, 2006) and learning achievement (Bernaus & Gardner, 2008; Rubin, 1975).

As many studies have been conducted about language learning motivation, the majority of them use a quantitative research methodology such as surveys or close-ended questionnaires, especially since Gardner published the Attitude/Motivation Test Battery (AMTB) in conjunction with the socio-educational model (1985a, 1985b). While a quantitative approach has the capability of measuring learning motivation and generates objective results, it ignores the personal voices of the learners. Listening to learners' voices about their learning motivation towards a specific language can help to provide a more complete picture about motivation and provide insight to language instructors as to how to spark, promote and sustain students' learning motivation.

Language Immersion Programs

Immersion is an approach to language instruction in which the regular curriculum is taught through the medium of a target language while emphasizing the concept of additive bilingualism. Foreign language immersion programs, also referred to as one-way immersion programs, are specifically designed for language learners

who have little or no exposure to a target language, with the goal to develop “a high level of proficiency in the foreign language; positive attitudes toward those who speak the foreign language and toward their culture(s); English language skills commensurate with expectations for student's age and abilities; and skills and knowledge in the content areas of the curriculum in keeping with stated objectives in these areas” (Met, 1993, p.1).

Since the first entrance into the United States in 1971 from Canada, foreign language immersion programs have gradually spread across the country and are now viewed by educators and parents as a highly effective way of teaching foreign languages to children (Curtain & Dahlberg, 2010). Data from the latest Directory of Foreign Language Immersion Programs in U.S. Schools shows that by 2011, there were 528 foreign language immersion programs housed in 448 schools, which are spread across 38 states and 151 school districts (Center for Applied Linguistics, 2011a). By comparing these figures with past years, it shows a fairly steady increase in foreign language immersion education in U.S. schools over the last 40 years and that more languages are being offered through immersion than ever before. More specifically, 22 languages were offered in 2011, which is more than double compared with the number offered in 1995 (ibid). Among these languages, Chinese is offered by 13 percent of immersion programs, ranking in third place after Spanish (45%) and French (22%) (ibid).

In the past decades, studies about foreign language immersion programs consistently have revealed the benefits of these programs. Specifically, it has been

found that immersion students do as well as, and in some cases better than non-immersion students on measures of academic attainment (e.g., Genesee, 2008; Lindholm-Leary, 2001, 2011; Turnbull, Lapkin, & Hart, 2001; Holobow, Genesee, Lambert, Gastright, & Met, 1987; Cloud, Genesee, & Hamayan, 2000), language and literacy proficiency (e.g., Campbell, Gray, Rhodes, & Snow, 1985; Curtain & Dahlberg, 2010; Forrest, 2007, 2011; Lindholm-Leary & Howard, 2008; Swain & Lapkin, 1991), and cognitive skill performances (e.g., Bialystok, 2001; Cenoz & Genesee, 1998; Hakuta, 1986).

Studies conducted on language immersion programs largely focused on learning outcomes of learners, more specifically comparing learning achievement between immersion students and non-immersion students. While these studies provided a concrete way to help evaluate language immersion program, they ignored the learning experiences of learners. A study about learners' learning experiences in different immersion contexts will help to shed light on how certain learning outcomes happen and how to achieve better outcomes.

Research Problems

Based on the background, three major problems emerge and need to be addressed.

The first problem is about research on Chinese learning motivation. Given the fact that Chinese is regarded as one of the most difficult languages for English native speakers, which frightens away many potential learners, research on how to motivate

people to start and persist in learning Chinese becomes very important.

The second problem is about research methodology for studying language motivation. Since the majority of studies about foreign language learning motivation have been conducted with quantitative approaches, which largely ignore voices from learners, some researchers (Crookes & Schmidt, 1991; Dörnyei, 2001b; Ushioda, 2001; Syed, 2001) indicated the need for more qualitative approaches. However, as McInerney (1998) pointed out that it was an “emic-etic dilemma” in the examination of motivation, where researchers faced the dilemma of choosing either quantitative or qualitative approach (p.3). Specifically, while both approaches have advantages, each also has disadvantages. On the one hand, the quantitative methods makes motivation measurable but ignores listening to the voices from learners; on the other hand, the qualitative methods builds from views and perspectives of learners making motivation contextualized but limits the generalizability of the research results. To balance these two approaches, researchers began looking for new methodology approaches to study foreign language learning motivation as claimed by Dörnyei and Ushioda (2011) that “motivation research has reached a transition stage when it would benefit from complementing the traditional research techniques (quantitative research or qualitative research)” (p.212). Wesely (2010), in her study about language learning motivation, suggested the adaptation of the mixed methods approach which she claimed was “an ideal research structure” by “looking at the motivation of a particular group both quantitatively and qualitatively” (p.296).

The third problem is concerned with students’ language learning experiences in

immersion programs. Regarded as a highly effective way for teaching foreign languages, foreign language immersion programs have increased at a significant pace in the United States. The majority of studies about immersion programs that have been conducted focus on immersion students' learning outcomes, which are popular among immersion program administrators to help evaluate the program. While learning achievements provide a concrete way to look at language immersion programs, besides knowing "what are the outcomes", it is even more important, especially for language learners and instructors, to know "how do the outcomes happen." In order to study the "how" part, researchers need to look at students' language learning experiences in immersion programs, which will also help to shed light on ways to help learners obtain higher achievement and ways to improve a specific immersion program.

Purpose Statement

Despite the trend of "Chinese fever" and the increasing number of Chinese immersion programs in the United States, student enrollment and retention in Chinese classes is relatively low, especially compared with students in other languages classes such as Spanish and French. The purpose of this mixed methods study was to explore development and dynamics of high school students' Chinese learning motivation during and beyond a residential language and cultural immersion program (STARTALK). A mixed methods intervention convergent case study design was used in which an intervention convergent design was embedded within the case, the

two-week long STARTALK immersion program at University of Nebraska-Lincoln. Specifically, the immersion program itself was an intervention trial⁷ designed to study participants' Chinese learning motivation. In the intervention convergent design, both qualitative and quantitative data were collected in parallel, analyzed separately, and then merged. The qualitative data in this study consisted of interviews, observation notes, and documents in order to explore participants' experiences during the immersion program to gain an in-depth understanding of participants' motivation towards learning Chinese. Quantitative data consisted of surveys collected at three different time points (the first day when students entered the program, the last day of the program, and one semester after the program) to predict the overall trend of participants' motivation towards Chinese learning in order to test the impact of the immersion program on participants' learning experience. Both forms of data in the intervention convergent design were embedded in the larger design of case study and threaded throughout the entire study. The reason for collecting the two forms of data through the intervention convergent design was to combine and mix them in order to bring greater insight into the case than could be obtained by either form of data alone, which was also wherein the significance of this study lies.

Research Questions

Qualitative Questions

How do student participants describe their motivation towards Chinese learning

⁷ For more information about the intervention trial, see the section "Intervention Convergent Design" in this dissertation.

before, during and after the residential Chinese immersion program?

Quantitative Question

Are there statistical differences in participants' motivation towards Chinese learning, as measured by the adapted Attitude/Motivation Test Battery (AMTB), from the beginning to the end to one semester after the immersion program?

Mixed Methods Question

How does the convergence of the qualitative findings from the interviews, observations, and documents and the quantitative findings from the concurrent survey through the intervention trial provide an enhanced understanding of the case?

Definition of Terms

The definition for some of the terms employed in this study are presented in this section:

Foreign Language (FL)/Second Language (L2): In this study, FL and L2 are used interchangeably referring to any language other than the first language, either learned naturalistically or with aid of formal instruction.

Target Language: A language that a person intends to learn.

Minority Language: A language other than the one spoken by the majority of people in a given regional or national context, for example, Spanish in the U.S., Basque in Spain, English in Japan, etc.

Majority Language: The language spoken by the majority of people in a given regional or national context, for example, English in the U.S., Spanish in Spain,

Japanese in Japan, etc.

Heritage Learners: People who speak a language other than English as their first or native language, either because they were born in another country or because their families speak a language other than English at home.

Chinese as a Foreign/Second Language (CFL/CSL): Chinese learned by people who have not been exposed to it before start learning the language.

Chinese as a Heritage Language (CHL): Chinese learned by people who have been exposed to it in a home setting before start learning it.

Critical Need Languages (CNLs)/Critical Languages (CLs): Languages that are crucial to economic competitiveness and national security such as Arabic, Chinese, Japanese, Korean, Persian/Farsi, Russian and Turkish (U.S. Department of Education, Office of Postsecondary Education, 2008).

Less Commonly Taught Languages (LCTLs): LCTLs include all languages other than English and the three commonly taught languages (CLTs) in U.S. Schools, German, French and Spanish.⁸ LCTLs tend to be languages that the United States has associated with current economic, strategic, and/or cultural interests (NSFLEP, 1999).

STARTALK: It is the newest of the component programs of the National Security Language Initiative (NSLI) announced by former President Bush in January of 2006, with the purpose to expand and improve the teaching and learning of strategically important world languages that are not now widely taught in the US.⁹

Immersion Program: A program in which at least 50% of instruction is in the target

⁸ See <http://www.ncolctl.org/>

⁹ See <https://startalk.umd.edu/about>

language and, in both English and the target language; the focus of instruction is on both language and subject content.¹⁰

Foreign language immersion/One-way immersion: A language program in which students are primarily native English speakers learning a foreign/second language.¹¹

Delimitations

Delimitations are choices made by the researcher to set the boundaries for the study. The delimitations of the current study included the time boundary, the participant boundary, and the literature review boundary. All three boundaries were taken into consideration when discussing the results of the study.

The Time Boundary. Since the time for most language programs funded by STARTALK is in summer, these programs usually last two to five weeks. The program that I investigated lasted two weeks during which students resided on campus and were immersed in Chinese language and culture. To provide a complete picture about students' Chinese learning motivation before, during, and after the immersion program, data collection in this study started about one month before the program when instructors in the program sent out two rounds of online discussion questions to all student participants, and ended one semester after the program when a third round of survey and a second round of interviews were conducted with each student participant. Therefore, while the Chinese immersion program involved in this study only lasted two weeks, time for the data included in this study extended

¹⁰ See <http://www.cal.org/twi/glossary.htm>

¹¹ Ibid.

approximately half a year.

The Participant Boundary. Only students from one Chinese immersion program were included in this study. The same sample of participants were used in both quantitative and qualitative strand. For the current study, the targeted population was the 25 students in the immersion program, while the sample size was large enough for the qualitative strand, it seemed too small to obtain generalizability for the quantitative strand. However, in this mixed methods case study, the major purpose for collecting and analyzing both quantitative and qualitative data was to enhance the understanding of the case about the specific Chinese immersion program in order to address student participants' Chinese learning motivation. Therefore, a small but representative sample would help the researcher gain an in-depth understanding of the case.

The Literature Review Boundary. Motivation has been extensively researched in a variety of disciplines and fields. Even in the field of education, motivation has been approached from many different perspectives. Since the current study was focused on Chinese learning in immersion programs, the review of the literature was focused on language learning motivation, particularly Chinese language learning motivation, and immersion education, which were directly relevant to the nature of the study.

Significance of the Study

This study contributes to both the research content and the research methodology in the field of foreign language education. Firstly, as there are few

studies that have been conducted about Chinese learning motivation, this study fills the topical gap by investigating Chinese learning motivation of English native speakers who learn Chinese in the United States. Furthermore, the study was situated in a specific context of a Chinese language and cultural immersion program examining students' Chinese learning experiences in the program, which also helps to contribute to the literature on students' experiences in language immersion programs. Secondly, as the majority of studies about foreign language motivation have been conducted through a quantitative approach or qualitative approach, this study fills in the methodological gap through investigating Chinese learning motivation with the mixed methods research approach by collecting and analyzing both quantitative and qualitative data in order to get a deeper and more comprehensive understanding than could be obtained by either type of data alone.

It is expected that this study can provide broader views to program administrators, language instructors and educators on how to promote Chinese learners' motivation towards learning the language, and consequently enhance students' learning outcomes and contribute to the continuous development of Chinese programs, especially Chinese immersion programs. The findings from this project may also assist instructional material writers to create materials that could produce and promote learning motivation, which would lead to more successful learners.

CHAPTER 2: LITERATURE REVIEW

This chapter first introduces the two theoretical frameworks of this study: the socio-educational model (Gardner, 2006, 2010), and the process-oriented model of student motivation (Dörnyei & Ottó, 1998; Dörnyei, 2005). It also reviews the literature related to the study, including two major areas: language learning motivation and immersion education. Given that this study was about Chinese learning motivation in an immersion program, studies about Chinese learning motivation and Chinese learning motivation in immersion contexts are specifically introduced.

Theoretical Framework

Gardner's Socio-Educational Model

Gardner's socio-educational model is concerned with the understanding of individual difference variables that are important in learning a new language. Based on the compelling empirical research conducted by Gardner and his associates which provided strong evidence for the effectiveness and applicability (e.g., Gardner, Lalonde, & Pierson, 1983; Gardner, Moorcroft, & Metford, 1989; Gardner & MacIntyre, 1991; Masgoret & Gardner, 2003; Bernaus, Masgoret, Gardner, & Reyes, 2004) of the socio-educational model, it has been extensively used in the field of language education (e.g., Tarhan & Turkey, 2014; Al-Tamimi & Shuib, 2009; Zafarghandi & Jodai, 2012; Azarnoosh & Birjandi, 2012; Moiiinvaziri, 2008; Mehrpour & Vojdani, 2012; Liu, 2012) and is regarded as one of the paramount theories in foreign language motivational studies (Dörnyei, 2005; Wesely, 2009).

However, despite its popularity and dominance in the language education field, this socio-educational model has also undergone several revisions (Gardner 1979, 1981, 1983, 2000, 2001; Gardner & Lambert, 1959, 1972, Masgoret, Bernaus, & Gardner, 2001; Tremblay & Gardner, 1995) as a result of recommendations from researchers and new emerging language theories, such as expectancy-value theories and goal theories, to expand its dimensions and promote its application in new language learning contexts arising from globalization. According to Gardner, despite the different versions, all of them embrace the assumption that learning a second language in the classroom is different from most other classroom learning as language learning “involve(s) the acquisition of skills or behavior patterns which are characteristic of another cultural community” (Gardner, 1985a, p. 146).

The latest version of the model (See Figure 1), published in 2010 in Gardner’s book “Motivation and Second Language Acquisition”, was applied as one of the theoretical frameworks for the current study. According to Gardner, this new model not only emphasizes that motivation is a key factor in language learning, but also indicates measures from the AMTB assessing all of the affective constructs (*ibid*, p.87). (See Chapter 3 for detailed information about AMTB). Based on these two characteristics, the model was chosen as one of the theoretical frameworks for this study in order to assess the major affective factors related to language learning motivation.

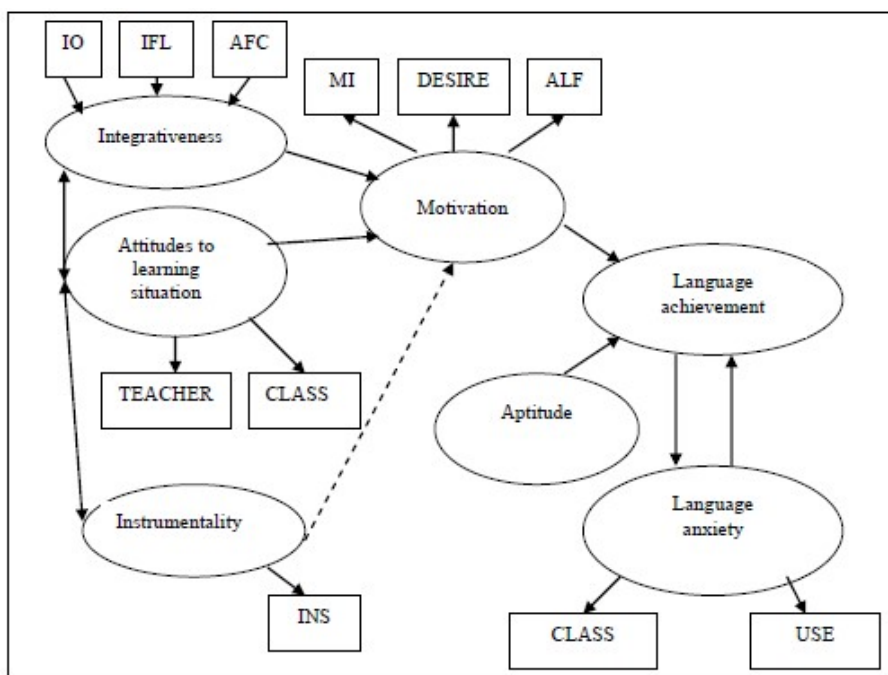


Figure 1. A structural equation representation of Gardner's (2006) socio-educational model in Gardner (2010, p.88)

The Constructs of the Socio-Educational Model

Seven major constructs are included in the latest version of the socio-educational model as shown in Figure 1, which are explained in detail in this section.

The construct, integrativeness, reflects “a genuine interest in learning the second language with the purpose of communicating with members of the other language community” (Gardner 2010, p. 88). A learner who has integrativeness toward learning a language shows openness to the community where the language is spoken and is also willing to accept people from that community. This construct is regarded as complex and it has been proposed to be measured by three factors together: IO (integrative orientation), IFL (interest in foreign languages), and AFC (attitudes toward French Canadians). To fit in with the context of the current study,

AFC is then altered to ACP (attitudes toward Chinese people).

The construct, attitudes toward learning situations, involves “attitudes toward any aspect of the situation in which the language is learned” (ibid, p. 89). Specifically in classrooms, while factors such as learning materials, classroom activities, classmates, and the teacher can be reflected in a learner’s attitudes and affect learning, a student’s reactions to the context are regarded as the most relevant factor to have impact on his or her learning. This construct is proposed to be measured by two factors together: TEACHER (evaluation of the teacher) and CLASS (evaluation of course).

The construct, motivation, refers to “the driving force in any situation” (ibid, p. 89). According to the socio-educational model, language learning motivation is comprised of several driving forces: efforts, desire and positive affect. Specifically, a truly motivated individual not only invests great effort and has a strong desire to learn a new language, but also enjoys the learning process. This construct is proposed to be measured by three factors: MI (motivational intensity), DESIRE (desire to learn the language), and ALF (attitudes toward learning target language people). To fit in with the context of the current study, ALF is then adjusted to ALC (attitudes toward learning Chinese).

The construct, instrumentality, refers to “a potential support for motivation”, as opposed to the “direct and consistent” support in the integrativeness construct (ibid, p. 90). In the literature, while few studies have been conducted about instrumentality, these studies do not show a consistent and clear relationship between instrumentality

and learners' motivation. However, through these studies, Gardner found that "instrumental motivation could be effective until it is clear that the instrumental goal was not achievable" (ibid). This construct is proposed to be measured by the factor, INS (instrumental orientation).

The construct, language anxiety, refers to "a situational form of anxiety associated with learning and using a second language" (ibid, p. 90). According to the research, language anxiety is generally independent of general anxiety, but is aroused by exposure to learning and using the language, that is, resulting from language learning experiences (MacIntyre & Gardner 1991). This construct is proposed to be measured by two factors: language class anxiety (CLASS) and language use anxiety (USE).

No factors are assigned to measure the two constructs, aptitude and language achievement, as they are not part of AMTB. However, Gardner also suggested that for different studies, based on the research context, the two constructs can be adopted accordingly. For the current study, the two constructs were not measured, because the purpose of this study was to investigate students' Chinese learning motivation through their learning experiences, that is, the focus of this study was to look at students' learning experiences or processes instead of the learning outcomes. Therefore, the two constructs were not included.

While seven constructs are included in the socio-educational model, Gardner (2010) pointed out that the socio-educational model "does not attempt to show all the possible links or even all the possible variables, since the intent is to focus attention

on the role of motivation in second language learning.” (Gardner, 2010, p. 93).

Dörnyei and Ottó’s Process-oriented Model of Student Motivation

One of the important characteristics of motivation is that “it ebbs and flows” (Garcia, 1999, p. 231). The dynamic character and temporal variation of motivation has drawn researchers' attention since the 1990s (e.g., Dörnyei & Ottó, 1998; Ushioda, 2001). It is argued that research on the temporal dimension is particularly important for the understanding of student motivation, because a major motivational function in prolonged learning activities, such as mastering a foreign language, is "to maintain the motivational impetus for a considerable period against a number of distracting influences" (Dörnyei, 2000, P.519). In order to illustrate the “time” dimension of motivation, the process-oriented model of student motivation (See Figure 2) was advanced by Dörnyei and Ottó in 1998, which organizes the motivational influences of language learning along a sequence of actional events from the initial wishes (or desires) to the completion of action and the subsequent retrospective evaluation.

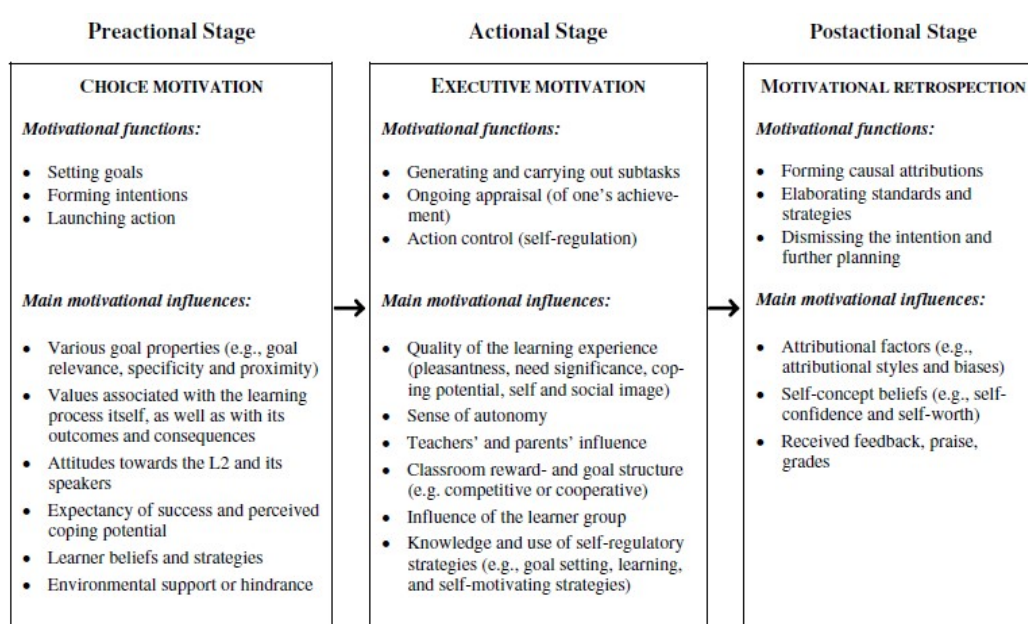


Figure 2. A structural equation representation of Dörnyei and Ottó's (1998) process model of student motivation in Dörnyei (2005, p.85)

The researcher chose this process model as one of the frameworks mainly for two reasons. First of all, the purpose of the study to explore students' Chinese learning motivation trajectories before, during and after the immersion program fits well within the purpose of the model to look at language learning motivational influences in "time" dimension based on the sequence of actional events. More than that, Dörnyei and Ushioda (2011) pointed out that this dynamic approach "would offer obvious benefits for the study of the complex interaction of language, learner and learning environment" (p.246), which also matches the purpose of the current study to investigate students' language learning motivation through their learning experiences. Second, since the model is regarded as "the only fully developed and comprehensive process-oriented model of L2 motivation to date" (Guilloteaux, 2007, p.72) and "the most elaborate attempt to model the process dimension of L2 motivation" (Dörnyei & Ushioda, 2011, p.65), which exerts great influence on presenting motivation in a developmental framework, is a good fit as the theoretical framework for this study.

The Constructs of the Process-oriented Model of Student Motivation

In this model, the motivated behavioral process is divided into three main phases occurring in the following sequence: the preactional phase, the actional phase and the postactional phase, each of which is associated with different motives.

Preactional Stage. Since motivation needs to be generated, which then leads to the selection of the goal or task to be pursued, the initial stage corresponds roughly to

"choice motivation". Three sub-processes are distinguished within this stage: goal setting, intention formation, and initiation of intention enactment, which may happen sequentially or simultaneously, but the sequence can terminate at any time before reaching the impulse to act. Motivational influences during this stage mainly include learning goals and expectancy, learning environment, and potential learners' overall psychology (values, beliefs, attitudes).

Actional Stage. In order to energize and prolong the particular action being carried out, the generated motivation needs to be actively maintained. Therefore, this stage is referred to as "executive motivation", which means actually committing to action and emphasizes shifts from intention to action. Three basic processes: generating and carrying out subtasks, ongoing appraisal, and action control, come into play during this stage. Particularly, at this actional stage, "learners are engaged in executing a task, they continuously appraise the process, and when the ongoing monitoring reveals that progress is slowing, halting, or backsliding, they activate the action control system to save or enhance the action" (Dörnyei, 2005, p. 81). Motivational influences mainly include learning experience, social influences, and learners' psychological needs.

According to Dörnyei (ibid), this stage is particularly relevant to sustained activities such as studying a new language, where students are exposed to a great number of distracting factors that make the task difficult to be completed (p.84).

Postactional Stage. This stage follows the completion or, sometimes, interruption of the action, when learners examine their behavior in retrospect and

evaluate the outcome of their action. Therefore it is also referred to as "motivational retrospection". Through this process, learners "enrich their store of accumulated experience, elaborate their internal standards, and enlarge their repertoire of action-specific strategies", which is usually followed by contemplating and determining the kind of activities they will pursue in the future (Guilloteaux, 2007, p.78). Thus, three basic processes come into effect during this stage: forming causal attributions, elaborating standards and strategies, dismissing the intention and further planning. Motivational influences during this stage mainly include attributional factors, self-concept beliefs and feedback.

Language Learning Motivation

Research in the field of foreign language learning motivation was initiated during the 1950s. Since then, it has undergone a number of shifts resulting in “an exciting state of flux” as described by Dörnyei (2001b, p. 18). This section intends to give a general overview of the historical developments and trends in this field, mainly from the perspectives of scope and conceptualization.

Development and Trends in the study of Language Learning Motivation

Form General to Specific Context

The early conception of motivation originated from behaviorism, according to which, need and drive were two motivational instigators that combined with external components to cause behaviors. Thereby, early studies about motivation viewed motivation as a biological drive and natural instinct within all learners. Later from the

1960s, with the popularity of cognitivism, research in educational psychology began to emphasize the importance of mental activity in learning, which led to the dominance of a psychological approach in research about motivation. In the 1980s, researchers viewed motivation from both the micro and the macro perspective, which led to a socio-cultural approach that complemented the psychological approach. Gardner's (1983) social psychological approach provided a new perspective to not only look at individual psychology, but also the social psychology, in order to provide a holistic picture about language learning motivation. With the popularity of the socio-cultural approach, researchers began to realize the importance of learning context when studying motivation and argued that motivation neither resided entirely within the individual nor entirely within the context. Then, the person-in-context view of motivation, which was also referred to as the cognitive-situated approach, quickly became the dominant approach in research about academic motivation and motivational theories (Urduan & Schoenfelder, 2006). The main focus shifted from examining psychology to looking at the reality of the classroom, specifically identifying and analyzing classroom-specific motives. While both individual factors and context factors are investigated in studies about language learning motivation, an increasing number of studies about language learning motivation have been conducted focusing on motivation situated in classrooms.

From Product to Process

Murphy and Alexander (2000) in their extensive review of motivation found that there has been a shift in motivation research about foreign language learning from

conceptualizing motivation as a product to a process in order to account for its fluctuations. The shift was in fact initiated in the mid 1990s, when the process-oriented approach focusing on questions about "how did motivation work?" was raised by researchers to enrich the traditional product-oriented approach focusing on questions about "what was motivation?", and became more dominant after Dörnyei and Ottó's advanced their Process-oriented Model of Student Motivation in 1998. The process-oriented approach places an emphasis on the fact that motivation is not simply a static product, but also a dynamic process fluctuating and evolving as time changes, which leads toward a more situated research approach as the actual learning context is always ideal for conducting close and comprehensive observations about change in students' motivation. Hence, numerous studies have been conducted about the dynamic process of motivation in classrooms (e.g., Järvelä & Niemivirta, 2001; Middleton & Tolk, 1999; Volet, 2001, Ushioda 2001). These studies in turn yield implications directly relevant to classroom practice, in terms of how teachers can help to develop and maintain students' motivation.

Theories of Language Learning Motivation in Educational Psychology

Given that the shifts in the field of language learning motivation have produced a wide variety of theories, this section presents a selection of theories related to foreign language learning motivation in order to serve as a basis for the discussion and interpretation of results from the current study. It is expected that theories relevant to the topic of the current study can be applied appropriately. However, due to the specific context of this study, students who are English native speakers learning

Chinese in an immersion program, the theories discussed here would unavoidably represent certain personal selection from the researcher. To maximally reduce the subjectivity during selection, only theories that inform the study are presented here.

Goal Setting Theory. Based on Locke and Latham' (1990) work, goal-setting theory assumes that human actions are caused by specific purposes and based on goal setting and pursuing. Performance differences among students can be explained in terms of differences in their goals. Research indicates that specific and difficult goals can lead an individual with goal commitment to the highest performance (Locke & Latham, 2006; Lunenburg, 2011). When it comes to motivation, a person with a high level of motivation is more likely to be committed to a goal when he or she believes that achieving the goal is important and possible; whereas, a person with low level of motivation is unlikely to commit to a goal when he or she believes that the goal is unattainable and unimportant. According to this theory, goals are not only regarded as learning outcomes (distal goal) but also set the standards and are used during the learning process to evaluate learners' performances (proximal subgoals) (Dörnyei & Ushioda, 2011, p.21). In the case of language learning, besides the distal goal (e.g., achieving certain level of proficiency in the target language), setting up proximal subgoals during the learning process (e.g., completing a dialogue with a learning partner in the target language) may have “a powerful motivating function in that they mark progress and provide immediate incentive and feedback” (ibid). Attainable proximal subgoals can also play an important role in developing students' self-efficacy.

Self-determination Theory (SDT). Based on Deci and Ryan's (1985) work, self-determination theory (SDT) is concerned with the sources and the roles of intrinsic and extrinsic motivation in the development of an individual's cognitive development. Intrinsic motivation entails performing specific activities in order to get a sense of self satisfaction and pleasure, such as learning a language for the joy of learning; whereas extrinsic motivation refers to performing activities for some extrinsic reward, such as learning a language in order to find a good job. According to SDT, extrinsic forms of motivation "can be placed on a continuum representing different degrees of external control or internal regulation (self-determination), depending on how internalized these extrinsic goals are" (Dörnyei & Ushioda, 2011, p.24). That is, a fully internalized extrinsic goal can co-exist with the intrinsic motivation related to the same goal. Based on the notion of the continuum of self-determination, researchers (Deci & Ryan, 1985, 2000; Ryan & Deci, 2000) have found that people are more self-determined and intrinsically motivated to carry out certain tasks when the following three needs are addressed: autonomy (the need to be agents of one's own behavior), competence (the need to control the outcome and experience mastery), and relatedness (the need to be connected to other individuals).

Attribution Theory. Based on Weiner's (1992) work, attribution theory assumes that an individual will try to understand and determine the influences of their past successes and failures, and that the interpretation about past influences affect their current behaviors and also their motivation to initiate future actions. Specifically, successful students "attribute their successes to a combination of skill and effort," and

are more likely to be motivated to accept challenges in work and put in the needed efforts to complete it, whereas, failing students “attribute their successes...to external factors such as luck, task ease, or the generosity of a teacher”, who are less likely to be motivated to work when challenges occur in their work and tend to give up more easily rather than persevere (Covington, 1984, p. 93). According to Graham (1994), the seven most common attributions in school environments are ability, effort, task difficulty, luck, mood, family background, and help or hindrance from others. Among these seven attributions, “ability and effort have been identified as the most dominant perceived causes in western culture” (Dörnyei & Ushioda, 2011, p.15).

Self-Efficacy Theory. Based on Bandura's (1997) work, self-efficacy theory refers to an individual's judgments about personal capabilities to organize and carry out certain tasks, and, accordingly, an individual's sense of efficacy determines their choice of specific activities to pursue, the amount of effort to make and their persistence in doing the work. Thus, self-efficacy theory focuses on how people see themselves. Specifically, people with a high sense of self-efficacy often have high levels of motivation to approach challenges with confidence and efforts because they believe that they have the ability to meet the challenges; whereas, people with a low sense of self-efficacy often have low levels of motivation and “perceive difficult tasks as personal threats...and dwell on their own personal deficiencies and the obstacles they encounter rather than concentrate on how to perform the task successfully” (Dörnyei & Ushioda, 2011, p.16). Therefore, the self-efficacy theory is regarded as having the “predictive utility” for motivation (Wesely, 2009. p.53).

Study of Chinese Learning Motivation

An extensive review of the literature shows that only a few studies have been conducted that examine motivation towards learning Chinese compared with the amount of studies about motivation towards learning commonly taught languages such as Spanish, French, German and English. Among those studies about Chinese language learning motivation, the majority are about learning motivation of Chinese heritage learners and the comparison between motivation of Chinese heritage and non-heritage learners. Only a handful of studies specifically address motivation of non-heritage (CFL) learners, and even fewer in an American context (e.g., Wen, 1997; Chen, 2006; Lin, 2013). This section mainly reviews studies concerning Chinese learning motivation in an American context, which is divided into three big topics, including studies focused on Chinese learning motivation of heritage learners, of non-heritage (CFL) learners, and studies focused on a comparison of Chinese learning motivation between heritage and non-heritage(CFL) learners.

Chinese Learning Motivation of Heritage Learners

In the context of the Unites States, two studies, Wen's (1997) "*Motivation and Language Learning with Students of Chinese*" and Chen's (2006) "*Balancing goals and emotional responses to learning Chinese as a heritage language*", have been found to solely focus on the motivation of heritage learners. The following is an overview of these two studies.

Early in 1997, Wen conducted the first study investigating the motivational factors of Chinese heritage learners in the United States. The study recruited

seventy-seven students learning Chinese at the university level, from whom data were collected through a survey. Based on a quantitative analysis of collected data, the results indicated that intrinsic interest in Chinese culture and the desire to understand one's own cultural heritage were the initial motivation for students to start learning the Chinese language, and that students' expectations for learning tasks and efforts motivated them to continue their Chinese at the intermediate level. In addition, the results also showed that motivational factors correlate significantly with desired learning outcomes.

Later in 2006, Chen explored the learning experience of Chinese heritage language learners from the sixth to eighth grade at two local community Chinese schools, focused on the interaction of their multiple goals, their emotional responses, as well as the influence of their experience in their family and formal school contexts. Data were collected from multiple sources including students' responses to a self-report questionnaire, interviews with students and their parents, interviews with teachers, and a semester-long retrospective observation journal. The results of the study indicated that perceptions of Chinese school learning affected students' motivational goals and their emotional responses in the Chinese learning experience. These perceptions included (a) perceptions of the Chinese learning environment (instructional methods, teachers' characteristics, and peer influence), (b) perceptions of their ability, (c) perceptions of values and beliefs, and (d) perceptions of their available time and schedule (Chen, 2006 p.115-142). More than that, the contextual factors, including students' formal school experience and their family experience were

also regarded as influencing directly or indirectly students' perceptions of Chinese school learning as well as their motivational goals and emotional responses.

Chinese Learning Motivation of Non-heritage (CFL) Learners

Only one study, Lin's (2013) "*A sociocultural approach to the study of motivation and attitudes towards the learning of Mandarin Chinese in the U.S.: Secondary school students' perceptions*", solely focused on the motivation of non-heritage learners. Below is a summary of the study.

Lin (2013) conducted a qualitative case study in her dissertation, which focused on exploring Chinese non-heritage learners' and their parents' perspectives on the students' Chinese language learning experiences, aiming to provide a better understanding of what motivates secondary school level students in the U.S. to learn Chinese, as well as their attitudes towards the Chinese language, the Chinese culture, and Chinese speakers. Data were collected from ten students and their parents through interviews and documents. By applying the sociocultural constructivist framework and the multiple-leveled Communication Ecological Model, the findings of the study were presented at three levels (ibid, p.8-12). At the macro level, it showed that the economic power of China and the national security establishments of the U.S. affected the motivation and attitudes of non-heritage secondary level school students towards learning Chinese; at the meso level, it was found that families, schools, teachers, peers, extracurricular Chinese programs, the presence of local and overseas Chinese speaking communities, and media supported students' Chinese learning; at the micro level, both students and their parents reported overall positive attitudes towards the

Chinese language, the Chinese culture, and Chinese speakers, specifically students mentioned about investing in learning Chinese with the goal of communicating effectively and their parents expressed the necessity of learning both the Chinese language and its culture in the new century. Moreover, the data also showed that in the initial period of Chinese learning, schools and parents played a significant role; and that beyond the initial period, there were two patterns associated with sustaining students' involvement in Chinese learning: the "agentic pattern" (ibid, p.84) and the "traditional institutional pattern" (ibid, p.116). The "agentic pattern" (ibid, p.84), related to attendance of Chinese classes operated by different educational institutions. They also exercised agency in non-instructional settings to access additional linguistic and interactional resources. In the "traditional institutional pattern" (ibid, p.116), despite access to spontaneous interactional resources, students continued to be mainly active in Chinese language socialization in instructional settings. Thus, the study indicated that students managed to sustain involvement in Chinese learning because the possibility of becoming a proficient Chinese speaker was supported by the multiple communities where they had memberships.

Chinese Learning Motivation: Heritage vs. Non-heritage(CFL) Learners

Besides studies solely focused on motivation of Chinese heritage learners and of non-heritage learners, studies comparing motivation of heritage and non-heritage learners have become popular in recent years. Below is a summary of these studies.

Lu (2007) studied the effect of motivation on language learning and learning outcomes of Chinese heritage and non-heritage learners through measuring their

integrative motivation, instrumental motivation, and attitudinal motivation in mixed higher education classrooms. The results of the study indicated that a learner's heritage status was an important factor for understanding motivational orientations in Chinese language learning and attitudes toward the learning situations.

Lu and Li (2008) also investigated the effect of different motivational factors on college students' Chinese learning in mixed classrooms with both heritage and non-heritage students based on data collected through questionnaires from both sides of students. Quantitative results of the study indicated that both integrative and instrumental motivation were important to students' self-confidence in acquiring language proficiency, but integrative motivation was more important to students' overall test scores. It was also pointed out that while heritage language students were more influenced by instrumental motivation than non-heritage students, they were less influenced by institutional factors, such as teacher effect, effect of mixed classes.

Comanaru and Noels (2009) studied the motivation of Chinese learners through a questionnaire survey. The results showed that the more learners felt they were learning Chinese because it was personally meaningful and fun, the more they engaged in the learning process. This orientation was promoted to the extent that learners felt a connection with the Chinese community and, particularly for heritage learners, a sense of personal control over the learning process. Relative to non-heritage learners, heritage learners more strongly indicated that they were learning Chinese because it was an integral aspect of their self-concept, but also because of feelings of obligation. Comparatively, few differences were found between

heritage learners who spoke Chinese as a mother tongue and those who spoke English, which suggested that from the standpoint of social psychology, regardless of the level of Chinese proficiency, subgroups of heritage language learners may be more alike than different.

Dretzke and Jordan (2010) reported the results of a survey of secondary school students enrolled in Chinese language classes with respect to their reasons for enrolling in Chinese, their plans for continuing their study of Chinese, and what they especially enjoyed about their classes. The results showed that there were significant differences between heritage and non-heritage students regarding their motivations. Heritage learners were more likely to enroll in Chinese based on reasons related to travel and recreation, whereas, non-heritage learners were more likely to report reasons related to academic learning and job preparation.

Wang (2010) examined how students' Chinese learning motivation interacted with student ethnicity, language learning environment, and teaching strategies through interviewing and observing both students and their teachers. Results from the study showed that students' ethnicity interacted with their Chinese learning motivation, specifically heritage learners expressing more heritage-related motivation and non-heritage learners expressing more integrative motivations. However, those students who expressed the heritage-related motivation also expressed pressure to learn Chinese from their parents or other people. For non-heritage learners of Chinese, there was an indication that presenting Chinese learning as being hip and cool may increase their motivation to learn the language. These findings corroborated earlier

studies (Ryu Yang, 2003; Sung & Padilla, 1998; Wen, 1997). Findings from this study suggested that Chinese language teachers needed to be more proactive in shaping students' motivation to learn Chinese, in addition to improving their Chinese language proficiency.

Wen (2011) investigated attitudes and motivation that influenced heritage and non-heritage students' learning of Chinese as a second language, examining the similarities and differences among three subgroups: bilingual, heritage motivated, and non-heritage learners. Data were collected from students enrolling in Chinese courses at three state universities in the U.S. The results demonstrated that "positive learning attitudes and experience" was the factor most predictive of motivational magnitude (intended learning efforts in the present) and direction (intended continuation of study in future), and that "instrumentality", rated very highly across the three subgroups, appeared as the second significant predictor for intended continuation of study in future) with both groups of heritage learners (*ibid*, p.1). Moreover, it also showed that heritage and non-heritage learners might differ not only in linguistic and cultural backgrounds but also in socio-psychological and affective dimensions, which corresponded to previous studies (Li & Duff, 2008; Fishman, 2001; Valdes, 2001; Wiley, 2001).

Immersion Education

Since the first modern language immersion program appeared in Quebec, Canada in 1960s, the idea of immersion education expanded around the globe.

Modeled after the pioneering immersion program developed in Canada, language immersion programs have been established in the United States to enrich the education of English native speakers through learning of foreign languages. In the past 50 years, immersion education has undergone some changes. This section provides a general overview of the features and types of language immersion programs in the American context. A detailed introduction of studies about Chinese immersion education in the United States is also presented.

Features of Immersion Education

The term “immersion” denotes a method of language instruction by which the regular school curriculum is instructed through the medium of target language. Immersion education is also referred to as “language-enriched content classes” and “content-enriched foreign language classes” (Genesee, 1982, p.553), where students are immersed in or surrounded by the target language focusing on meaning. Therefore, one advantage of immersion education is teaching the target language along with its culture and content instead of teaching it in isolation as in traditional language classrooms. That is, the target language in immersion education is the medium of instruction.

According to the Center for Advanced Research on Language Acquisition (CARLA), the core characteristics of immersion education include:

- *Additive bilingualism with sustained and enriched instruction through the minority language and the majority language is promoted*
- *Subject area instruction through the minority language occurs for at least 50% of*

the school day during the elementary school years

- *Teachers are fully proficient in the language(s) they use for instruction*
- *Support for the majority language is strong and present in the community at large*
- *Clear and sustained separation of languages during instructional time*

-- CARLA (2014)¹²

To integrate these features, it is not an easy task to employ immersion education, which requires the committed support from many sides, including but not limited to learners, parents, teachers, and schools. According to Met (1993), in general, successful immersion education can be characterized by: administrative support, community and parental support, qualified teachers, appropriate materials in the foreign language, time for teachers to prepare instructional materials in the language, and ongoing staff development (p.2).

Types of Immersion Education

Since its first appearance in the United States in the 1960s, immersion education has experienced a series of developments that lead to two main immersion types: one-way immersion and two-way immersion.¹³ Both types are currently popular and available in U.S. schools.

The first type, one-way immersion, serves the majority language speaking students who seek to learn a new language, or the target language. For instance, English native speakers learn Chinese in U.S. schools. Because the student population in this type comes from the majority-language background where the target language

¹² See <http://www.carla.umn.edu/immersion/faqs.html>

¹³ Ibid.

is not used by people around, it is also called the foreign language immersion. The exposure to the target language in one-way immersion mainly takes place in classrooms. Based on the extent the target language is used in the one-way immersion, it is further divided into two categories: full immersion and partial immersion (Center for Applied Linguistics, 2011a). In full immersion programs, which is also referred to as total immersion programs, the target language is used almost 100% of the class time; in partial immersion programs, the target language is used at least half of the class time to teach the subject matter. According to the Center for Applied Linguistics, by 2011, the amount of Chinese immersion programs in the United States accounts for 13.4 percent of one-way immersion programs (71 out of 530). Other immersion programs include Spanish (45%), French (22%), Hawaiian (6%), Japanese (5%), German (3%) and other languages (6%) (ibid).

The second type, two-way immersion or dual language immersion, serves both majority language speaking students and minority language speaking students in the same classroom, each group acquiring the other group's language in an integrated setting. The instructional languages in this type of immersion involve both the minority language and the majority language. For instance, in two-way Chinese-English immersion in the American context, ideally, half of the students are native English speakers (the majority language group) and the other half are Chinese native speakers (the minority language group). In learning, the English group learns Chinese from the Chinese group and the Chinese group learns English from the English group. Because both majority language speakers and minority language

speakers are involved, the two-way immersion is also referred to as bilingual immersion or dual language immersion. According to the Center for Applied Linguistics (2011b), until 2011, the vast majority of two-way immersion programs in the United States are Spanish-English programs account for 93 percent (361 out of 389), followed by Chinese-English programs which account for 3 percent (11 out of 389). Other two-way programs include French-English (2%), Korean-English (1%), Japanese-English (0.7%), and German-English programs (0.3%) (ibid).

The Chinese immersion program involved in the current study was a one-way partial immersion program. All participants in this program were English native speakers, and Chinese was used about 90% of the class time.

Study of Chinese Learning Motivation in Immersion context

Two major topics dominated the research about immersion education: language proficiency and learning achievement. While these topics are of great importance, learner experiences in immersion programs, especially language learning motivation, has rarely been explored as substantiated by my literature review. This is also confirmed by Genesee's (2007) report about the top ten most consistent findings from research on foreign language immersion education. According to Genesee's (ibid.) report, nine of the top ten findings were related to language proficiency and learning achievement and only one was concerned with learning psychology.

Based on the detailed literature review about Chinese learning motivation presented in the previous section, a new round of review specifically focused on Chinese leaning motivation in immersion contexts is conducted in this section. Only

one study, Andersen's (2014) *"Parent Reasons for Enrollment at One Dual-Language Chinese Immersion Elementary School Program"*, has been found, which examined learners' motivation from the perspective of the parents instead of the perspective of learners themselves. Below is a summary of this study.

Andersen (2014) explored the reasons why parents of children enrolled in Utah's Long Hill elementary school Chinese immersion program chose to enroll their child. A household survey was used for gathering data on parents' demographic and background characteristics, reasons for enrollment, and attitudes towards several statements about language learning. Survey responses revealed both Chinese-specific and non-Chinese specific factors from parents when they explained reasons for enrolling their children in the Chinese program. Chinese-specific factors included future career, educational opportunities, the growing importance of China, and the desire to preserve a heritage language; non-Chinese specific factors included the cognitive benefits of learning a second language, the desire for a challenging academic experience, as well as the belief that learning a second language would make their child more multicultural (ibid, p.1).

While only one study was found, this study confirmed what Wesely (2009) pointed out in her study that student perspective as a whole was often completely left out of motivation research in immersion contexts, and that "the voices and expressed needs of the students disappeared into adult anecdotes or were reduced to linguistic outcomes" (p.59).

Summary

This chapter first introduces the two theoretical frameworks applied in the study, the socio-educational model (Gardner, 2006, 2010) and the process-oriented model of student motivation (Dörnyei & Ottó, 1998; Dörnyei, 2005). Then, literature about language learning motivation is reviewed, particularly for Chinese language learning motivation. Based on the review, it was found that despite the increasing popularity of learning Chinese in the United States, only few research studies have investigated the motivation of Chinese learners. Those that has examined motivation of Chinese learners in the United States have mainly focused on heritage learners and the comparisons between Chinese learning motivation of heritage and non-heritage learners. Therefore, research focused on Chinese learning motivation of non-heritage learners, particularly of English native speakers, will help to provide insights into how motivation works in Chinese learning. Based on that, a second round of review specifically about Chinese learning motivation in the immersion context was conducted which revealed one study, Andersen's (2014) *"Parent Reasons for Enrollment at One Dual-Language Chinese Immersion Elementary School Program"*, in which motivation was actually investigated from the perspective of parents. In response to Wesely's (2009) call for more "immersion students' voices" to be included in motivation research (p.59), the current study contributes to filling the gap in literature by investigating students' Chinese learning motivation in and beyond an immersion program from the perspective of immersion students themselves as the primary source and also the perspective of instructors as the secondary source.

CHAPTER 3: METHODOLOGY

This chapter focuses on the methods employed to conduct the study. First of all, it describes the philosophical assumptions adopted for the study. Then, it introduces the research design and its characteristics. Particularly, it reports the research context, the sampling procedure and participants, and ethical considerations involved in this study. Lastly, it discusses data collection, data analysis, and validation procedures for qualitative phase, quantitative phase, and mixed methods phase respectively.

Philosophical Assumptions

Philosophical assumptions, also referred to as worldviews or paradigms, are a basic set of beliefs or assumptions that guide research or inquiries (Guba & Lincoln, 2005). They are used in different types of research to shape the research process. For instance, qualitative research is traditionally associated with a constructivist worldview, where multiple realities exist and reality is constructed subjectively through social experiences; quantitative research is often associated with a postpositivism worldview, within which reality is regarded as singular and to be discovered objectively through empirical observation and measurement (Creswell & Plano Clark, 2011; Creswell, 2007a; Erlandson, Harris, Skipper, & Allen, 1993). Based on previous work on philosophy and worldviews, Creswell and Plano Clark (2011) proposed four possible worldviews that can inform mixed methods research: postpositivist worldview, constructivist worldview, participatory worldview and pragmatist worldview, which are related to the types of mixed methods design. In

light of the type of design, either one or multiple worldviews can be used in a mixed methods study (Tashakkori & Teddlie, 2010). Specifically, while pragmatism is considered appropriate for the convergent parallel mixed methods design, a combination of multiple worldviews are regarded as proper for sequential designs, such as intervention design and multiphase design (ibid.).

The current study is oriented toward a pragmatist worldview which focuses on “solving practical problems in the ‘real world’”(Feilzer, 2010, p.8). Particularly, pragmatism views the world as both singular and multiple with different elements or layers, “some objective, some subjective, and some a mixture of the two”(ibid). In order to produce knowledge that best represents the “real world”, it has been proposed by pragmatists to employ diverse approaches and value both objective and subjective knowledge (Creswell & Plano Clark, 2011). It is recommended to incorporate both a quantitative approach looking at the “objective” layers and a qualitative approach looking at the “subjective” layers. Thus, the pragmatist worldview has been widely perceived as the philosophical justification for combining qualitative and quantitative methods since the emergence of mixed methods in the late 1980s (Morgan, 2007; Johnson & Onwuegbuzie, 2006; Maxcy, 2003; Rallis & Rossman, 2003). In 2010, Tashakkori and Teddlie reported in their study that pragmatism is one of the best worldviews for mixed methods research evaluated by mixed methods researchers from different fields.

Within the pragmatist worldview, in order to investigate the Chinese language learning motivation of students in an immersion program, the researcher of this

study¹⁴ not only objectively measured and reported students' motivation before and after the program, but also concurrently observed students' learning experiences during the program through various data sources. Both quantitative and qualitative data were included in this study to provide a more complete picture of the case under study.

Research Design: Mixed Methods Intervention Convergent Case Study Design

The current study adopted an advanced design, the intervention convergent case study design, in which a convergent parallel design was embedded within a case. Therefore, two basic designs were involved in the intervention convergent case study design: the intervention convergent design and the case study design. Specifically, in the intervention convergent design, both qualitative and quantitative data were collected in parallel, analyzed separately, and then merged together, the results then interpreted with a purpose to enhance the understanding of the case. Particularly, the intent of the intervention convergent design was to merge the results of the quantitative and qualitative data analyses to provide multiple angles and multiple perspectives for the case (Creswell and Plano Clark, 2011). The notation of the design for the current study can be written as: QUAL (+quan) = enhance the case study (Bustamante, 2014; Morse & Niehaus, 2009; Plano Clark, 2005)

The “Case” in the Case Study

Case study is commonly used in social sciences as an empirical inquiry

¹⁴ For information about research positionality, see the section “Sampling Procedure and Participants” in this dissertation.

“investigat(ing) a contemporary phenomenon in depth and within its real-life context” (Yin 2009, p. 18). It allows researchers to gain particular insights and understandings about the phenomenon in a particular context that they have chosen to study.

According to Meredith (1998), case study has two outstanding strengths: first, it studies the phenomenon in its natural and real setting, from which meaningful and relevant theories can be generated; second, it allows research questions to be answered based on a full understanding of the complexity of the phenomenon under study. Likewise, Stake (2000) also argued that case study could not only provide “purposive”, “situational” and “interrelated” descriptions of the phenomenon in context, but also connect it to relevant theoretical abstractions (p.340-343).

It is critical for case study researchers to know the focus of the study, that is, what is the “case” in a case study. According to Creswell (2007), the focus of case study is understanding the case (or cases) involved in the study, which is described as “a bounded system” used to delineate the research (p.73). Stake (1995) classifies cases into three categories: the intrinsic case which consists of a situation where the researcher’s interest is in the particular case; the instrumental case where the researcher uses the case to explore a specific issue; the collective case where multiple cases are taken as the tool for understanding something else. The case involved in the current study was delineated by its “event” and “place” boundaries (Ragin 1992), the STARTALK immersion program (event) at UNL (place), which was taken as an instrumental case due to the fact that through studying this case, the researcher explored a specific issue, that is, the immersion students’ motivation towards learning

Chinese. Below is a detailed description of the case.

The Department of Teaching, Learning and Teacher Education in the College of Education and Human Sciences at the University of Nebraska-Lincoln (UNL) secured a STARTALK grant to provide funding to support a Chinese Language, Culture and Technology Summer Academy for high school students in summer 2014 at UNL. The purpose of the Academy was to enable participants to be immersed in the Chinese language and culture, and allow them to become proficient in using iPads as a language learning tool in order to extend learning beyond the immersion experience. The funding enabled 25 students to participate in a two-week residential immersion in a Chinese Language and Culture Academy.

The Mixed Methods Intervention Convergent Design

Mixed Methods

According to Creswell (2014), mixed methods research is:

an approach to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (closed-ended) and qualitative (open-ended), integrates the two, and then draws interpretations based on the combined strengths of both sets of data to understand research problems (p.2).

By combining qualitative and quantitative methods, mixed methods researchers intend to achieve two main purposes: first, to gain an elaborate and comprehensive understanding of a phenomenon under study; second, to validate the research findings by triangulating data obtained through different methods (Sandelowski, 2003). For

language motivation research, Dörnyei and Ushioda (2011) claimed that it is the first purpose that makes mixed methods research invaluable, which “allows scholars to examine issues that are embedded in complex educational and social contexts” (p.241).

Intervention Convergent Design

The intervention convergent design, also referred to as intervention convergent parallel design, occurs when “the researcher collects and analyzes both quantitative and qualitative data during the same phase of the research process and then merges the two sets of results into an overall interpretation” (Creswell & Plano Clark, 2011, p.77). The purpose of this design is to “obtain different but complementary data on the same topic” in order to get a holistic picture of the topic under study (Morse, 1991, p.122). Specifically, through combining quantitative results about “general trends and relationships” and qualitative results about “in-depth personal perspectives of individuals”, the researcher cannot only “advance multiple perspectives”, but also “validate one database with the other” (Creswell, 2014).

In the current study, the intervention trial was the Chinese immersion program, through which the following major steps were involved in implementing the intervention convergent design. First, quantitative and qualitative data were collected before, during, and after the immersion program. The two strands of data collection were “concurrent but separate--that is, one does not depend on the results of the other” (Creswell & Plano, 2011, p.78). After all the data were collected, the researcher analyzed the two sets of data “separately and independently” and got the initial results

from each set, which was then followed by the integration point, when the results from the two data sets were merged together through a joint display (ibid). Finally, based on the results from the joint display, the researcher interpreted to what extent and in what way the two sets of data provided an enhanced understanding of the case under study. For detailed information about the research procedures involved in the current study, please refer to Appendix A at the end of this proposal.

Priority of the current intervention convergent design was given to the qualitative strand because the primary purpose of the study was to explore students' Chinese learning motivation through their Chinese learning experience in an immersion program. Qualitative data collected through interviews, observations, documents and classroom products were primary sources to understand students' learning experiences. Moreover, as mentioned in Chapter 1, previous studies about language learning motivation mainly employed a quantitative approach. A qualitative perspective is critical in order to provide a deeper understanding of students' language learning motivation. Therefore, the qualitative priority in the current study not only filled the methodology gap in the literature, but also contributed to an holistic understanding of the research topic under study.

The integration point, also referred to as “the point of interface”, is the phase in which the quantitative and the qualitative phases intersect or mix together (Morse & Niehaus, 2009). In this study, data integration happened after both strands of data, the quantitative data and the qualitative data, had been collected and analyzed separately. Specifically, during the integration, “a meta-inference is drawn which integrates the

inferences made from the separate quantitative and qualitative data and findings” (Onwuegbuzie & Johnson, 2006, p.53). The results of integration were presented using the technique of joint display. More detailed information can be found in the section about addressing the mixed methods phase.

Rationale for Using the Mixed Methods Intervention Convergent Design

Quantitative research methods have been the primary research methodologies employed in the studies about language learning motivation due to the initial influence of social psychology and a concomitant emphasis on reliable, replicable, and generalizable results that can be applied to different types of language learners (Dörnyei & Ushioda, 2011; Guilloteaux, 2007). However, despite its significant contribution to motivation research, quantitative methods is not without disadvantages. Many researchers have pointed out that by using researcher-driven research techniques, such as surveys and questionnaires, a quantitative approach ignores the contextual variability of motivation and constrains language learners’ voices about their own learning experiences.

Qualitative methods have been advocated in the past decade, although it is still not commonly employed in the research on language learning motivation. Ema Ushioda (1994, 1996) is one of the earliest researchers who promoted the use of qualitative methods to study language motivation. Compared with the quantitative approach, qualitative methods are more focused on learners’ voices and experiences. Thus, it can always yield rich data through different ways, such as interviews, observations, and journal writing, that can help to examine motivation in the specific

natural context, in this case the actual learning environment where learners acquire language and culture skills rather than investigating it in isolation. On the other hand, qualitative methods have limitations as regards reliability and generalizability. Specifically, there are two major concerns: first, whether a researcher's interpretation of self-reported data from learners are reliable; second, since qualitative research only involves a small number of participants, whether the results produced are generalizable.

Given the fact that both quantitative and qualitative methods have disadvantages, a mixed methods approach is proposed (e.g., Wesely, 2009; Dörnyei 2007) in order to get a far greater understanding of motivation by drawing from the best aspects of both the qualitative and quantitative traditions while minimizing the impact of their limitations. This study chose the intervention convergent mixed methods design, which involved the separate collection and analysis of both quantitative and qualitative data, followed by a merging of the results from both strands of data. According to Creswell (2014), this design “intuitively makes sense” because both forms of data are brought together, which enables the researcher to gain a complete picture of students’ Chinese learning motivation from different aspects (p.37). Additionally, the intervention convergent design is regarded as efficient because both strands of data are collected “during one phase of the research at roughly the same time” (Creswell & Plano, 2011 P. 79).

The convergent design is employed by some researchers in studies about motivation. Wesely (2010) conducted a study with this design reporting on Spanish

and French learners' language learning motivation related to their transition between elementary and junior high school in immersion programs. The quantitative data was collected through a survey with 131 students who had graduated from five public elementary immersion schools. The qualitative data was collected through semi-structured interviews with 33 students from the same sample. Interview participants were selected by combining a convenience sampling technique with a modified stratified sampling of the population (Cohen, Manion, & Morrison, 2000) in order to interview at least one continuing and one non-continuing student of each gender from each school. That is, the sampling procedure for interview participants was independent from the quantitative strand. During interpretation, six distinct phases were involved: preliminary data analysis (P1), initial qualitative analysis-transcriptions and initial coding (P2), initial quantitative analysis-statistical analyses (P3), second iteration of qualitative theme analysis (P4), Exploration of integrated findings (P5), and mini case studies (P6) (ibid, p.302-304). Before integration, both strands of data were analyzed separately. In P4, the two strands were integrated, where not just areas with congruent qualitative results and quantitative results, but also areas with conflicting results from the two strands were analyzed and discussed. The final phase involved selecting some of the student participants for a deep analysis. The findings from this study offered new perspectives on language learning motivation and provided insights that would have otherwise been missed if either the quantitative surveys outcomes or the qualitative interview outcomes were the main source for drawing inferences. Wesely (ibid, p.309) also made further

observations regarding the benefits of employing the convergent design:

- *Social psychological constructs such as motivation benefit from the combined deductive and inductive approach featured in mixed methods research.*
- *Mixed methods research is well suited to exploring areas of education research where previous findings have been contradictory.*
- *A study with a mixed methods design can benefit from drawing on multiple theoretical frameworks in the analysis phase.*

Although Wesely mentioned in her study that the study adopted “a modified Explanatory Design” (ibid, p.299), we think it is a typical convergent design. Wesely’s strong call for identifying “contradictory, problematic, or counter-intuitive findings” (ibid, p.305) fits well within the framework of mixed methods convergent design.

Research Context: The Chinese Immersion Program

When this study was conducted, the Chinese language and cultural immersion program at the University of Nebraska-Lincoln was in its third year under the leadership of Dr. Aleidine J. Moeller, the program director, with funding support from STARTALK, which was funded by the U.S. Department of Defense. This study included students who attended the program in 2014 summer from July 6-20. During the program, all participants were housed in residential suites on UNL campus with all expenses related to the program being covered, including housing, meals and supplies. Specifically, the program was a one-way partial immersion program, where Chinese was used 90% of the class time. (See Chapter 2 for detailed information

about types of immersion education). The main purpose of the program was to enable students to be immersed in Chinese language and culture and to gain interest and support to establish Chinese programs in the state of Nebraska.

Sampling Procedure and Participants

Purposeful sampling was applied in this study for recruiting participants who could "provide the necessary information" (Creswell & Plano, p.173). Because the basic design in this study was a case study, which was bounded as the STARTALK immersion program at UNL, all the data were selected from the case. Therefore, the sample of participants was purposefully selected from individuals who attended the Chinese immersion program at UNL in 2014 summer with the target population of 25 students. This is discussed in detail in the data collection sections.

All 25 targeted students agreed to participate in the study, however, only data from 12 of them were analyzed, except when analyzing reliability of each motivational factor of the adapted AMTB (See details in Chapter 5). The 13 students' data were excluded from the study due to incompleteness, specifically none of the 13 students filled out the survey conducted after the program. As there were both qualitative and quantitative strands included in this study, the same sample of 12 students were used in both strands in order to relate and corroborate the two sets of findings. See Table 1 for student participants' profiles. To ensure proper attribution of information, participants were identifiable by name during data collection. Once all data were collected, a student code was assigned to each of them in order to link

different forms of data collected from the same person.

Table 1. Student participant profiles

<i>Stud. Code</i>	<i>Assigned name</i>	<i>Gndr</i>	<i>Age</i>	<i>Ethnicity</i>	<i>Grade in School</i>	<i>Native language (s)</i>	<i>Language(s) have studied</i>	<i>Time spent in China</i>
01	Claire	F	15	Caucasian	10	English	Spanish	No
02	Makenna	F	17	Caucasian	11	English	Spanish	No
							French	
03	Christina	F	15	Caucasian	10	English	Spanish	No
04	Maria	F	16	Caucasian	11	English	French	No
05	Diana	F	15	Caucasian	10	English	Spanish	No
06	Miranda	F	16	1/2 Caucasian 1/2 Filipino	11	English	Spanish	No
07	Cole	M	15	Caucasian	10	English	Spanish French	No
08	Jack	M	17	Caucasian	12	English	Spanish, Arabic, a little Chinese	Yes
09	Leo	M	18	Caucasian	12	English	Spanish	No
10	Dillion	M	16	Caucasian	11	English	French	No
11	Aiden	M	15	Caucasian	10	English	Spanish	No
12	Sam	M	16	Caucasian	11	English	French	No

Ethical Considerations

Gaining Permissions

University of Nebraska-Lincoln Institutional Review Board (IRB) approval was sought and granted (See Appendix B) before the immersion program started. With potential participants' contact information obtained from the program coordinator, an invitation email was then sent out inviting them to participate in the study.

Specifically, since all targeted student participants were high school students, most of

them under the age of eighteen when the study was conducted, an invitation letter was also sent out to their parent or legal guardian. In each invitation email, related consent forms were attached for participants to sign if they agreed to participate in the study, meanwhile, it was also explained in each email that paper copies of consent forms would be provided on the enrollment day if they preferred to sign on papers. The attached consent forms included "Youth Assent Form" for student participants (See Appendix C), and "Parent/Legal Guardian Informed Consent Form" for parent or legal guardian of student participants who were under age eighteen (See Appendix D). In the consent forms, participants were informed of the purpose of the research, the tasks that they would be expected to perform, and the confidentiality of the data collected from them. They were also told that their participation was voluntary and could be withdrawn at any time. The researcher received an email response from all 25 targeted participants that they agreed to participate in the study. All consent forms were signed electronically or physically and returned to the researcher before the initial of classroom instruction of the Chinese Academy.

Procedures and Role of the Researcher

As both quantitative and qualitative data were collected in the current study, data collection procedures generally involved three steps: first, informing participants of the purpose of the study and ensuring them of the confidentiality of data collected (Brown, 2001, p. 5); second, collecting the data; third, expressing thanks for their participation. Particularly, for the classroom observation, neither the teacher, nor student participants were told the specific time when an observation was conducted.

The reason for doing this was to avoid any potential behavior adjustments or distractions from participants during the observation. The reason that the researcher chose to do this was because she was one of the instructors in the Academy and it was her responsibility to sit in other instructors' classes, sometimes aiding the instructor who was giving the lesson, and sometimes just observing the class. Therefore, the researcher's presence in the classroom was quite normal to the teacher and all student participants. Not announcing the observation was helpful for participants to behave naturally and comfortably in the class. However, all participants were informed about the classroom observation when they signed the consent form and also when the study was introduced to them on the first day of the Academy.

In this study, considering that the researcher was one of the instructors and that she gave two-day lessons at the end of the Academy, to avoid any influence from the research on instructional activities, she played a less prominent role in collecting data during the Academy, but a full role in collecting data after the Academy ended. During the Academy, the first round of interviews with each student participant was conducted immediately after the Academy ended, that is, when all learning activities were completed. Two doctoral students majoring in education and not directly related to the Academy helped conduct 8 interviews (67%) in order to triangulate with the 4 interviews (33%) the researcher conducted. The second round of interviews with student participants took place one semester after the Academy either online or by phone due to the fact that students resided in different areas across the state and elsewhere in the United States. Since there was no potential instructional intrusion

involved this time, the researcher conducted all the interviews. The quantitative data collection procedures with three rounds of online survey were conducted at three different time points. The first and the second round took place when students were in the program administered by a program staff member who was not directly involved in any teaching activities; the third round of survey took place one semester after students left the Academy by sending out a survey link to each student participant's email address. All students were requested to complete the survey by themselves within two weeks.

Besides observations, interviews, and surveys, other data collection procedures were also involved in this study but not discussed in this section of the study, because data produced in those other procedures, such as collecting students' discussion entries on Blackboard, required no additional work from participants as they were completed as a regular part of the program. Therefore, there was no need to assemble participants together or call them one by one in order to collect those data. What the researcher did was to collect the data after participants finished their assigned learning tasks. But as previously mentioned, all these procedures were clearly stated in the consent forms signed by participants. For detailed information about data collected in this study, please refer to "data collection" sections in this proposal.

In order to ensure the confidentiality of personal information from all participants and prevent potential ethical issues, the researcher assigned a code to each participant to link different forms of data collected from the same person. These codes were then used during data analysis in identifying participants in all paper and

computer files. In addition, all files were stored in a locked cabinet in the researcher's office and were destroyed after the study was complete. More importantly, data analysis in this study did not get started until the Academy ended. Lastly, the information obtained in this study will be reported in aggregated forms if published anywhere. No individuals will be recognized from the report.

Qualitative Phase

Data Collection

Multiple sources of qualitative data were collected in this study to explore students' experiences in a residential Chinese immersion program and their motivation towards Chinese learning during and beyond the program. As shown in Table 2, four types of qualitative data were included: interviews, observations, documents and products. These data were collected at different time points during the study as reflected in the procedural diagram (Appendix A).

Table 2. Multiple sources of qualitative data

<i>Types of Data</i>	<i>Sources of Data</i>	<i>Number</i>
Interviews	12 student participants (SPs)	12 x 2 (two rounds with each SP)
Observations	classroom	4 (four classes of four teachers)
Documents	SPs' application letters	12
	Program curriculum	1
Products	SPs' discussion entries on Blackboard	2 rounds
	SPs' journal entries	12 x 14 (14 daily journals from each SP)

Interviews. Interviews were conducted with 12 student participants. In-person semi-structured interviews were employed to better understand each participant's perspective on Chinese learning. Depending on the interview questions and duration of participants' responses, each interview with student participants lasted about 30 minutes. With permission from participants, all interviews were recorded with a digital voice recorder. The first round of interview was conducted face-to-face on the UNL campus in July, 2014, and the second round was conducted online through Skype or by phone in January, 2015. The same interview protocol was used in the two rounds of interviews except for minor changes on specific questions (See appendix E) due to the different contexts where student participants were during the Academy and after the Academy. Interview questions were mainly about students' Chinese learning experiences and their motivation toward learning Chinese. Specifically, questions about students' learning motivation were deliberately designed to address motivational factors of the AMTB used in this study (see the section of quantitative data collection in this proposal) to ensure that the same concepts "be addressed in both the qualitative and quantitative data collection so that the two databases can be compared or merged" (Creswell and Plano, 2011, p.184). On the other hand, since all interview questions were open-ended, they did not limit students' responses. During the interview, while generally followed the planned questions on the interview protocol, the researcher and the other two interviewers agreed that the actual structure of each interview was largely determined by the interviewee (Merriam, 1998). Mostly commonly, new

prompt questions were added to clarify the meaning or to encourage participants to elaborate on certain points.

Observations. Classroom observations were conducted in four of the five teachers' classes, not including the classes where the researcher acted as a teacher, with the same group of student participants, each lasting around one hour. Specifically, during class observations, the researcher acted as a participant observer, not a teacher. Since each of the four teachers was mainly responsible for teaching a specific topic, which students learned continuously during 3 day segments, the four teachers taught at different time periods during the program, specifically, one teacher taught at the beginning, one at the end, and two near the middle of the program. Therefore, observations conducted in each teacher's class would not only help to see how students behaved in different teachers' classes, but also see how they performed at different times during the program. The same observation protocol (See Appendix F) was used for each observation, which included two columns: the descriptive notes column and the reflective notes column. The descriptive notes recorded the activities that took place in the class chronologically; and the reflective notes recorded the observer's (here the researcher's) reflections, insights and concerns related to the study (Creswell, 2007b). One major goal for class observations was to find evidence about students' motivation towards learning Chinese and their interaction with teachers and other classmates.

Documents. Two forms of documents were collected: students' application letters and the program curriculum. Since the application letters were produced before

students enrolled in the program, they were mainly used for understanding students' prior ideas and experiences about Chinese language and culture, especially their original motivation towards enrolling in a Chinese immersion program. Specifically, in the application letter, each applicant was required to write a brief essay (approximately 200 words) addressing how the immersion experience would benefit him/her. The program curriculum was also included to provide a macro perspective of students' immersion experience, specifically how the program as a whole helped to immerse students in Chinese language and culture, which could also be used to triangulate with data collected from discussion entries and micro perspectives.

Products. Products here refer to discussion entries and journal entries produced by student participants on Blackboard. Since the discussion entries were produced before students enrolled in the program, they were mainly used for understanding students' prior perceptions and knowledge about Chinese language and culture. For the discussion board, prompt questions concerning Chinese learning (See Appendix G) were also provided to stimulate the discussion among students. For the journal entries, all students' journals wrote during the 14-day Academy were collected. See Appendix H for a list of journal writing tips (Moeller, 2013) used each time when students wrote their journals. Students' journal entries directly recorded students' learning experiences and served as a source of triangulation of collected data mentioned above.

Data Analysis

In order to explore students' Chinese learning experiences and understand their Chinese learning motivation during and beyond the Academy, the researcher worked

with a variety of qualitative data following a grounded theory approach (Strauss & Corbin, 1998). First of all, all digitally recorded interviews with participants were transcribed verbatim. Next, the researcher read the interview transcripts along with other collected qualitative data several times. After getting an overview of all the data, the researcher then started the coding process by using the qualitative data analysis software, MAXQDA. The overall process generally included three phases: open coding, axial coding, and selective coding. In the process of open coding, the researcher coded anything that seemed to inform students' Chinese learning experiences. In axial coding, the researcher organized the initial codes produced during open coding into broader categories. Then, in selective coding, the categories produced during axial coding were refined in order to "develop more analytic categories or clusters" (Bazeley, 2013, p. 126). In refining the categories, quotes from the data were used to provide evidence for more sustainable themes.

Validation

A critical issue for the qualitative phase was to validate the conclusions drawn from the data. Several validation strategies were used in this study. First, the strategy of triangulation was employed by using multiple sources of qualitative data as shown in Table 2. These different data sources not only provided multilevel perspectives about students' Chinese learning experience and “[gave] a fuller picture and address[ed] many different aspects of phenomena” (Silverman, 2000, p.50), but also helped to eliminate biases from relying on only one data source (Lincoln and Guba, 1985). Second, member checking was carried out with participants to ensure that the

researcher accurately interpreted the data. Specifically, the researcher sent a summary of qualitative findings from current study to participants for their comments and feedback. Any questions raised were discussed and reflected in the final report of the study. Third, peer debriefing were also used, by which I invited one of my colleagues to review and discuss the themes emerging in this phase to see if she agreed with the results. Lastly, as a researcher, I have been regularly reflecting on my role. Given the fact that I was one of instructors for participants, critical reflection becomes even more important for me to avoid potential biases to ensure impartiality and neutrality during the study.

Quantitative Phase

Data Collection

Quantitative data in this study was collected from an adapted survey based on Gardner's Attitude/Motivation Test Battery (AMTB) (1985b, 2004) and socio-educational model (See Figure 2). The survey was administered with the same sample of 12 student participants used in the qualitative strand to evaluate the fluctuation of students' Chinese learning motivation over time. Participants completed the survey online through the platform, Qualtrics, at pre-survey (See Appendix I), post-survey (See Appendix J), and follow-up survey (See Appendix K) as reflected in Appendix A, each lasting around 15 minutes. Particularly, the time points assigned for the three rounds of survey was purposefully designed to roughly match with the three stages in Dörnyei and Ottó's (1998, 2005) process model of student motivation: the

preactional stage, the actional stage and the postactional stage as shown in Figure 3.

(See the section “The Constructs of the Process-oriented Model of Student Motivation” in this dissertation). The "action" here specifically refers to the case of "learning Chinese in an immersion program". Therefore, the three motivational stages in combination with the three survey time points help to illustrate the "time" dimension of motivation. During each motivational stage, corresponding qualitative data were collected, which is further discussed in the mixed methods phase section.

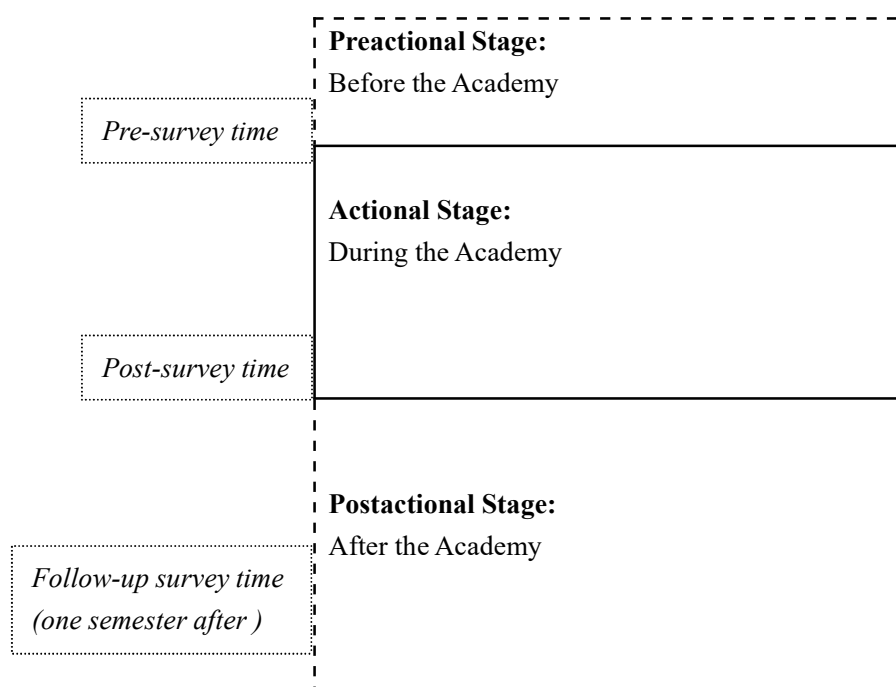


Figure 3. Survey times and motivational stages (Dörnyei and Ottó, 2005)

Besides the AMTB section, a section about students' background information (Moeller, A., & Hurlbut, S., 2013) was specifically included in the pre-survey in order to know more about the participants (See Appendix L). In the two post-surveys, participants only provided their name to help the researcher match the three surveys

completed by the same person.

Adapting and Piloting the AMTB

AMTB was first developed by Gardner (1985a) to fill the need for assessing the non-linguistic goals of second language programs, "emphasiz[ing] such aspects as improved understanding of the other community, desire to continue studying the language, an interest in learning other languages, etc.", as opposed to linguistic goals "focus[ing] on developing competence in the individual's ability to read, write, speak and understand the second language" (Gardner, 1985b, p.1). It is reported that AMTB has very high reliability (Gardner, 1985a). According to the AMTB reliability report based on a sample of 5189 students in Grade 7 to 11, 89% of the Cronbach coefficient alpha exceed .70. with the median reliability of .85 (Gardner, 1985b). However, since AMTB was originally designed targeting English-speaking Canadian students who learned French as a second language in elementary and secondary school, its items are concerned primarily with French. In order to use AMTB in the current study, it was adapted accordingly to fit with the specific context of this study as recommended by Gardner stating in his study that "[p]eople are encouraged not to simply take a set of items [off of the AMTB] and administer them unthinkingly in any context" (1985a, p. 525).

Specifically, the following adaptations were made based on the Chinese learning immersion context involved in the current study:

- (1) Eliminate the section about semantic differential assessment of the language teacher and the language class due to the fact that more than one Chinese teacher

taught during the program and each of them taught at different times during the program. More than that, in a immersion program, students do not learn a target language, but learn content knowledge through that target language, so they do not actually have a language teacher, or language class. Therefore, including this section in the survey could easily cause students' confusion.

(2) Eliminate the factor, "Parental Encouragement", considering that when students were in the program, their parents were not directly involved. However, this may not have been a good decision as some students, during the course of the interviews, mentioned the influence of their parents although I did not specifically ask any questions about their parents. While this is a limitation about the design of the survey used in this study, parental influence was discussed by some students during interviews. It proves that mixed methods is the optimal research methodology for the current study in that qualitative data and quantitative data complement each other and provide a more complete picture of the case under study.

(3) Eliminate the only item included in the factor, "Orientation Index", since the item tests about language learners' instrumental and integrative orientations, which are thoroughly tested by items under the two factors: "instrumental orientation " and "integrative orientation" .

(4) Combine two similar factors, "Attitudes toward French Canadians" and "Attitudes toward European French people" into one factor "Attitudes toward Chinese people" based on the specific Chinese learning context in the United States.

(5) Add 8 items from Gardner's 2004 version of AMTB to the end of each

adopted factor respectively. The purpose of each added item is to triangulate with the other items addressing the same factor.

(6) Alter the wording of some items to be clearer and more straightforward.

Specifically, since the survey was conducted three times, when students did the pre-survey at the very beginning of the program, most of them had never learned or attended a Chinese class before. Therefore, some assumptive phrases, such as "When I begin learning Chinese," were added to help students' understanding.

(7) Change items that are negatively-worded into positively-worded items to prevent any confusion for student participants.

(8) Eliminate some items in order to control the length of the survey while still preserve its integrity, given that each student participant would complete the survey three times and that students may not have long attention spans to complete a lengthy survey.

The adapted AMTB included 40 items under seven motivational factors. Three item formats, including a Likert scale, rating scale and multiple choice with ordinal responses, were used and divided into three sections with items having the same format in one section. The following Table 3 is an overview of the comparison between the original AMTB and the adapted AMTB for this study.

Table 3. Gardner's AMTB (1985) and the adapted AMTB

<i>Motivational Factors in Gardner's AMTB (1985) (N=134 items)</i>	<i>Motivational Factors of the Adapted AMTB in Current Study (N=40 items)</i>
Attitudes toward French Canadians (n=10)	Attitudes toward Chinese people

Attitudes toward European French People (n=10)	(n=6+1*)
Interest in Foreign Languages (n=10)	Interest in Foreign Languages (n=5+1*)
Attitudes toward Learning French (n=10)	Attitudes toward Learning Chinese (n=5+1*)
Integrative Orientation (n=4)	Integrative Orientation (n=4+1*)
Instrumental Orientation (n=4)	Instrumental Orientation (n=4+1*)
Orientation Index (n=1)	
French Class Anxiety (n=5)	
Parental Encouragement (n=10)	
Motivational Intensity (n=10)	Motivational Intensity (n=5+1*)
Desire to Learn French (n=10)	Desire to Learn Chinese (n=4+1*)
French Teacher - Evaluation (n=10)	
French Teacher - Rapport (n=5)	
French Teacher - Competence (n=5)	
French Teacher - Inspiration (n=5)	
French Course - Evaluation (n=10)	
French Course - Difficulty (n=5)	
French Course - Utility (n=5)	
French Course - Interest (n=5)	

(1* refers to one added item with rating scale format from Gardner's 2004 version of AMTB.)

Before using the adapted AMTB in the current study, it was piloted with a sample of five students who attended the same immersion program in the previous summer (2013). The researcher first sent a survey to each of the five students. After all of them completed the survey, an online focus group discussion was organized in order to get feedback from the participants concerning the survey. The main issue raised by all participants was about the suitability of language in some items. Based on their suggestions, some small changes in item wording were made.

Data Analysis

The quantitative data collected in this study was analyzed with the statistics software SPSS. In the initial phase, before inputting data into SPSS, I first converted student responses from the adapted AMTB into "coarse interval data" as opposed to "pure interval data", because two of the item formats included in the survey, the Likert

scale and multiple choice, yielded ordinal data in the first place. Since SPSS assumes interval data, the two sets of data were then converted into interval data (e.g., assigning 1 for a "strongly disagree" response, 2 for a "moderately disagree" response, 3 for a "slightly disagree" response, 4 for a "neutral" response, 5 for a "slightly agree", 6 for a "moderately agree" response, and 7 for a "strongly agree"), which is quite popular in social science studies. After that, all data were placed into SPSS and analyzed in terms of descriptive and inferential statistics. Descriptive statistics, mainly including means, percentages and standard deviations, were calculated with each motivational factor of the three rounds of survey to summarize the data obtained. Moreover, dealing with the data descriptively helped the researcher familiarize herself with the data sets. For inferential statistics, a repeated-measures analysis of variance (ANOVA) was used to identify any motivational changes that occurred over time from the pre-survey to the post-survey to the follow-up survey.

Validation

Three validation strategies were used in the quantitative phase of the study. First, using an adapted survey based on Gardner's AMTB which has high reliability with the Cronbach coefficient alpha exceeding .70 and the median reliability of .85 (Gardner, 1985b). Meanwhile, the AMTB is a widely accepted instrument dominant in the foreign language field for more than three decades, which helps provide content and construct evidence for the validity of the survey used in this study. Second, piloting the adapted survey before it was carried out in the current study. More than that, the pilot study was conducted with five students at the same level of participants

in this study, which makes their feedback more relevant. Third, in the phase of quantitative data collection and analysis, the researcher regularly visited the Nebraska Evaluation and Research center at UNL, where I shared and discussed with doctoral students majoring in statistics and methodology experts about my survey, my data, and also sought help from them as to how to adapt a survey and how to use SPSS analyzing quantitative data. This, to some extent, helps to ensure the quality of the quantitative data collection and analysis process.

Mixed Methods Phase

Mixed Methods Procedures

The point of mixing between the qualitative strand and the quantitative strand occurred during the interpretation phase and also at the design level within the case study. After the qualitative data and the quantitative data were collected and analyzed separately, the researcher looked across the two sets of results to see how the synthesis of, or comparison between the two, could provide an enhanced understanding of the case under study, that is, students' Chinese learning motivation during and beyond an immersion program. Interpretations or "meta-inferences" were drawn in this process (Teddlie & Tashakkori, 2009, p.300) . Specifically, results from the two databases were compared based on the three motivational stages from Dörnyei and Ottó's (1998, 2005) process model of student motivation: the preactional stage, the actional stage and the postactional stage (See Figure 2). To make the comparison, the three rounds of surveys were first assigned accordingly to each

motivation stage, given that the survey times were roughly matched with the three motivational stages as mentioned before. Accordingly, the pre-survey was assigned to the preactional stage as both took place before the Academy; the post-survey was assigned to the actional stage as both took place during the Academy; the follow-up survey was assigned to the postactional stage as both took place after the Academy. Of particular importance here is that besides the post-survey, a pre-survey was also assigned to the actional stage in order to examine the motivational change from the pre-survey to post-survey results during this stage; the same happened at the postactional stage where all the three surveys were assigned in order to see the motivational changes from pre-survey to post-survey to follow-up survey. Qualitative results based on the collection time were also assigned to corresponding motivational stages. The two databases were then compared based on motivational factors looking for congruence, discrepancy and relationships to develop a more complete picture of students' Chinese learning motivation (See Chapter 6 for detailed information). Particularly, when there were discrepant findings, existing data were reexamined to resolve the discrepancies. When necessary, additional data were further collected to reconcile the discrepant findings.

Validation

Validity has been identified as one of the most important aspects of a research project (Tashakkori & Teddlie, 2010). According to Creswell and Plano (2011), validity in mixed methods research refers to “employing strategies that address potential issues in data collection, data analysis, and the interpretations that might

compromise the merging or connecting of the quantitative and qualitative strands of the study and the conclusions drawn from the combination” (p.239). In the current study, based on the list provided by Creswell and Plano (ibid, p.240-241) about potential validity threats and strategies when merging data in concurrent convergent designs, the following validation strategies were adopted.

First, in the phase of data collection, validation strategies concerning sample selection, sample sizes, data collection procedures, and research questions were used. Specifically, the same sample of 12 student participants from the Academy was used for the qualitative and the quantitative strand to make the data collected in the two strands comparable. Separate data collection procedures were used for the two strands to minimize the potential bias from one strand on the other. Parallel questions addressing the same topic about students’ Chinese learning motivation in an immersion program were provided in both qualitative and quantitative data collection to ensure that related data were collected in the two strands.

Second, in the phase of data analysis, validation strategies concerning data convergence approaches and data comparison were applied. Specifically, a joint display (see Chapter 6 for detailed information) was developed arraying not only motivational factors by themes, but also presenting congruent and discrepant findings with explanations, which helps to portray the data mixing process and results in a clear and understandable way. Quotes from the qualitative data were used to match the statistical results from the quantitative data when comparing the two sets of results to ensure logical comparisons.

Lastly, in the phase of interpretation, validation strategies concerning divergent findings and mixed methods questions were addressed. Specifically, when there were divergent findings, the researcher either reexamined the available data, or gathered more data to find the causes to reconcile the divergence. The researcher also discussed the mixed methods question based on the data convergence to determine if the specific research design adopted in this study helps to enhance the understanding of the case involved.

Adopting these validation strategies in the current study greatly help the research to yield high quality meta-inferences.

Summary

This chapter reports on the intervention convergent case study design used in this study, including the parallel qualitative phase and quantitative phase, and then the mixed methods phase where the results from both qualitative phase and quantitative phase merged together. First of all, this chapter presents the philosophical assumptions of this study and describes the "case" study which was an intervention convergent design. Characteristics of the design and rationale for using the design are introduced. Next, the research context, sampling procedures and ethical concerns involved in this study are discussed. Lastly, the chapter addresses the procedures of research implementation in the qualitative, quantitative and mixed methods phases respectively, including data collection, data analysis, and validation approaches.

CHAPTER 4: QUALITATIVE FINDINGS

Two Case Studies

To provide a general idea about students' Chinese learning experiences and their descriptions about learning motivation during and beyond the Academy, two selected individual cases representative among all student participants were investigated. Available data sources, including application letters, online discussions, journals, and interviews, were combined to give a rich description of each case. The rationale for presenting the two case studies is to provide a background for the analysis of the seven motivational factors. These two selected individual cases, which were representative among all participants in this study, demonstrated how the two students' Chinese learning motivation fluctuated throughout the learning stages of before, during, and after the Academy. To further look at all student participants' Chinese learning motivation, their learning experiences and perspectives were also analyzed based on the three learning stages. Specifically, each motivational factor was investigated by looking at its development throughout learning stages of before, during, and after the Academy in order to see the motivational trajectory.

Case Study One: Cole¹⁵

Cole was in the 11th grade at the time of the Academy. As an English native speaker, Cole had also learned Spanish for two years, and French for one year. When I first met him, he struck me as a friendly and sensible student who was easy to talk to.

¹⁵ Pseudonyms are used for individual students in each case study.

On the first day of the Academy, when he saw me moving a pile of iPads into the classroom, he offered to help. During an afternoon break, we chatted comfortably about what he usually does in the summer and his decision about learning Chinese. In accordance with what he said in the application letter, Cole always wanted to learn Chinese. However, Chinese was not offered at his school. So he applied for this Chinese Academy as suggested by his Spanish teacher.

Before the Academy, Cole showed great interest in learning Chinese. He commented in a discussion entry that "Chinese language and culture have sparked an interest in me (him) all my (his) life," and shared that his family "guided and counseled" two foreign exchange students from China. He then expressed his desire to communicate in Chinese, "If I were able to speak Chinese to X and Y (the two exchange students), I would then be allowed to communicate and share an even more special bond with them." Accordingly, Cole was intrinsically motivated to learn Chinese to communicate with Chinese speaking people and learn Chinese culture. Moreover, Cole had clear intentions about learning Chinese, as he said: "I want to learn the Chinese language to get a head-start on my college education and my planned career to work for the government as a translator, it would mean a lot if I could get a head-start now, making it much easier for me to achieve my goals in the future." Accordingly, he was also instrumentally motivated to learn Chinese to prepare for his "planned career". Although integrative orientation and instrumental orientation are two general inclinations for learning languages, the two orientations "need not be independent"; instead they can positively relate to each other to

strengthen motivation (Gardner, 2010, p.17-18). In Cole's case, the integrative goal to communicate with Chinese people and know about Chinese culture could help achieve his instrumental goal to be a translator, especially when translating Chinese-related materials. Thus, Cole's two motivational orientations were positively related to each other, which indicated his motivation to learn Chinese before the Academy.

During the Academy, Cole was actively engaged in learning. When reading his journal entries, I was greatly impressed by his hard work. In the journals, he not only recorded what happened, but also reviewed the Chinese language that he learned each day in the Academy. Chinese could be seen in almost all of his Academy journals. For example, in the middle of the Academy, Cole wrote down a paragraph of Chinese in one of his journals, “我叫上天峦。我十五岁。我喜欢吃。我不喜欢茶。我喜欢饺子。我的生日是九月二十四日。我属虎。我的妈妈他喜欢茶。我的爸爸不喜欢茶。老少平安” (My name is Shang, Tianluan. I am 15 years old. I like eating. I don't like tea. I like dumplings. My birthday is September 24th. I was born in the year of Tiger. My mother likes tea. My dad doesn't like tea.), where he reviewed language points, including age, birthday, animal sign, and Chinese food, that he had learned in the past week and applied them in a self-introduction context. From one short Chinese sentence on the first day to a paragraph of Chinese after a week of study in the Academy, Cole made great learning progress. In one of his journal entries, Cole shared his excitement about how much he had learned in the Academy: “As my stay here is coming to a close, I'm beginning to realize how much I have learned...I have

learned so much more here in two weeks than I could learn anywhere else in two months.” Moreover, Cole expressed his confidence in Chinese learning during the interview right after the Academy: “In the two weeks, I feel I have got more of a feel for the Chinese language, because each day I get to know more and understand more.” Both the learning progress and learning confidence enhanced Cole’s motivation for learning Chinese. At the end of the Academy, he expressed his desire to continue learning Chinese, as he said, “I have really been enjoying myself in this Academy and I am trying to look into distance learning like over Skype. So I can continue my Chinese education.” More than that, Cole’s high motivation was also reflected in his attitude toward learning Chinese characters. Being aware of the challenge of learning “extremely complicated” Chinese characters, he did not give up learning as some learners would do and deeply believed that “a lot of practice and study” would finally lead him to “successfully recall and recognize Chinese characters.” Therefore, Cole’s learning confidence gained during the Academy sparked his motivation for learning Chinese, which was reflected in both his desire to keep learning Chinese and his positive attitudes toward learning Chinese characters.

One semester after the Academy, Cole described his motivation for learning Chinese as “high”, but “a little bit lower” than that right after the Academy. He explained that the decreased motivation was related to “the fact that my (his) school doesn’t have Chinese classes”. Without classes being offered at school, Cole tried to learn Chinese at home by himself. However, being busy with other school subjects, Cole felt it “challenging” to keep learning Chinese, as he said, “I review learning

materials from the Academy, but I haven't really taken it seriously and gone and done a while of studying, just because I have other classes I have to study for." Besides, Cole also mentioned the difficulties of teaching himself Chinese, "It is non-structured, there is nothing that I can really have that stable, it's just kind of me looking things up, I don't have like a solid study path or a curriculum." However, despite the time challenge and learning difficulties, Cole shared experiences of using Chinese in daily life, as he said, "I made better friends with my friend from China. We became closer and more better friends after I came back from the Chinese academy. We talk sometimes in Chinese." Therefore, Cole did not actually stop learning Chinese after the Academy, though he described his motivation for learning Chinese not as high as that of right after the Academy.

Cole thus provided us with a case of a student whose motivation for learning Chinese fluctuated throughout the learning process. Before the Academy, Cole showed his learning motivation as both integratively-oriented for opening to the Chinese community and instrumentally-oriented for career development. During the Academy, the productive learning experiences built up Cole's confidence about Chinese learning, which thereafter further promoted his learning motivation. One semester after the Academy, Cole described his motivation as "a little bit lower" than right after the Academy due to reality issues, however, he still tried to practice Chinese with friends.

Case Study Two: Makenna

Makenna was in the 10th grade at the time of the Academy. Being raised in a

bi-lingual family, she described herself as a native speaker of both English and German. Besides, she had also learned Spanish for three years at the time of the Academy. Because of her active participation in various activities during the Academy, she impressed me as an engaging and enthusiastic student who was serious about learning.

Before coming to the Academy, Makenna expressed her interest in learning different languages. “All languages have always fascinated me, and I plan to fluently learn several, including Chinese,” she shared in a discussion entry. Particularly, she pointed out that Chinese is “a popular language”, which is “widely spoken around the world.” She also expressed her desire to communicate with Chinese people, which indicated her integrative motivation to learn Chinese, as she said: “Being able to communicate with another 1.3 billion people in the world intrigues me. I would love to share my experiences and exchange ideas with people throughout the world.” At the same time, Makenna articulated her concern about the difficulty in learning Chinese: “Just a cursory internet search asking about the difficulty shows that it (Chinese) is incredibly difficult and that it is rated as one of the most difficult languages to learn.” With the concern, she took the opportunity to learn Chinese in the Academy as a way to “look at and experience and try out the Chinese language to see if I (she) would be able to do it”. At the same time, she mentioned that the Academy learning experience would build “a good base” for her to continue learning in the future. Therefore, we can see that while Makenna was integratively motivated to learn Chinese, she had a tentative attitude about learning Chinese. On the one hand, she

expressed her desire to communicate with more people in Chinese; on the other hand, she realized the challenge of learning Chinese. Thus, learning Chinese in the Academy was taken as an opportunity to “try out” learning Chinese, which would help to decide whether she would continue learning in the future.

During the Academy, Makenna showed more motivation for learning Chinese. When I read her journal entries, I was greatly impressed by her enjoyment of learning Chinese. In the journals, she recorded what happened and shared her learning excitement each day. The joy of learning could be seen in almost all of her Academy journals. An example was from one of her journals written toward the end of the Academy, "I had another great day today here at the Chinese Academy!.....I am always feeling like I am learning, which always makes me happy. I can't wait for tomorrow!" The exciting and positive attitudes actually indicated Makenna's high motivation for learning. Particularly, she shared the “enjoyable” learning experiences during the Academy, which made her feel that learning Chinese was “doable”:

I like the way we are taught; how the teachers bring games, songs or stories into the class to help us learn. We are not just learning the vocabulary or the grammar. We learn traditional Chinese festivals and the stories behind them; through them, we learn the language. We play games but actually practicing the language we have just learned. Through contextualizing, repeating and using the language, learning becomes doable and enjoyable. I really enjoy learning Chinese here (in this Academy).

With positive learning experiences during the Academy, Makenna gained confidence

in learning Chinese, which thereafter enhanced her learning motivation. During the interview at the end of the Academy, she expressed her tendency to continue learning Chinese, as she said, “I’ve never looked at Chinese as a career, but now I am considering it.” From before the Academy when Makenna tended to “try out” learning Chinese to the end of the Academy when she considered Chinese as a career option, we can see her enhanced motivation for learning Chinese once again.

One semester after the Academy, Makenna expressed that her motivation for learning Chinese was “almost the same as (right) after the Academy” and emphasized that learning Chinese “is something I (she) do(es) want to do in my (her) life.” During the interview, she shared her expectation to continue learning Chinese: “I wanna continue to learn and become at least more fluent than I am right now. I just want to learn more, because it’s really intriguing once I started. I know that I can go really far if I keep working on it. ” However, at the same time, she pointed out the challenge of learning Chinese after the Academy because of no exposure to the language, as she said, “I am a small town girl, you know 7000 people. Our school only offers Spanish. I don’t know any Chinese people in the town.” She once drove to a Chinese restaurant in the neighboring town where she spoke Chinese with the waitress, but that was “the only chance” she got to speak Chinese after the Academy. She tried to teach herself Chinese, but found it was “a lot harder” without help, as she said, “Without someone who knows Chinese I can go back to, it’s very difficult to learn Chinese and learn it correctly.” Although she kept learning Chinese by herself in the rest of the summer after the Academy, when the fall semester started at school, she decided to put it aside

for a while, as she said, “It is my last year of high school, and I am too busy to learn Chinese.” Meanwhile, she expressed that she would like to continue learning Chinese in college. Therefore, while Makenna had motivation to keep learning Chinese after the Academy, the challenges emerged in Chinese learning and reality issues concerning the lack of language exposure and her busy schedule finally made her “put Chinese aside”.

Makenna thus provided us with a case of a student whose motivation for learning Chinese changed at different stages of learning as related to her learning experiences. Before the Academy, learning from the internet that Chinese was “one of the most difficult languages to learn”, Makenna shared a tentative attitude about learning Chinese and took the opportunity to study in the Academy as a way to “try out” learning Chinese. During the Academy, because of positive and enjoyable learning experiences, Makenna showed higher motivation. One semester after the Academy, Makenna did not persist in learning Chinese in face of the reality with no exposure to the language and no time for learning the language. However, she claimed that she was still motivated to learn Chinese and expected to learn it in the future.

Discussion

Cole’s and Makenna’s cases demonstrated how their Chinese learning motivation fluctuated throughout learning stages of before, during, and after the Academy as related to different learning experiences. Their motivational trajectory and experiences were representative among student participants in this study. With prior

foreign language learning experiences, both Cole and Makenna showed a high baseline of motivation for learning Chinese before the Academy. Cole was integratively motivated to learn Chinese to know more about the people and culture of the Chinese community, and at the same time, instrumentally motivated to prepare for future career; Makenna was integratively motivated to communicate with people around the world, and meanwhile, recognizing the challenge of learning Chinese. Learning Chinese in the Academy for two weeks, with positive and enjoyable learning experiences that helped increase learning confidence, both Cole and Makenna showed higher motivation than before the Academy. In the following semester after the Academy, facing the learning reality with no exposure to Chinese language, no support in learning Chinese, and no time for learning Chinese, Cole described his motivation as “a little bit lower” than right after the Academy but still practiced Chinese with friends; Makenna “put Chinese aside” but expected to continue learning it in the future.

In the rest of this chapter, all student participants’ (see Table 1 for all participants’ background information) learning experiences and perspectives during and beyond the Academy were further analyzed to look at their Chinese learning motivation throughout the three learning stages. In order to facilitate the later mixing of the qualitative and the quantitative data, emerging themes were categorized according to motivational factors from the adapted AMTB (See Table 3), specifically including: integrative orientation, interest in foreign languages, attitudes toward Chinese people, motivational intensity, desire to learn Chinese, attitudes toward learning Chinese, and

instrumental orientation.

Integrative Orientation (IO)

Integrative Orientation refers to the reason for learning Chinese to communicate with people speaking Chinese to satisfy “social as opposed to purely instrumental objectives” (Gardner 2010, p.116). Specifically, it is to assess the extent to which the social aspects of Chinese communication are seen as important to the participants.

Two themes related to Integrative Orientation emerged from the qualitative data: willingness to communicate, and openness to the target community.

Willingness to Communicate

Willing to use Chinese to communicate with people who speak or know Chinese emerged as a common theme. Before the Academy, many participants expressed their willingness to communicate with relatives or friends who speak Chinese. Claire has an uncle who is from China; "Although my uncle speaks English, I would like to talk to him in his language (Chinese)," she shared in a discussion entry. Sam has a little brother who speaks both English and Chinese; "I would like to be able to talk to him in both languages," he wrote in the application letter. Maria's uncle married a girl from China who speaks little English; "I really want to have a conversation with my aunt in Chinese," she noted in a discussion entry. Jack was from a high school where there were Chinese students, "I would like to be able to interact with the Chinese speaking students in their language," he wrote in the application letter. Willingness to communicate with nearby people who speak Chinese indicated participants'

willingness to know Chinese.

During the Academy, participants tried communicating using Chinese. In order to create a Chinese immersion environment from the first day of the Academy, while considering that all participants were beginning learners, , the Academy instructors provided each participant a sheet of paper with basic Chinese that could be used for daily communication, such as greetings, inquiries, and requests. Both pinyin and English translation were added in order to help participants understand and use Chinese. Participants made good use of this resource to help their Chinese communication. During the interview right after the Academy, Christina shared her enthusiasm for using Chinese:

Every time when I say something, I try to think how to say it in Chinese. Like the first time when I asked a teacher: ‘我可以去厕所吗?’ (May I go to the bathroom?), I had the note paper with me and I was like reading the sentence to the teacher. But after using it several times, I can say it very easily now. It gets me so excited when I can use Chinese to say something, even a Chinese word or a very simple Chinese sentence.

In sharing the excitement, Christina indicated her desire to communicate in Chinese.

In addition, communicating in Chinese helped participants feel "a closer bond" with Chinese people. In the Academy, besides speaking Chinese with each other and with teachers in the Academy, participants also got the chance to practice Chinese with 15 Chinese teachers from a STARTALK Teacher Institute program, a professional training program for Chinese teachers, which was held concurrently with

the Chinese Academy in the same building. Most teachers from the Institute are Chinese native speakers. Through communication with these teachers in a real-life context, many participants found that speaking Chinese could help to build a closer bond with Chinese people. "Although I can only speak very basic Chinese, it helps me get closer to Chinese people," Leo said in the interview right after the Academy. Aiden, who visited China before the Academy, when recalling his visit, said: "...the one thing I regret from my visit was not being able to actually talk with people there.....I would like to use what I have learned in this Academy to better connect with people there when I visit China next time." The closer bond with Chinese people built through communicating with them in their language further increased participants' willingness to communicate with Chinese people.

One semester after the Academy, besides sharing their "proud moment" of speaking Chinese with nearby friends, participants expressed their desire to speak Chinese to "communicate with more people around the world" and "exchange ideas with people he (or she) otherwise would not be able to understand". A typical response was from Jack: "With Chinese, I can communicate with so many people in the world. I can go to Beijing, Shanghai, and every city of China, and talk with the local people there." Speaking Chinese with people from around the world and whom one even do not know, indicated participants' willingness to learn Chinese.

To conclude, participants showed their willingness to communicate with people in Chinese throughout their learning process. Before the Academy, students showed their willingness to communicate with nearby relatives or friends who know or speak

Chinese. During the Academy, participants actively used Chinese while communicating with both teachers and classmates. Moreover, speaking Chinese with native speakers in real-life contexts helped them feel "a closer bond" with them. One semester after the Academy, participants expressed their desire to use Chinese to communicate with people around the world. From communicating with nearby people to communicating with people around the world, participants' expanded their Chinese communication circle indicated their motivation for learning Chinese.

Openness to the Target Community

Openness to the Chinese community emerged as a common theme.

Before the Academy, participants showed their interest in Chinese culture, which they described as "interesting", "phenomenal", "amazing", "exceptional", and "astounding". Maria shared in a discussion entry her fascination with Chinese culture, "China is a very culturally rich country. Amazing food, people, and history are only some of the characteristics that China contains that have always fascinated me." Christina traveled a lot with her family and were interest in different cultures. In her application letter, she expressed her desire to learn Chinese culture: "I have been particularly fascinated by Chinese culture.....When I read the STARTALK Academy description, the cultural aspect enthralled me.....I am thrilled to learn more about Chinese culture." Participants' interest and fascination with Chinese culture showed their openness to the Chinese community.

In addition, the "uniqueness" of Chinese culture sparked participants' curiosity, which fostered their learning interest. Dillion, in the application letter, expressed his

interest in China because "it is very different from anything I(he) have(has) experienced or studied." Particularly, in a discussion entry, Makenna talked about her curiosity about the difference between Chinese culture and American culture, "I really wanna see how the Chinese culture is. I want to see how people in the Chinese eastern culture and people in the American western culture can react to the same situation, such as how they act differently on dining table and how they talk to teachers in classroom, etc.." With learning curiosity, Leo noted the importance of learning and understanding Chinese culture, as he said: "We live here in the United States. And Chinese, I mean, is culturally all the way around the world. So to me it's important to learn about their culture, so that you understand how they live and why they live like that. Because then you will get a better perspective and you understand why they are the way they are." Specifically, some participants mentioned particular aspects about the Chinese culture that they were most interested to learn and explore. For example, Sam shared in the discussion entry that he would like to learn Chinese poetry and Chinese folk music; Jack noted that he likes ancient Chinese architecture. Therefore, participants' curiosity about Chinese culture not only indicated their openness to Chinese community, but also showed their interest in learning Chinese.

During the Academy, the cultural immersion experience exposed participants to Chinese culture, which further promoted participants' interest in Chinese culture and Chinese community. To create a Chinese culture immersion environment, the Academy integrated Chinese culture elements throughout all aspects of the curriculum and throughout the day. For example Tai Chi was offered every morning, a field trip

to the Asian market in preparation for a dumpling festival preceded a cooking experience in the evening and daily cultural evenings included a variety of authentic dance and song activities. Diana positively commented on her Chinese culture experiences during the Academy, “The culture activities and games we had during the Academy not only helped balance out the more academic learning of the language, but also helped us experience the Chinese culture in a way that was totally unique and interactive. That's what sparked and interested me for Chinese cultures and convinced me to learn more.”

Jack described his morning Tai Chi experiences and reflected how he was intrigued to know more about Chinese culture:

We really loved the Tai Chi in the morning. It was relaxing, and it prepared us to start a new day. At first, I thought it was just a way to work out. But when the teacher explained to us how each movement of Tai Chi is related to Chinese Kung Fu, everyone was like it's unbelievable. You know, Chinese culture is always so different, like the Chinese Kung Fu is with Chinese Tai Chi. I was really intrigued to know more.

Cole specifically talked about the field trip to the Asian market that made him want to know more:

I really enjoyed going to the Asian market. I got to see, touch and taste different things from China and other Asian countries. I find myself interested in almost all things there. When Lv laoshi (teacher Lv) showed me different kinds of Cha (tea), she read and explained their names to me. I found that so interesting, like

the dragon tea and the Jade Goddess tea. It made me want to know more, like the stories behind these tea names. I need to learn and read more about Chinese culture.

The culture immersion experience during the Academy helped participants realize that China as a country with a very rich culture, which motivated them to learn more. This was also reflected in Leo's description about his ideas of Chinese culture before and after the Academy:

Before attending the Academy, Chinese culture to me was just like Chinese people; they like dragons; they like this and that; they have a different New Year. That's literally all I knew. This Academy highlights the contrasts between the culture and language of America and China.....It further deepens my fondness for China. It was in this Academy that I discovered my true passion for Chinese culture, like the story behind Chinese festivals, Chinese songs, and Tai Chi. It has helped me to realize that there are so many interesting things to learn about China and Chinese culture.

One semester after the Academy, during the interview, many participants expressed their interest in visiting or studying in China to experience the local culture and communicate with local people. A typical response was from Claire, who had never been to China before, "I am really interested in visiting China, maybe moving into China in the future, learning about the culture, and talking to people in China. I would really like to know more about their language and their traditions." Participants' desire to study Chinese culture and Chinese language in China indicated their

openness to the Chinese community.

In summary, participants revealed an openness to the Chinese community throughout their learning process. Before the Academy, participants expressed their interest in Chinese culture. More than that, their curiosity about the differences between Eastern and Western culture fostered their learning interest. During the Academy, the culture immersion experience further promoted participants' interest in Chinese culture and Chinese community. One semester after the Academy, participants' interest in going to China experiencing local culture again showed their openness to Chinese community. Participants' openness to Chinese community during and beyond the Academy indicated their motivation for learning Chinese language and Chinese culture.

Interest in Foreign Languages (IFL)

Interest in Foreign Languages refers to a general aspect of integrativeness referring to any other language groups (Gardner 2010, p.117). Specifically, it is to assess a general interest in or tolerance to other groups in general with a focus on the issue of language.

Two themes related to Interest in Foreign Languages emerged from the qualitative data: motivation to learn different languages and an expanded worldview.

Motivation to Learn Different Languages

Learning different languages, specifically learning languages besides the first language, emerged as a common theme. Before the Academy, participants expressed

their interest in learning languages. Miranda shared in a discussion entry that she is “a language nut”, and wants to “learn many languages”. Maria noted in the application letter that she enjoys learning and speaking different languages and that she is quad-lingual with English, Hindi, Punjabi, and Spanish. Diana talked about her “obsession” with languages in the application letter:

I think language is like fascinating. I am obsessed with the idea of language. I am not obsessed in a strange way, I just genuinely love the sound of different languages. I love listening to language, like songs in different languages, because I think it's like really cool to hear it, and it kind of makes me wish that I could understand what they were saying.

Particularly, some participants talked about the influence from significant others who inspired them to learn different languages. Claire expressed the influence from her Mom:

I have always been naturally interested in the idea of being fluent in a new language. Learning languages has been something I've always been captivated by--my Mom is from Vietnames and she speaks fluent Vietnamese. She also speaks fluent English and a little bit Cantonese. Since I was very young, I hope that I can speak different languages as my Mom does. I feel like that's really cool.

Diana mentioned the influence from her childhood friends, whose capacity for speaking languages besides English motivated her to learn more languages:

When I was younger, I had friends that could speak Spanish and Vietnamese.

One day, I asked why our family couldn't speak multiple languages. I started to learn languages as soon as I could. Right now, I'm in Spanish II and French I, while that can be confusing, they're my best classes.

Miranda suggested that everyone should at least try to learn a second language and illustrated her point with words from her dad: "When I talked to my Dad, he said one of his regrets is never taking the time to be fluent in another language, because he just knows English." Participants' interest in and initiation of learning different languages indicated their easy acceptance of learning Chinese.

Learning Chinese in the Academy for two weeks, participants expressed their desire to try and learn more languages, especially when they realized their "potential" in learning Chinese. "As I can learn Chinese pretty well, I am considering to learn other Asian languages in the future," Leo said during the interview right after the Academy. Realizing her "great potential" in learning Chinese, Maria expected to learn more languages, as she said,

It really surprises me because I have learned in two weeks in this Academy what I learned in a semester in my French class. Before I didn't know I can learn that much in two weeks. Now I feel really awesome to be able to learn that fast.....My goal before (the Academy) was to learn four languages, but now I think I am going to try more.

What's more, some participants also shared the "excitement" of being able to speak different languages, which further promoted their desire to learn more languages, as Diana said, "When I was doing the Chinese flash cards for the colors the other day, I

found I can say all the colors in four different languages. For example, yellow in English, amarillo in Spanish, 黄 in Chinese, and yellos in Portuguese. That's SO exciting." Therefore, participants were promoted to learn different languages based on their "great learning potential" found in Chinese learning during the Academy and the joy of knowing different languages.

One semester after the Academy, participants again shared their great interest in learning languages. "I am going to apply for a STARTALK program to start learning Arabic this summer," Maria told me during the interview. Nicole emphasized that she always wants to learn more languages. To support what she said, she shared a quote from Nelson Mandela, "If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart." "When I first saw this quote," Christina said, "I know I want to learn many languages, because I am gonna go and see different places, learn about different cultures, and actually talk to the common people." Her desire to see and communicate with people around the world promoted her to learn different languages. Particularly, when talking about their interest in learning different languages, many participants mentioned the inseparable relationship between language and culture. "Languages are what keep all different cultures together," Maria claimed in the interview. Christina described her own experience of learning Chinese language and Chinese culture: "I think I understand Chinese culture a lot better than I would if I didn't know Chinese. . . I feel like people, like for Chinese, if you learn the Chinese language, you learn about the culture as well. It's a package deal." Therefore, participants' kept their high interest in learning

foreign languages one semester after the Academy, which was reflected in their application for new language programs and their interest in learning both language and culture.

To conclude, participants showed their interest in learning languages. Before the Academy, participants expressed their interest in learning different languages. During the Academy, participants were stimulated to learn different languages based on their “great learning potential” found in learning Chinese and the joy of knowing different languages. One semester after the Academy, participants maintained great interest in learning languages. Participants' high interest in learning different foreign languages throughout the learning process indicated their ready willingness to learn Chinese and motivation to learn Chinese.

An Expanded Worldview

A world view, specifically interpreting or interacting with the world through a wide world or global perception, emerged as a common theme. Before the Academy, participants indicated the importance of learning different languages to "expand the knowledge of the world" (Claire), "improve the perspective of the world" (Jack), "increase the culture perspective on the world" (Dillion), and "make one more culturally aware of the world and understand things in the world" (Cole). Knowing more than one language, participants shared their experiences of viewing the world through different languages. Miranda, a Spanish-English bilingual, shared that “being bilingual has made me (her) understand the world in a different perspective.” Diana,

who learned Spanish and French as her second and third foreign languages, noted that knowing different languages “has expanded my (her) view of the world.” Particularly, because all participants are English native speakers, learning other languages was regarded as a way to help expand their “English perspective”. “There are just so many things one can learn from other people, other languages and cultures,” Miranda said, “if you only speak English, you are kind of limiting yourself to the ‘English world’. You would miss the chance to view the world in different other ways.” Participants’ accounts about the worldview related with language learning implied their interest in learning different languages.

Learning Chinese in the Academy, participants shared how it helped to open up their vision of the world. “It makes me feel that I am no longer stuck in a bubble,” Leo said. Diana specifically shared one thing that she “did not feel quite comfortable with” before learning Chinese, but “understand and accept” after learning Chinese:

Before learning Chinese, when I heard Chinese people, maybe someone from other Asian countries, when I heard them using "he" and "she" wrong (using “he” for female and “she” for male), I felt...oh that’s funny and...weird. After learning Chinese, I get to know that there is no "he" and "she" difference in Chinese, both are "ta" with the same pronunciation. Now it becomes totally understandable for me when Chinese people say "he" for "she" or “she” for “he”.

Diana’s example well illustrated how learning Chinese helped open up her view about the Chinese people using the wrong English personal pronouns. Instead of thinking

that it was weird, she began to understand and accept it as a result of learning the Chinese language.

One semester after the Academy, many participants talked about the importance of learning different foreign languages in a “smaller” world. “We are living in the 21st century, and we are seeing more and more people from different cultures everyday,” Jack claimed, “one of the most important skills is to learn different languages in order to communicate with people and understanding their culture.” Christina, who traveled a lot with her family, shared in the interview, “The world is getting smaller and being able to communicate with different people and cultures is important.” Meanwhile, participants noted that learning Chinese made them feel “more of a citizen to the world”. Participants’ accounts about the social requirement for learning different languages and learning Chinese being “a world citizen” indicated their motivation to learn Chinese.

To conclude, participants paid special attention to the “world view” brought about by learning different languages. Before the Academy, participants indicated the importance of learning different languages to obtain a “world view”. With prior language learning experiences, they also shared experiences of viewing the world through different languages. During the Academy, participants shared how knowing the Chinese language helped to open up their vision of the world. One semester after the Academy, participants talked about the social need for learning different languages. Participants emphasized the expanded “world view” gained through language learning and voiced their intention to learn different languages, including Chinese. Participants’

expanded "world view" about learning different languages indicated their learning motivation.

Attitudes toward Chinese People (ACP)

Attitudes toward Chinese People refers to the way one thinks or feels about Chinese people. Two themes related to Attitudes toward Chinese People emerged from the qualitative data: stereotypes and "Aha!" moments.

Stereotypes

Stereotypes, specifically one's beliefs that a group of people or things are the same with particular characteristics, emerged as a common theme. Stereotypes¹⁶ are not always true (In Merriam-Webster.com., 2015). While sometimes they are applicable to part of the group or individuals from the group, they are not often true for the whole group.

According to students' accounts, before attending the Academy, most of them had only limited contact with Chinese people, and some had never met Chinese people in real life. Thus, when talking about their impression of Chinese people, their responses turned out to be somewhat stereotypical.

Chinese people always had their "individual small groups". Participants mentioned that Chinese people always kept to their own ethnic group with only Chinese. "They have their own race network," Claire said, "three or four Chinese students sit together in the classroom and hang out together all the time." Aiden went

¹⁶ In Merriam-Webster.com. Retrieved November 25, 2015, from <http://www.merriam-webster.com/dictionary/stereotype>

to a boarding high school, where he lived five days a week. He described the three Chinese students at the same high school as “lonely”:

While being in a boarding school and having to live with the same people week after week, we have become a tight-knit community in the process. However, there are three students who are native Chinese, who seem very lonely at times, being so far away from the native country and therefore are not a part of this otherwise close community, instead forming their own small group. This is an unfortunate situation, because there are many experiences, both that they have and that the rest of students have, that are not shared with each other. Because they do not connect with the rest of students, they rarely talk to the rest of us.

Both Claire and Aiden talked about their impression of Chinese people based on their idea of Chinese students at school, who represent a very small part of Chinese people. While Claire’s and Aiden’s description might be true for some Chinese individuals, it would not be true for all Chinese people. Therefore, the description about Chinese people only keeping to their own “individual small groups” was stereotypical.

Chinese people were “not willing to express their opinions”. Participants pointed out that Chinese people always kept silent on things. Makenna did not know any Chinese people before the Academy. But during the interview, she mentioned what she was told by one of her friends, “most Chinese people like to keep things to themselves.” Jack had several Chinese friends at school. When he talked about his impression about them, he said, “They are not as outspoken as the other people at our school.” To support what he said, Jack provided an example, “When they see

someone doing something really stupid, they just walk away.” Either Makenna’s indirect impression about Chinese people or Jack’s direct comment about Chinese friends at school revealed their limited contact with Chinese people, which thereafter led to their stereotypical assumptions.

Chinese people were “smart”. Some participants mentioned that Chinese people were good at science and mathematics. Diana shared her experience at an International Baccalaureate program where she had classes with several Chinese students:

I was just always amazed because they (Chinese students) are just so intelligent, and they are just so smart. They seemed to know the answer to each question given by the teacher. They were always like the first ones in the math class who completed the worksheet quickly and correctly.

Diana’s impression about Chinese people based on Chinese students who she knew in an International Baccalaureate program led to her stereotypical assumption that only applied to a small part of Chinese people.

To conclude, due to limited communication and contact with Chinese people, participants shared some stereotypical assumptions about Chinese people before the Academy. It was mainly reflected in three aspects. First, Chinese people liked to have their own “individual small groups” restricted to only Chinese. Second, Chinese people were “not willing to express their opinions”. Third, Chinese people were “smart”, especially in math and science.

“Aha!” Moments

“Aha!” moments, specifically moments when participants discover things different from their prior assumptions or knowledge, emerged as a common theme. Compared to stereotypical impressions participants had about Chinese people before the Academy, they experienced some insightful moments after spending two weeks in the Academy. More than that, several students visited China in the following semester after the Academy who also shared their “Aha!” experiences in China. An important note here is that “Aha!” moments do not mean the moments when participants get “correct” attitudes or knowledge about Chinese people. Instead, these moments are when participants’ show their growth in knowledge or understanding about Chinese people.

“Chinese people are respectful to the elders,” Leo wrote in his journal after watching a video about Chinese family in a class during the Academy. Later in the interview, Leo explained that it was the first time he got to know the Chinese family tradition of respecting the elders. He commented and related this Chinese tradition to his own family:

I like the way that they (Chinese people) treat each other. Because in my family, we always say to respect the elders, and now I know that’s the same in Chinese culture. They always respect the elders. Whenever they are gonna eat, they don’t eat until everybody sits down; they don’t take the last bit of food, all that sort of stuff. I get to know that it’s actually a very respectful culture. From this, I think a lot of Chinese people have manners too.

Through watching the Chinese video, Leo got to see the respectful side of Chinese

people, which he did not notice before. He then connected it with the “good manners” of Chinese teachers in the Academy when he said, "All the (Chinese) teachers in the Academy had so much respect for the students, so much respect for each other, they were really polite, nice to us and themselves as well. I always respect them, because they respect me." Combining what was shown in the video with what he saw in reality, Leo got to see a new aspect of Chinese people.

“Chinese people are not always dull as I assumed before; they can be adorable,” Maria shared during the interview after the Academy. To explain her change of ideas about Chinese people before and after the Academy, Maria referred to the Chinese teachers in the Academy and said, “They are all adorable when they teach. They all giggle all the time, and they laugh. They seem so excited. I just don’t see that very often. It gets me to see a whole new side of Chinese people.” Likewise, Christina also noted that after spending two weeks with Chinese teachers in the Academy, she found her previous assumption about the Chinese being “dull and serious” was not true for all Chinese people. Particularly, she shared that Chinese teachers in the Academy were always smiling and encouraging, and that they told funny jokes in class to help students learn. Therefore, participants’ ideas about the Chinese were gradually changing during the contact with Chinese teachers in the Academy.

Some participants noted that they could “better understand Chinese people and their lives” based on what they had learned in the Academy. Cole shared that a better understanding of Chinese customs made him “pay more respect” to Chinese culture and the Chinese people. “I didn’t really understand their customs. I thought that was

kind of strange. But now I understand more why they have these customs and what the customs mean. I feel that both their customs and (Chinese) people who try to keep the customs are respectful," he expressed during the interview after the Academy. Therefore, knowledge of Chinese culture also helped participants to better understand people living in that culture.

In the following semester after the Academy, several students who visited China during the holidays shared their impression of the Chinese as being "very nice and friendly". Dillion stayed in China for two weeks with a group of friends. After coming back, he told me during the interview that Chinese people were "friendlier than I (he) thought." To support what he said, Dillion compared his impression about the Chinese before and after visiting China:

The people there are very willing to talk to people they don't know, like I could just walk up and talk to someone I didn't know, and they would be willing to talk to me. And I wasn't at all expecting that. Before I went to China, I didn't have really any experience with Chinese people and culture other than STARTALK. um...Really I didn't expect that the people were so friendly there. Compared to my prior understanding of Chinese people, I didn't expect that at all. My previous thought was that they were reserved and kind of closed off a little bit and definitely less willing to talk to foreigners than they were. But it turned out to be totally wrong.

Through visiting China and direct contact with Chinese people, Dillion realized the difference between what he previously expected about the Chinese and what he saw in

reality. Likewise, Christina, after visiting China with her family, commented that the experience provided her “a real and new perspective” to look at Chinese people. Therefore, participants’ experience visiting China helped them get a more holistic picture about the Chinese people.

To conclude, participants' attitudes toward the Chinese people became more holistic based on their experiences during and after the Academy. During the Academy, through the learning experiences, plus direct contact with Chinese teachers, participants learned different sides about Chinese people that they did not note before, such as being respectful to the elders. One semester after the Academy, several students who visited China got to experience the Chinese people first hand, which helped them reflect on their prior attitudes, and at the same time, added to their knowledge about the Chinese, thereby developing a more holistic picture about the Chinese people. Participants' growth, or change in attitudes about the Chinese evolved from being a more “stereotypical” to more holistic view of the Chinese language, culture and people.

Motivational Intensity (MI)

Motivational Intensity refers to the amount of work accomplished through persistent and consistent effort. It is considered as a major component necessary to learning a new language as it reflects the effort expended in the learning process (Gardner 2010, p.121).

Three themes related to Motivational Intensity emerged from the qualitative data:

motivated behaviors, motivating influences, and demotivating influences.

Motivated Behaviors

Motivated behaviors, specifically behaviors driven by participants' motivation for learning Chinese or what participants' actually did in learning Chinese, emerged as a common theme. Before the Academy, participants were actively engaged in an online discussion about Chinese language and Chinese learning. To help participants prepare for learning Chinese, Academy teachers organized two rounds of online discussion one week and two weeks before the Academy respectively. For each round of the discussion, participants first watched a video, and then discussed questions related to the video. The two videos were selected by Academy teachers, the first¹⁷ introducing China, the second¹⁸ introducing Chinese characters, for the purpose of helping participants get familiar with and have a general idea about what they were going to learn. Discussion questions were open-ended in order to spark participants' thinking and facilitate the discussion. All participants joined the discussion and actively shared their ideas. Moreover, because it was the first time for all participants to learn Chinese, besides watching the video and responding to provided questions, they read and searched for more information online about the Chinese language and Chinese learning, and shared it during the discussion. After watching the video "Learn to read Chinese with ease!" Miranda read more about Chinese characters and compared it with English letters, and shared her amazing one-page long reflection with other participants during discussion. "I did a lot of research! And the ideas (about Chinese

¹⁷ See <https://www.youtube.com/watch?v=2IqdV5EfByg>

¹⁸ See http://www.ted.com/talks/shaolan_learn_to_read_chinese_with_ease#t-168680

characters) just fascinate me!" she commented in the reflection. The following is an excerpt from participants' discussion about Chinese characters after they watched the first video "Introduction to China in 10 minutes":

Jack: One thing from the video that I found intriguing was the amount of Chinese characters of nearly 40,000. Although a well-educated person can usually recognize 6,000, this is extremely different from the English language with only 26 letters.

Nicole: Your point about the huge number of characters compared to our measly 26 letters is really amazing, especially how they can manage to remember all of those 6,000 characters. but then again, each character represents a word, and we definitely have more than 26 words in the English language. I wonder how many words we have compared to their characters.

Cole: I agree with your point about the characters. I was honestly pretty confounded when the video said that, and, oddly enough wondered how the Chinese text. Are there that many different buttons on their phones? Do they need to memorize the character positions? It is just so different than the English language and I am eager to learn more.

Jack: I did some research on the average words used in an American vocabulary and the most consistent fact I saw was 5000-10000 words. However, this doesn't include all the slang words that we use. This made me wonder if China has slang words like swag and yolo, and/or if they just adopted it from America.

Miranda: Every language has it's own slang and borrows slang from other

languages. What if we (America) have actually borrowed slang from China?

Jack: That's a great question, I'll be interested to see if we learn any Chinese slang words, or if that is seen as not important.

This excerpt showed participants' active engagement in the discussions about Chinese language. While there were doubts and questions, and also attempted answers and further explorations, considering that all participants were Chinese beginning learners who had never learned any Chinese before the Academy, all these indicated motivation for learning Chinese. It was the learning motivation that led to their active involvement in the discussion.

During the Academy, participants were actively engaged in learning. When describing their performances in class, participants mentioned how they attentively listened to the teachers, actively participated in learning activities, and carefully took class notes. Aiden talked about his attentiveness in class: "During the class, I am very in, I always pay attention to what the teacher says and try to understand as much Chinese as possible. I'm usually able to do it. I can pick up sentences like: 这是红色 (this is the color red), 懂不懂 (Do you understand?)." Jack actively participated in various classroom activities, which he described as "a good way to help learn Chinese." Christina had a pocket notebook, which she carried everywhere she went. In the interview, she showed me the notebook, where she took notes for each Chinese class in the Academy, including Chinese vocabulary, grammar rules, and learning strategies shared by either teachers or students of the Academy. "When I take notes, I can remember Chinese more easily. It helps me review what I have learned in this

Academy,” she said. Participants’ active participation in class revealed their motivation for learning Chinese.

In addition, participants autonomously learned Chinese after class during the Academy. Sam described how he was actively involved in learning Chinese out of class by himself and with friends in the Academy:

After class, I go and I look over my vocabulary sheets. Sometimes I look up words in the dictionary if I ever think about something. Like I think about a word, I will go, you know, I wonder what is that in Chinese...I try to speak Chinese even when I am out of the class. I walk out downtown Lincoln with my Academy friends, and I am trying to speak Chinese and I am trying to like name things. I am just trying to apply it to everyday life.

Miranda talked about how she spent time after class in learning Chinese characters:

Chinese characters are difficult. To memorize them, every day after a day-long class, I go over the word sheets that we’ve got from the class a couple times. Then I have some of the Laoshi (teachers) go over with me to make sure I am saying it correctly. Like today I memorized the numbers, going by tens, and then a hundred. You know just trying to ask for help and studying a bit more like helps a lot. Put more time and effort.

Sam’s and Miranda’s examples, which were representative among participants, illustrated their Chinese learning autonomy after class. On the one hand, they reviewed and practiced Chinese outside of class and they took the initiative to learn Chinese by looking up words in the dictionary and asking for help from the teachers.

One semester after the Academy, participants shared their experiences of using Chinese outside of class during the interview. Some talked about how they practiced speaking Chinese with friends. Cole has a Chinese friend at school. "She and I talk sometimes in Chinese, very basic Chinese. I feel pretty comfortable when I speak Chinese to her," he said. Jack learned Chinese with one of his Chinese friends "every once in a while" as he said, "We have general Chinese conversations. He always corrects me on grammar, really digs into me about how to say this, how to pronounce that, and how to use a phrase in a better way. I have learned so much from him." Maria described her experience of practicing Chinese with one of her friends who attended the Academy one year before she did:

So on her birthday, we sat in her basement, and we tried to have simple Chinese conversations. We reminded each other what we had learned from the Academy. I remembered a lot of simple stuff, and she remembered a lot of the tones and stuff, so she reminded me of that. Both of us were very proud of ourselves when we remembered Chinese and conversed in Chinese. It also made us feel more connected with each other.

Participants' willingness to practice speaking Chinese or learn Chinese with friends were strong indicators of their motivation for learning Chinese.

Some participants shared their experiences of using Chinese in Chinese restaurants. Diana and her family love Chinese food, so they always go to eat in Chinese restaurant. She talked about her experiences of speaking Chinese with people in the restaurant, "Every time we go the Chinese restaurant, I greet people there in

Chinese: 你好!(How are you?) 你今天好吗?(How are you today?). I have short conversations with the waitress, like the price. I know how to say Chinese numbers.”

Sam sometimes went to eat in a local Chinese restaurant as he mentioned, “I try to read the Chinese menu, and I am able to recognize some characters or some parts of some characters.” Claire got hired in a Chinese restaurant after the Academy because “I(he) can speak basic Chinese”. When she had the interview with us, she had been in the job for 4 weeks. In describing the job, she provided an example of how she used Chinese in the job and also expressed her enjoyment of the job:

I am now working at a Chinese restaurant. So there is kind of a disconnect between the workers and the Chinese workers in the back, so I help with relaying messages and stuff. Like a few days ago, we run out of 韭菜(chives), that someone ordered. I helped to relay the message between the American waitress and the Chinese cook in the back. I felt a little nervous when I started this job, but now it mostly makes me really happy to be able to help people communicate.

Using Chinese in authentic conversation such as in a restaurant indicated participants’ willingness to learn Chinese. Particularly, Claire’s involvement in a job that requires speaking Chinese not only showed her willingness to communicate in Chinese; but at the same time could further motivate her to continue learning Chinese.

For participants who have family relatives speaking Chinese, practicing Chinese with these family members became one of their priorities. Jack has an aunt from China, with whom he tried to “use Chinese to talk...as much as I (he) can.” Sam has a

little brother speaking both Chinese and English. "Each time when he came over, I talk to him in Chinese as much as I can. That was really fun," he said.

Some participants taught others to learn Chinese. Claire shared that she taught her brother to speak Chinese: "I taught him very basic Chinese, like 你好!(How are you?), 你几岁(how old are you?), and then 你很可爱(You are very cute)." Miranda mentioned in the interview that her Mom got the opportunity to go to China months ago. In order to help her Mom enjoy the time in China, Miranda talked about how she helped her with the basics of both Chinese language and Chinese culture based on what she had learned from the Academy:

I shared with her some basic knowledge about Chinese culture, like red is the lucky color for Chinese people, and bargaining is always acceptable in China. I also prepared some flashcards with everyday use Chinese with pinyin and English translation on it, such as 水(shuǐ, water), 厕所(cè suǒ, bathroom) and 鸡肉(jī ròu, chicken). When she came back and told me how my flashcards saved her and her friends when they were in a local restaurant where no one could speak English, I was very happy.

Participants' behaviors of teaching and sharing what they had learned with others indicated their sustained passion for Chinese after the Academy.

To conclude, participants showed different motivated behaviors for learning and practicing Chinese at different learning stages. Before the Academy, participants were actively engaged in online discussion about Chinese language and Chinese learning. During the Academy, participants not only actively learned Chinese in class, but also

autonomously learned Chinese outside of class. In the following semester after the Academy, participants learned and practiced Chinese in various ways: some speaking Chinese with friends, some using Chinese in Chinese restaurants, some learning Chinese with family relatives, and some teaching others to learn Chinese.

Motivating Influences

Motivating influences, specifically learning events or experiences that positively influence students' motivational intensity, emerged as a common theme.

Experiences in the Academy motivated participants to learn Chinese. During the interview right after the Academy, they shared how the teachers, Chinese class experiences, and the Academy environment promoted them to learn.

Academy teachers' enthusiasm for and commitment to teaching positively influenced participants' motivation for learning Chinese. Dillion noted that teachers' excitement infected participants in learning as he said, "The teachers were very excited whenever they were teaching Chinese. That made students more excited." Christina expressed that teachers' positive reactions encouraged participants to do better in learning, "The teachers are always fun. They laugh and they are proud of us when we do well. It makes us want to do even better." Sam mentioned the patience of all teachers in learning, "They really cared about you learning the language. They were willing to talk to you and explain if you didn't understand something. And they were patient with you and didn't seem to mind if you didn't get it the first time, or the second time." Diana appreciated the support from all teachers in the Academy:

Whenever I need help, like when I ask questions or anything, they (Academy

teachers) are always there. Like when I asked how to pronounce a word, Hu Laoshi (Teacher Hu) not just helped me the pronunciation, but also tried to help me understand the concepts behind it.

Academy teachers' encouraging words and deeds built a comfortable and pleasant learning atmosphere which helped to establish a good relationship with learners.

Chinese instruction during the Academy consisted of research based learning pedagogy and strategies that motivated learners and promoted active participation by the learners. These included the integration of Can-Do statements, or learning targets aligned with national proficiency standards, dividing the learners into families consisting of 5 students and one teacher, and the extrinsic reward of using "Yuan" to reward active participation on the part of the learners. These strategies were the most frequently mentions by participants in the interview immediately after the Academy.

The Yuan incentive was a reward strategy used during the Academy through which students received fake Chinese money (RMB or Yuan) for their active participation during learning activities. Based on their performances, participants received different amount of Yuan. At the end of the Academy participants could use their earned money to buy authentic Chinese souvenirs from the Academy. It successfully promoted participants to learn Chinese as Aiden said, "The Yuan system made me want to learn more and to get more Yuan." Jack talked about how he got Yuan by working hard both in and out of class, "I got 427 Yuan finally, more than many of my friends in the class. Because I not just completed all the tasks from the teachers in the class, but also learned all the flashcards out of the class. I pushed

myself really hard, so I got more Yuan.” Christina pointed out the “true motive power” of the Yuan strategy enhanced participants’ learning motivation:

I really do quite enjoy getting the Yuan. I think that really helps. Whenever someone completed a task or made progress, the teachers gave the little fake cash reward. Then everyone was like, oh money. Because everyone loves money in America at least (laughing). So then we were more motivated, not just for our desire to learn, but also because we are gonna get cool fun Chinese prizes.

Specifically, an example of the application of the Yuan incentive in the Academy was the flashcard activity. To expand participants’ Chinese vocabulary and consolidate what they had learned in class, the Academy provided decks of Chinese flashcards with different vocabulary themes, which participants could check out and study voluntarily. Once a participant learned and mastered all Chinese words and phrases of one deck of flashcards, he could go to a teacher, who would then check his performance. If the participant gave a good performance showing his knowledge of Chinese on all flashcards, he then received a certain amount of Yuan. A participant who completed one deck of flashcards could choose to do another deck with different vocabulary theme if he wanted. It was voluntary, however, all participants in the Academy checked out at least one deck of flashcards and worked on it voluntarily. During the interview right after the Academy, many participants mentioned how the combination of the flashcard activity and the Yuan strategy promoted them to learn. A typical response was from Aiden:

The flashcard game is really helpful. With the competition for more Yuan, it

made us remember a bunch of words. If you just gave us like a vocabulary sheet, we would not really care about remembering it. Because there is competition for Yuan, that's really helpful.

The Yuan incentive as a strategy to promote participants' motivation to learn Chinese was applied throughout the Academy. While it externally motivated participants to learn Chinese to get more Yuan, however, at the same, it helped participants realize that learning success resulted from effort.

Can-Do statements were used to track and document what students "can do" with Chinese. Specifically, the Can-Do statements, in the form of "I can.....", were adapted from the NCSSFL-ACTFL Can-Do Statements developed by the National Council of State Supervisors for Languages (NCSSFL) and the American Council on the Teaching of Foreign Languages (ACTFL). According to research, Can-Do statement is an important factor to motivate continuous learning among learners, because it focuses on what learners are able to do rather than what they cannot do, which thereafter gives students a sense of accomplishment (Faez, Majhanovich, Taylor, Smith, & Crowley, 2011; Moeller & Yu, 2015; Van Houten, 2007). In the Academy, Can-Do statements were used in each class. Specifically, at the beginning of each class, they were presented to participants as learning objectives; the instructional lesson was designed and based on these Can-Do objectives. Each task within a lesson was designed to assist the learners to accomplish the learning objectives (Can-Do statements) and demonstrate through evidence at the end of the class that they could perform the learning objectives independently. At the end-of-the-class the teacher

returned to the learning objectives and students self-evaluated at what level they could accomplish the learning goals. In addition at the end of the day each participant received a stamp sheet containing all learning objectives introduced that day. They could then choose to voluntarily work on the learning objectives outside of class. Once a participant was ready to show what he “can do”, he could then go to a teacher who would check his performances according to the “Can-Dos”. Based on a good performance, the participant could then get a stamp on the corresponding “Can-Do” from the teacher. Instead of grades, these “Can-Dos” made it about learning as Claire said, “Can-Do statements make learning more transparent. They help me know what I can do with what I have learned.” More than that, participants also mentioned that Can-Do statements brought them a sense of accomplishment, which further promoted them to learn Chinese. A typical response by learners was voiced by Maria, “Every time when I got stamps from the teacher, when I looked at my sheet with stamps on most Can-Dos, I feel accomplished. It makes me want to learn more.”

Putting participants in family groups during the Academy not only helped them work together and learn from each other, but also encouraged them to do their best to complete learning tasks representing the family. From the first day of the Academy, 25 students were divided into five family groups with each group having both male and female students. Members of each family group then sat at the same table and completed group projects together during the Academy. Participants shared that the family group arrangement helped them to connect with each other and promoted learning, as Diana said, “We feel connected during family projects. We just all like

share our ideas and thoughts. It makes it (the project) easier. And then we end up having really good presentations all of the families. That makes us feel more accomplished and to learn more.” Acknowledging that cooperation within family groups helped learning, Christina further noted that the competition among different families further improve learning efficiency:

I like how we work in family groups a lot, how we help each other and work out different amazing presentations. At the same time, we compete with other families. In order to do that, we have to be able to speak pretty fluently and we have to do a good job about everything. The competition does help to motivate everyone to learn in a much quicker pace than they might alone.

Particularly, participants pointed out that it was “very nice” to have a Chinese teacher for each family group, who learned together with group members and provided help whenever necessary. Learning together with family members and the family teacher made participants feel belongingness, as Claire said, “I enjoyed the experience of learning in a family group with a table teacher mentoring us. That way I normally didn’t feel singled out or isolated.” The sense of belonging expressed by the participants revealed peer approval and acceptance and helped to build caring relationships among participants. Aiden explained how the table teacher helped participants feel comfortable in learning:

We counted on the table teacher. When a teacher was teaching in front of the classroom, we asked our table teacher questions if we didn’t understand. So that was nice. It also became a lot more personal when you can ask questions. It took

the nervousness away and made us feel comfortable.

The family group and the table teacher thus not only provided participants a sense of belonging, but helped them feel comfortable when asking questions during class. The immediate feedback from the table teacher could then further improve participants' learning (Pineda, 2011).

While most participants expressed their appreciation and love of the family group arrangement which helped to promote their learning motivation, several participants pointed out that the family group "sometimes brought tension among group members." Marissa explained the tension in the family group where she belonged to, "I think that's just because every person in my group is very strong-minded, and they want to do things in their way, so it's been hard to work...I still love them, but it's just difficult to work with sometimes." Noticing the tension, Jack suggested switching around the groups more as he said: "Sometimes tension builds, you just need to work with someone else." During the Chinese Academy a variety of forms of group work were employed, such as individual, or independent work, pair work, small groups and whole group project based learning tasks. Although it worked well, in light of the possible tension among family group members it may be advisable to work across families in future academies.

Besides motivation that stemmed from Chinese instruction during the Academy, participants also shared how the Academy environment sparked their motivation for learning Chinese. Participants particularly noted that the Chinese immersion atmosphere, the boarding experience, and the no-grading system encouraged and

supported high motivation.

The Chinese immersion atmosphere in the Academy was described by participants as “a big motivator” for them to learn more Chinese and learn harder. Immersion was one of the major characteristics of the Academy, through which participants were instructed in Chinese during the two weeks of the Academy. Participants talked about how the Chinese environment encouraged them to learn, as Leo said, “Chinese is everywhere in the Academy. We hear it all the time. Hearing the teachers talk makes us want to understand what they are saying.” Likewise, Makenna said, “When all Laoshi (teachers) speak Chinese, I want to be able to understand every single word. I push myself to learn more, so I can understand them and even have Chinese conversations with them.” Specifically, because of the fact that all participants were beginning learners who had never learned Chinese before, English was used on some Powerpoint slides presented during class in order to provide clear instruction to help participants understand what they needed to do. However, all teachers only spoke Chinese to students. Aiden commented how it added to the immersion atmosphere in the Academy:

Like they (Academy teachers) pointed to the activity instructions on the screen. We would read along in the English. But they still spoke in Chinese. So we still heard the Chinese. That really is an immersion program, with like solely Chinese. It is like everything is in Chinese. When you are around Chinese for that long, you start to want to pick up on things, like how the tones sound, how the words are pronounced, you pick up on stuff that you wouldn’t normally pick up on in a

regular class, like in school.

Participants were thus immersed in a Chinese language environment during the Academy. The immersion environment provided participants opportunities to consistently listen and speak Chinese and motivated participants to learn Chinese in order to “survive” the immersion.

The boarding experience in the Academy was regarded by participants as “beneficial” for their learning of Chinese. “Living in the dorm helps us to bond with each other, really form the friendships, and feel more comfortable learning with each other,” Cole said. Some participants noted that the boarding experience made it easier for them to study together. Jack found that it was very difficult to pronounce Chinese pinyin; he then formed a study group with several other students. “Every night we would spend 15-30 minutes just working on pronunciation together,” Jack said, “I love that we stay here over night. It keeps me involved more. It is easier for me to spend time with my friends here practicing Chinese.” Moreover, some participants pointed out that living together with a group of people who shared the same interest in learning Chinese further improved their learning motivation. A typical response was voiced by Christina:

It is really helpful staying with people who are doing the same thing you do and trying to learn the new language and the new culture. Everybody is here for the same reason. We have formed a strong community, which makes learning easier because we are close to each other and we have each other’s back.

Therefore, boarding experiences not only helped participants become close to each

other, but also provided them the opportunity to study Chinese together.

The no-grading system of the Academy, specifically students not being evaluated according to the traditional A-through-F grading system based on assignments and tests was noted by the participants as another motivating element. Marissa explained that this system led learners to learn out of their own will, which then internally motivated them to learn:

We don't have any grades. It's like I am not being forced to do anything; it's if you wanna learn it, you learn it. It's do it if you actually want to learn it. I think that's really good motivation because it's within yourself, not exterior or external.

Makenna compared the school grading system where she attended high school and the Chinese Academy with no-grading system and expressed her preference for the no-grading system of the Academy:

I like that it (the Academy) is not like the school. Here we are not graded. Because I feel like sometimes at school, like myself and some other kids just do the work in order to get the grade, just to get the A or B. We don't try because we want to know the knowledge that we are being taught. But here at the Academy, I don't need to worry about my grades. I just want to know and understand what I am being taught and what others are saying around. It's definitely motivating.

Therefore, the no-grading system provided participants a sense of freedom in learning.

It made them feel that they were not learning to secure a good grade or some other

extrinsic reward, instead they were learning because they liked it and they wanted to learn it. This helped participants enjoy the learning process more..

In the following semester after the Academy, several participants who visited China realized that their experiences in China motivated them to continue learning Chinese. Dillion went to China with his friends for about two weeks. After he came back, he shared with me that the two-week experiences in China made him want to learn more Chinese:

In China, I talked to Chinese people and learned more about their culture. I really loved being in China. I plan on going back to China to not just learn more language, but I do plan on continuing my Chinese education there. My experience made me want to learn Chinese more.

Christina mentioned that speaking to local people in China made her want to know more about their life and culture, which further motivated her to learn the Chinese language. “There is no better way to know Chinese people and Chinese culture than to know Chinese language,” she said, “although I know basic Chinese now, I feel I need to learn more.” Therefore, participants’ exposure to local Chinese culture during their visit in China enhanced their motivation to continue learning Chinese.

To conclude, participants' motivational intensity was positively influenced by their experiences both during and after the Academy. During the Academy the positive learning experiences related to the engaging language instructional approaches and helpful, competent instructors in addition to the positive learning environment motivated the participants to engage actively in the learning process.

Participants credited first and foremost the enthusiasm of the Academy teachers and their commitment to teaching as positively influencing their motivation for learning Chinese. Second, the participants noted the use of the Yuan as incentive, the Can-do statements, and division by family units as promoting their learning gains. Third, the Academy environment, including the Chinese immersion atmosphere, the boarding experience, and the no-grading system were noted as further enhancing the participants' learning motivation. In addition, during the following semester after the Academy, several participants who visited China reported that their experiences in China further motivated them to continue learning Chinese.

Demotivating Influences

Demotivating influences, specifically learning events or experiences that negatively influence students' motivational intensity emerged as a common theme.

During the interview one semester after the Academy, participants shared experiences after the Academy that negatively impacted their Chinese learning motivation, which included not having Chinese classes at school, difficulties in self-learning of Chinese, and lack of time for learning Chinese.

No access to Chinese classes at school was frequently mentioned by participants that led to "lower motivation" as compared with their motivation right after the Academy. For most participants in this study, Chinese classes were not offered at their school. Miranda expressed that without access to Chinese classes made her feel she was losing "a big support", "In a class, we learn different things, and the teacher is there for help.....without class, I need to do everything. Although I learned Chinese in

the Academy for two weeks, I still feel it very difficult to learn it by myself.” Jack learned Chinese with one of his friends, however, he pointed out that their learning was “not organized”, as he said, “My friend helped me a lot, but we only learned occasionally. When we were together, he corrected my pronunciation or (sentence) structure. But it’s not like in Chinese classes, where we learn, for example, vocabulary this week, and grammar next week.” Makenna noted that she was “slightly less motivated” after the Academy, as she said, “I haven’t had a lot going on (with Chinese learning) as I am not having any classes. I feel that I am slowly forgetting things I learned in the Academy.....the less I remember, and the harder I think it’ll be to get back into it.” Therefore, no access to Chinese classes made participants felt less motivated to learn Chinese due to a lack of instructional support and lack of regular and organized learning.

For participants who learned Chinese by themselves after the Academy, challenges emerged in furthering their learning also negatively impacted their motivation. Aiden expressed his helplessness in teaching himself Chinese:

It’s really hard because sometimes I get the tones wrong, but I don’t know that I am, so I used the wrong words. Or sometimes I don’t know how to formalize or informalize a sentence. So without someone there to guide me and help me, I know that I mess up a lot, but I don’t know where or how.

Claire talked about the difficulties she came across in learning Chinese online:

I usually go to the internet. I usually like to watch youtube videos and stuff, but that can only help me to an extent. Because I don’t know if I am saying it right

or wrong, I can only hear what they are saying.....Sometimes you know there are a lot of videos on google talking about the same stuff, I try to watch all of them and find the one that is easy to understand. But to be honest, sometimes they are totally different. I guess I do try to solve it, but you know it's really hard.

Therefore, a sense of helplessness and uncertainty in self-learning of Chinese negatively influenced participants' continued learning motivation.

Some participants also shared that being busy was another obstacle for their learning of Chinese after the Academy. Sam noted that his motivation "tempered with realization of the time needed" as he was taking a lot of classes at school, so "it's really hard to get into the (Chinese) language to learn more." Maria expressed that her busy schedule "wore down" her desire for learning, as she said, "As I got busier and busier, I put my Chinese notes and everything on my bookshelf, but they slowly got forgotten about." Likewise, Diana realized that the busy schedule of the International Baccalaureate program where she studied made it "very difficult" for her to continue learning Chinese, which then "chilled" her motivation. The busy lives and schedules of the participants resulted in negatively impacting their Chinese language learning progress and ultimately eroded their motivation to continue their Chinese studies.

To conclude, participants' motivational intensity was negatively influenced by their experiences after the Academy. It was mainly reflected in three ways. First, no access to Chinese classes at school made participants felt less motivated to learn Chinese due to a lack of support and lack of regular and organized learning. Second,

challenges experienced in self-learning of Chinese made participants feel helpless and uncertain about Chinese learning. Third, some participants' busy schedule made them gradually forget about learning Chinese, thereby negatively impacting their learning motivation.

Desire to Learn Chinese (DESIRE)

Desire to Learn Chinese refers to a strong feeling of wanting to learn Chinese. It is considered as an added motivational factor to the major factor, Motivation Intensity (see the section “Motivation Intensity” of this dissertation) (Gardner 2010, p.122).

Two themes related to Desire to Learn Chinese emerged from the qualitative data: intended behaviors and expectancy.

Intended Behaviors

Intended behaviors, specifically behaviors directed by one's goal of learning Chinese, emerged as a common theme. Being different from motivated behaviors (See the section “Motivated Behaviors” of this dissertation), intended behaviors are what one intends to do but may not actually do. Participants showed different intended behaviors for learning Chinese throughout the learning process.

Before the Academy, participants shared about what they intended to learn in the Academy. Some participants intended to learn about Chinese culture, as Makenna expressed in one of the discussion entries: “I want to be able to know more about customs and traditions in China and also Chinese people, taking as much information as I can.” Some wanted to learn Chinese language, as Jack wrote in the application

letter: “I would like to learn Chinese language. I think it is very interesting and I would feel very privileged to know it and be able to speak, read, and write fluently.” Some mentioned specific things they would like to learn, such as Chinese food, Chinese Kung Fu, and the Great Wall, as Claire expressed in her application letter: “I would like to know more about the Great Wall of China and its history.” Participants’ learning intentions indicated their desire to learn Chinese.

Learning Chinese for two weeks in the Academy, participants shared their intentions about continuing learning Chinese after the Academy. For Leo and Christina, whose school provides Chinese classes, they intended to take Chinese classes at school. Leo planned to sign up for a Chinese course in the new semester. Likewise, Christina was considering taking a Chinese class when she got back to school. Most participants whose school did not provide Chinese classes, sought other ways to continue learning Chinese. Some were looking for schools or programs where Chinese classes are offered: Maria intended to take Chinese classes at a neighboring school where Chinese was offered; Cole intended to look for a Chinese online program. Some planned to take a Chinese class in college: Jack was going to college the following year and he intended to take a Chinese class then; Diana mentioned that she was looking for colleges with good Chinese programs, where she intended to continue learning Chinese.

Besides taking Chinese classes, participants shared other intended behaviors in order to continue learning Chinese. Some participants planned to learn Chinese by themselves. Makenna was going to “buy a book about the 200 basic Chinese

characters” and learn the characters by herself. Jorden was going to “review all handouts from the (Academy) teachers”, and “expand my (her) Chinese based on the handouts”. Particularly, some participants mentioned that they would like to learn Chinese with iPad apps that were introduced during the Academy. Aiden mentioned that he was going to use the Train Chinese app to learn pinyin and Chinese characters.

A few participants intended to study abroad in China. Jack had been wanting to study abroad for many years, but he “did not know where to go”. During the interview right after the Academy, he said, “I realized that China is a great culturally diverse place, so I thought that China would be a great place to study abroad.” Sam shared that he would like to apply for scholarships to study in China, as he said, “I plan on pursuing to learn more Chinese in China, maybe in a study abroad program. But that will be a couple of years later after I finish my high school.” Likewise, Christina was going to look for scholarships to study in China; at the same time, she was also going to look at Peace Corps volunteer opportunities in China, as she said, “If I get the scholarship, that would be great. But I think that’s not always easy.....The Peace Corps, I know that they need volunteers to go to China for four weeks or so. I think that's a good way to know more about the local language and culture.” Christina’s intention of either studying in China or going to China showed her willingness to learn Chinese.

To conclude, participants showed intended behaviors about learning Chinese throughout the learning process. Before the Academy, participants shared about what they intended to learn in the Academy. Learning Chinese for two weeks in the

Academy, participants shared their intentions about continuing learning Chinese after the Academy, which included taking Chinese classes, self-learning Chinese at home, and studying abroad in China.

Expectancy

Expectancy, specifically students' expectation about learning Chinese language, emerged as a common theme. Participants' expectancy became higher and more specific prior to and after the Academy in this study.

Before the Academy, participants' expectations tended to be general in nature focused on "speaking" Chinese or "using" Chinese for communication. Some of the typical responses were: "I hope that I can speak Chinese" (Leo), "I wish I can use Chinese to communicate with more people" (Sam), and "I would like to speak Chinese"(Miranda). Particularly, Claire expressed her expectation to speak four languages, including Chinese, as she said, "Currently. I am studying Spanish and French. If I can speak Chinese, I am quadrilingual." Therefore, participants' had relatively general expectations before the Academy, which focused on the result that they "can" speak Chinese language.

After learning Chinese in the Academy for two weeks, plus contact and communication with Chinese teachers in the Academy, participants aimed higher and expressed more specifically their expectations about learning Chinese. While realizing that she knew basic Chinese after the Academy, Diana expressed her desire to learn more Chinese, "I want to be able to speak Chinese pretty fluently, and talk as fast as the teachers can. Even though I can speak simple conversations, I would like to

expand on that to bigger conversations." Miranda noted that she wanted to reach higher levels of Chinese proficiency, as she said, "Since I've done this introductory class (in the Academy), I would like to be intermediate and then advanced. So in that way I can get better in Chinese." Leo expressed his goal to have "full-blown" conversations with Chinese people:

I want to learn more. I know I learned a lot of things in this Academy, but I feel there is still a lot to be learned. I want to be able to have a full-blown conversation, so I can talk to people in Chinese for like a few hours if not forever. I want to be able to understand them too, because sometimes people talk to me in Chinese, for me, it seems a bit too fast. But I know it's because I am not used to it. But I mean once I get it done, they can talk to me at any speed they want on their stand. That's what I want, that's my goal. So that's why I want to take more time learning.

Once participants understood the limitations in their Chinese language ability, they planned to "expand" their current Chinese knowledge and reach a more advanced level of communication in Chinese. It is clear in participants' responses that their experiences of speaking Chinese with Academy teachers provided a direct reference for their expectancy.

To conclude, participants' expectancy about learning Chinese language became higher and more specific after the Academy, which indicated their desire to learn Chinese. Before the Academy, participants' had relatively general expectations, which focused on the result that they "can" speak Chinese language. After the Academy,

based on what they had learned during the Academy and their communication experiences with Chinese teachers, participants had more specific goals and expectations to reach a higher level of proficiency in Chinese.

Attitudes toward Learning Chinese (ALC)

Attitudes toward Learning Chinese refer to the way one thinks and feels about learning Chinese, which usually affect one's learning performance (Gardner 2010). Two themes related to Attitudes toward Learning Chinese emerged from the qualitative data: from challenging to doable, and from unsure to confident.

From Challenging to Doable

From challenging to doable, specifically participants' attitudes about learning Chinese changed from challenging before the Academy to doable after the Academy.

Before the Academy, although all participants had never learned Chinese, they shared the impression that Chinese language was "difficult". Many thought that learning Chinese would be "challenging" based on what they learned from the media or friends. "Chinese is a language with lots of history, but very complicated; I believe that learning Chinese would be a great challenge," Dillion said. Christina felt "nervous" to learn Chinese, as she said: "I think it would be really hard because people always say that Chinese is such a hard language." Leo described that Chinese was "a difficult, challenging, and interesting language to learn," and expressed that learning Chinese was "to step out of my (his) comfort zone and put myself (himself) to the test of learning Chinese."

Participants provided two major reasons explaining why learning Chinese would be “challenging”. The first reason was Chinese language being unique and different from the languages they had learned before. Due to the fact that all participants are English native speakers and most of them had only learned alphabetic languages¹⁹, including Spanish, German, and French, as their second or third language, Chinese being an ideographic language²⁰ is thus a different language system for them. Lack of prior knowledge about and experiences of learning an ideographic language made participants think learning Chinese being “difficult”, as Makenna said, “Chinese is a totally new language. It is not Latin-based, and it is not like anything I have ever learned before. It’s gonna be difficult.” Aiden learned Spanish as the second language; learning Chinese was “a different experience” for him, as he said, “It’s not easy to quite like relate it (Chinese language) to English or Spanish that I know, link back to that grammar or something like that. It is a brand new language, which I have no prior knowledge at all. So when I learn Chinese, I start from the ground up. There is no jumping off point.” Besides the uniqueness of Chinese language, Chinese characters was referred to by participants as “the real challenge”. Participants discussed and predicted the difficulty to learn Chinese characters. “Just looking at the characters, I feel they are complicated,” Jack said. Diana shared that when she saw Chinese characters the first time in a Chinese restaurant, she felt “a bit daunted”. In a discussion entry, Cole reflected on the large number of Chinese characters that “terrified” him:

¹⁹ See <http://iwcmecolgy.pbworks.com/w/page/8480813/Ideographic%20vs%20Alphabetic%20languages>

²⁰ Ibid.

I was rather concerned-yet intrigued-by the number of characters in the Chinese language. I am aware that I know nothing about Chinese, so I cannot pretend to be unalarmed. I suppose that I have only been familiar with the small English and Spanish alphabets, and have (to this point) kept a closed mind as far as far-Eastern language goes. Honestly, the amount of characters terrifies me.

Therefore, learning Chinese was regarded by participants as “difficult” and “challenging” before the Academy. From participants’ accounts, plus the fact that none of them had learned Chinese before, their attitudes about learning Chinese were based on limited knowledge of the Chinese language.

Learning Chinese in the Academy for two weeks, participants shared that it was “doable” to learn Chinese, as Sam described, “Throughout the past two weeks, I’ve noticed how the mystery and fear have slowly gone down. It seems to be it (learning Chinese) still looks hard. But it seems more of a ‘I can do’ this hard rather than an impossible task hard.” Likewise, in a journal entry towards the end of the Academy, Christina wrote, “Chinese is not as hard as many people thought it would be.” In the interview right after the Academy, Claire expressed, “The learning experiences in this Academy have made me realize that I can definitely get better and better at it (Chinese learning). I try to think it’s promising.” Maria also described her positive attitude about learning Chinese after the Academy, as she said, “Before the Academy, I thought it was difficult (to learn Chinese), because Chinese is all new to me. As I started learning in the Academy, I found it was a lot smoother and a lot more fun than I ever thought.” Based on participants’ accounts, their attitudes toward learning

Chinese became more positive after the Academy.

Particularly, participants shared the learning experiences during the Academy that helped to improve their learning attitudes. Classroom activities, learning context, and use of iPads, were three aspects frequently mentioned by participants as helpful in their learning.

Various classroom activities helped to create a “fun” learning environment, where participants played and learned. Participants talked about how the Chinese class environment in the Academy was different from what they had thought. "In the class, we are able to do things with what we have learned and not just sit down and listen to the teacher talk to us the whole time," Miranda said. Sam further explained how the learning activities were helpful for learning, “We learned a lot, but they were not crammed into our head. Instead, we did a lot activities and fun games, like projects, where we applied what we had learned. So it was really a lot more fun than I was expecting.” Makenna commented on the "skit" activity from the Academy, where students worked together acting out a story based on what they had just learned, as she said, "In the skit activity, we made our own scripts. So we had to come up with everything we wanted to say in Chinese; we had to memorize it; then we had to understand what it means. We felt like we entertained a lot in the process."

Particularly, many participants mentioned the “interview in Chinese” activity they had during the Academy. After having classes for about one week, the Academy invited 15 Chinese teachers from a STARTALK Teacher Institute program (See section “Willingness to Communicate” of this dissertation), to have face-to-face interviews

with Academy students in Chinese. Based on what they had learned in the past week, all students prepared at least five interview questions. With these questions, each student interviewed and exchanged information with at least three Chinese teachers. This activity turned out to be very successful and popular among students. Besides interviewing the teachers with prepared questions, students also had real spontaneous conversations with the teachers. As Miranda said: “With these teachers, it was very spontaneous. I have to think on my feet, use my Chinese language skills. I really enjoyed this part.” Sam explained that the interview activity helped build up confidence, which further motivated him to learn:

The interview helped solidify what we knew in branching out. These teachers wouldn't just go with what we knew; they would go with what we might know and then build off what we knew to expand that. It was very helpful in simulating actual conversations, the actual usage of the language. We got to actual practice using Chinese. That's amazing, it's like a real life experience talking with someone. It helped us to get more confidence when we realized that we could not just to have the hello goodbye conversation, but we could have, hey I am gonna tell you a little about me, conversation.

Therefore, learning activities during the Academy helped participants enjoy learning with playing, and at the same time enhanced their learning confidence, which thereafter promoted their learning attitudes. “We learned and we applied what we had learned in different activities, that makes the learning easier and more interesting,” as Maria concluded.

Learning Chinese in contexts was also welcomed by participants. Specifically, all Chinese classes during the Academy were designed based on five Chinese traditional festivals, which include the Spring Festival, Lantern Festival, Dragon Boat Festival, Qixi Festival, and Mid-Autumn Festival. Participants learned Chinese language and Chinese culture through the five festivals. For instance, in the context of Qixi Festival, participants first learned the origin of the festival through predicting and reading the story between the Weaver Girl and the Cowherd, which is a classic folklore in Chinese mythological history. Based on the relationships between the characters in the story, participants then learned Chinese kinship terms and the grammatical structure “...的...是...” (e.g., 爸爸的爸爸是爷爷/Father’s father is paternal grandfather) expressing relationships. Thus, through the context of Qixi Festival, participants not only learned Chinese language, but also Chinese culture, such as the origin of the Festival and why and how people celebrated this festival. Participants expressed that the context made learning “comprehensible”, as Leo said, “I like how the teachers divided all classes into sections by festival, then use those sections to teach different aspects of the language. It made it a lot easier to organize and more simple for us to understand what they were trying to teach us.” Cole commented that learning in contexts was “a good way” to start learning Chinese, as he said, “We matched the language with the festivals. So it wasn’t just learning the language, it was learning language and culture. Putting it in the context made them both easier to understand.” Sam reflected on how learning Chinese in context motivated learning:

I think it was very helpful and special that the lesson plans go over five

traditional Chinese festivals. We didn't just learn the language, the vocabulary, and the grammar. We learned about the festivals, which gave us a glimpse into Chinese history, Chinese stories, the stuff that Chinese people know by heart. I mean we actually got to know the culture and the way people in that culture live. Like we had dumplings when we learned the Spring festival; we made lanterns when we learned Lantern festival. So it's the small things like these that help motivate. It made me wanna know more about China and learn more about Chinese culture.

Therefore, the festival context adopted in the Academy not only made learning “comprehensible”, but also promoted participants to learn, which thereafter improved their positive attitudes toward Chinese learning.

The use of iPads in Chinese learning was described by participants as “helpful” and “interesting”. Specifically, during the Academy, each student received an iPad on the first day, which was used both in and out of class. Learning Apps were also introduced to help students learn. Participants shared their experiences of using iPads that helped with learning. Jack shared his experience of using the Train-Chinese App to help with writing Chinese characters: “The App teaches the sequence of strokes for different characters. When I am studying, it's very useful. It helps me to know how to write a character correctly, but not just draw it as what I did before.” Likewise, Sam described how the PinPin App helped him with pronunciation:

Every time when I see a new word, I usually try to get the pronunciation myself, and then I look it up on the iPad App, pinpin. Since it provides pronunciation for

all the syllables, it helps me to see if I am right. Sometimes I adjust my speech patterns to match it as close as possible.

Therefore, iPads not only provided participants easy access to learning Chinese, but also helped learning with appropriate use of learning apps. The use of iPads in the Academy thus promoted participants' positive attitudes toward Chinese learning.

In addition, with learning experiences in the Academy, participants got to know more about Chinese language day by day. When participants expressed their positive attitudes about learning Chinese being “doable”, they frequently referred to three major aspects about the Chinese language to illustrate their point. The first was about Pinyin, the official phonetic system for transcribing the pronunciations of Chinese characters. As to the fact that Chinese Pinyin is based on Latin alphabet, which is familiar to English speakers, learning Pinyin was thus regarded as “easy” by participants. “One thing I like is how they develop the Pinyin system, so it makes it more easier for new learners to learn Chinese,” Jack said. Maria further explained, “Pinyin makes more sense to me. Once I learn pinyin and figure out the tones, I can just look at the Pinyin and just say Chinese. That's pretty neat.” The second aspect was that there are no conjugations in Chinese language. As participants learned more about Chinese language, they shared that no conjugations was the “big difference” between Chinese and other languages they had learned before, including English, Spanish, French, and German, which they described as “a relief” in learning Chinese. “I really like how there are no verb conjugations (in Chinese), and how everything is kind of simple and the words don’t change,” Cole said. Jack provided a specific

example concerning no verb conjugations for different tenses in Chinese to illustrate how it made learning “possible”:

When people speak Chinese, they don’t really have to think about it too much, just kind of follow and place, no gender, no tense. Like you cannot say it was my birthday. You have to say like a week ago it was my birthday. You just have to add that general “sometime” in the past. So you don’t have to change it for every single time in context with different tenses.....This helps me feel that learning Chinese is not that difficult; it is possible.

The third aspect was that participants made comparisons between Chinese language and the languages they already knew, which then helped with learning. According to some participants, the more they learned Chinese, the easier they made comparisons between Chinese and other languages, as Sam said, “Sometimes, there are a lot of similarities, but there are also some very differences. Both make you think deeply, which makes the learning more interesting and easier.” Christina described the differences she found about the possessive case in Chinese and in Spanish, “The ‘的 (de)’ of position in Chinese is different from the position in Spanish. For Spanish it’s the exact opposite. Like, 爸爸的妈妈(bà bà de mā mā), that being said in Spanish is, Mom’s dad, instead of Dad’s Mom as in Chinese.” Maria speaks Hindi as her second language, and she compared Chinese and Hindi and described how the comparison helped with the learning:

Hindi and Chinese I’ve noticed both differences and similarities. When you say 弟弟(di dì) , the younger brother in Chinese, that means sister in Hindi; 哥哥(gē

gē) means older brother, my cousin he is the youngest brother in his family and his nickname is gege in Hindi; like 茶(chá) means tea in Chinese, in Hindi we say cha too. By doing the comparison, it's much easy for me to remember these words in Chinese.

Therefore, the pinyin system and the no conjugation requirement in the Chinese language helped participants develop positive attitudes about Chinese learning after the Academy, especially comparing their general impression about Chinese learning being "difficult" and "challenging" before the Academy. More than that, as participants got to know more about Chinese language, they also realized that a comparison between Chinese and other languages also helped with learning.

One semester after the Academy, participants shared a more objective and comprehensive attitude toward Chinese learning. They expressed that learning Chinese is "doable" and emphasized that it takes time and practice to learn Chinese well. A typical response was expressed by Claire, "Learning Chinese is difficult but it's doable. If you try and practice, it gets easier." Likewise Diana noted the balance between "effort" and "challenge", as she said, "The Chinese language is different but worthwhile to learn. As long as you put the hard work and effort in, it's definitely not that big a challenge."

To conclude, participants' attitudes about learning Chinese changed from being "challenging" before the Academy to being "doable" after the Academy. Before the Academy, participants regarded learning Chinese as "difficult" and "challenging" mainly due to two reasons: first, Chinese being a different and unique language;

second, Chinese characters being complex. Learning Chinese in the Academy for two weeks, participants began to realize that learning Chinese was "doable" based on both their learning experiences during the Academy and their increased knowledge about the Chinese language. With regard to learning experiences, participants shared aspects that helped with learning, including various classroom activities that created a "fun" and "enjoyable" learning environment, festival-based learning context that made learning "comprehensible", and the use of iPads that provided easy access to learning tools. In addition, as participants came to know more about Chinese language during the Academy, they developed a more objective idea about Chinese learning with the pinyin system, the no conjugation requirement, and the comparison with other languages. All these promoted participants' positive attitudes about Chinese learning.

From Unsure to Confident

From unsure to confident, specifically participants' attitudes about learning Chinese changed from being unsure before the Academy to being confident after the Academy. Before the Academy, while participants indicated their desire to learn Chinese, faced with learning Chinese, participants expressed their uncertainty about learning Chinese. "It (learning Chinese) is an unknown but exciting journey," Miranda wrote in her application letter. "Although I am not sure how it (Chinese learning) is going to be, I will try my best to learn," Leo expressed in a discussion entry. Learning Chinese in the Academy was regarded by some participants as "a good opportunity" to "try out" learning Chinese, as Aiden mentioned in the interview when he recalled experiences before the Academy: "I was not sure if I really wanted

to learn Chinese before (the Academy), so I came here (to the Academy) and tried out.....” Therefore, participants, as novice learners, revealed uncertainty about learning Chinese before the Academy.

Learning Chinese in the Academy for two weeks, participants shared their confidence and willingness to continue learning. Many participants pointed out that the Academy experiences enhanced their confidence in learning Chinese, which encouraged them to keep learning, as Dillion said, “The Academy gives me hope that I can learn Chinese pretty well and pretty quickly like some other stuff. It promotes me to keep learning it.” Makenna noted that after the Academy, learning Chinese “isn’t as daunting a task as it seemed before” and that she felt “more confident” to learn Chinese. Diana expressed her appreciation to the Academy and teachers that helped her build up Chinese learning confidence, “The Academy makes me think that I could keep going with it. I gave a lot of thanks to the Academy and all the teachers, they helped me build a base off of thinking that I can do it.”

Participants specifically noted the use of learning strategies that helped them learn Chinese, which increased their confidence. Learning with movement was regarded by participants as a “useful” strategy for tone pronunciation. Miranda used hand motions to help say different Chinese tones, “It was difficult for me to figure out the differences between the five (or four??) tones. Then I use hand motions, and I go with the flow of my hand. That works pretty well.” Aiden noted that by using hand motions, his reading of Chinese sentences on an iPad had improved:

Once I recorded a sentence on the iPad and compared it with the reading from

the teacher, I found all my tones were almost wrong. Later when I tried again following hand motions for the tone on each character, I found my pronunciation was much better. Now when I read, I always use hand motions to help with the tones.

Moreover, correcting pinyin pronunciation by observing mouth shape and tongue placement was regarded by participants as an “effective” strategy. Christina learned Spanish as the second language, and she said, “Although sometimes pinyin sounds similar to Spanish, but there are still differences. To pronounce pinyin correctly, it's important to get my mouth in the right form.” Leo shared his way of correcting pronunciation by adjusting mouth shape and tongue placement, “What I do is usually ask the teachers and I listen as well as look at their mouth, so that I can make my mouth the same way, and that way I get it well done.” What’s more, learning Chinese characters through radicals was considered by participants as a “smart” strategy. A radical is a basic part of a Chinese character, which always indicates the meaning of the character. Dillion found that Chinese characters were interesting after he learned to break them down with radicals. Claire expressed that using radicals to help remember Chinese characters increased her confidence:

Before the Academy, I thought it would be really hard, especially the Chinese characters. Memorizing characters would be really hard. Then after this Academy, I’ve learned a way to be able to do that. As different Chinese characters have similar radicals, they are easier to remember than just random strokes. And so the characters become a lot easy to me now, not that intimidating

as I thought before.

Through the effective use of different strategies, participants became more confident about learning Chinese. They learned to overcome difficulties and challenges that emerged while learning Chinese. More than that, according to Dörnyei (1998), “the voluntary use of strategies to facilitate one’s own learning process presupposes a great deal of commitment” (p.130). Thus, use of learning strategies indicated participants’ commitment to learning Chinese.

In addition, according to participants, what they had learned during the Academy brought them a sense of accomplishment, which enhanced their learning confidence. In the “intense” two weeks, participants learned both Chinese language and Chinese culture. At the end of the Academy, looking at how much they had learned, participants’ confidence was inspired by their “productive” Chinese learning experiences. During the interview right after the Academy, Diana expressed that learning Chinese was “fulfilling”, as she said, “I was able to listen to a story, understand a lot of what it was saying, and hold a conversation with someone in Chinese. I feel I have a good hands-on with Chinese at the end of the two weeks.” Makenna noted that what she had completed during the Academy provided much needed confidence to learn Chinese, “When I see how much I have done in two weeks, I know that I can go really far if I keep working on it.” Claire shared that the confidence she gained during the Academy “promoted me (her) to stick with Chinese learning.” Thus, with “productive” learning experiences during the Academy, participants’ learning confidence was enhanced, which thereafter promoted their

Chinese learning motivation. This was in accordance with research that indicates language learning success strongly affects learner motivation (Strong 1983, as cited in Ellis 1997).

One semester after the Academy, although most participants did not get the chance to continue learning Chinese at their school and many participants found it challenging if not prohibitive to continue through self-learning (see the section “Demotivating Influences” in this dissertation), they shared a strong sense of confidence in the ability to continue learning Chinese in the future. Specifically, participants pointed out that the Academy was the “kick-starter” in their Chinese learning, and that the Chinese knowledge they learned in the Academy served as “a solid base” for them to continue learning Chinese. “Because I already have a lot of basics done in the Academy, like the Pinyin, the tones and some of the culture. For my future learning of Chinese, I will have the background knowledge that I will always be able to fall back on,” as Maria said. Likewise, Jack shared that the Chinese learning experiences in the Academy provided him an “advantage” to continue learning Chinese, “The Academy is a starting point; it has introduced me to so many things about Chinese. With a basic understanding of the culture and language, it is easy for me to figure out how to do the rest of the stuff next.”

To conclude, participants’ attitudes about learning Chinese changed from being unsure before the Academy to being confident after the Academy. Before the Academy, participants, as novice learners, shared an uncertainty about Chinese learning due to a lack of prior knowledge of Chinese language. Learning Chinese in

the Academy for two weeks, participants expressed confidence in learning Chinese because of their "productive" learning experiences during the Academy. Particularly, participants shared their use of strategies in learning Chinese, which not only increased their confidence, but also showed their commitment to learning Chinese. One semester after the Academy, based on the Chinese basic knowledge learned in the Academy, participants shared confidence in continuing to learn Chinese in the future.

Instrumental Orientation (INS)

Instrumental Orientation refers to “the practical benefits and advantages” of learning a new language (Gardner 2010, p.127). In this study, it was used to assess the extent to which the instrumental aspects of Chinese learning were seen as important to participants. Particularly, although Gardner's socio-educational model of motivation is more focused on the integrative motivation, both integrative and instrumental orientations function as motivational antecedents that help to arouse motivation and direct it towards a set of goals (Moiinvaziri, 2007). This is echoed in the literature by researchers such as Crookes and Schmidt (1991), Ellis (1997), and Taylor, Meynard, and Rheault (1977), who found in their studies that both integrative and instrumental motivation are essential elements in successful language learning.

Two themes related to Instrumental Orientation emerged from the qualitative data: future career and college application.

Future Career

Learning Chinese with the purpose of opening doors for future careers was

frequently mentioned by participants before, during, and after the Academy. For some participants, learning Chinese could help to expand career potential. "If I were able to speak even a small amount of Chinese, my possibilities would be more endless for a career," Maria said. Jack' uncle worked in China, and he also planned to find a job in China after finishing college, as he said, "Learning Chinese will produce a dramatic increase in my job opportunities in China." Leo wrote in the application letter that the reason he chose to learn Chinese was to develop a future career:

I want to expand my job horizons and opportunities. I believe I would be benefitted by an experience with Chinese language and culture greatly and in many ways. The biggest benefit being that knowledge of the Chinese language opens up many new job opportunities and advantages for me in whichever field I choose.

Likewise, Sam mentioned during the interview right after the Academy that learning Chinese could be "an extreme advantage" for future career, as he said, "The Chinese learning experience will greatly assist my future, because I will be competing with many different people in the global economy. Knowing the Chinese language and culture will benefit me considerably in attaining a job and in other business opportunities." Therefore, learning Chinese was taken by participants as a way to improve their chances professionally.

For participants who had clear career intentions and knew what they wanted to do in the future, Chinese learning was considered as a step closer to their intended career. Miranda planned to pursue a career in foreign affairs and noted that, "learning

Chinese language will prepare me for my future career path." Cole had the career plan to work for the government as a translator or analyst, and he expressed that learning Chinese would impact his future "in positive ways", as he said: "World language experts are in higher demand these days. Learning Chinese now would possibly get me ahead enough to be successful in pursuing all of my career goals." Claire had the goal to build non-profit schools around the world in order to promote women's education. She explained that learning Chinese would help her to achieve the goal in China:

I know that in China, the birth of daughters is not always celebrated and enjoyed and often pales in light of the birth of son. It would be amazing to start learning the Chinese language. So that in the future, when I can promote women's rights and education in China and other countries, I will be able to speak their native languages.

More than that, for participants who pursued a career that requires knowing a different language, learning the Chinese language was taken by them as "essential." A typical response was voiced by Jack who planned to do work related to international and public relations, "The more exposure I can get to foreign cultures and languages the better. Chinese as the number one language in the world is a great asset for my career." Therefore, learning Chinese was taken by participants as one of the ways to prepare for their future career.

Particularly, participants pointed out that since Chinese is a "popular" language around the world, learning Chinese would "benefit career", as Leo said, "Chinese is

rising up. It's getting more and more into the world. It's one of the most spoken languages and one of the most that people have been driven to learning. It is a good skill to know Chinese." Maria claimed that knowing Chinese language was a "privilege" in the job market. She further explained, "Chinese is the language of the future. It's a huge growing language now in business and technology. Having the knowledge of Chinese language and understanding of Chinese culture will help to broaden opportunities, even those opportunities one wouldn't know that they are existing." Therefore, the popularity of Chinese language around the world also helped participants to see its importance in career development.

Participants clearly expressed that their purpose for learning Chinese was to open doors for future careers. Three aspects were explicitly noted: First, learning Chinese was considered helpful to expand career potentials, second, learning Chinese was regarded as one step closer to participants' intended career, and third, Chinese was regarded as a "popular" language around the world that would be beneficial for participants' career development.

College Application

When interviewed after the Academy, the participants mentioned the practical benefits of learning Chinese for college applications. Because of the fact that all participants were high school students at the time of the Academy, their concern about college applications was understandable. However, based on the participants' accounts, college application was not their exclusive purpose for learning Chinese, but rather there were other integrative (see the section "integrative orientation" in this

dissertation) or instrumental (see the section “future career” in this dissertation) purposes expressed by the participants.

During the interview right after the Academy, participants shared that the Chinese learning experiences in the Academy could “enrich” and cause their college application to “shine” which could increase their chances to gain admission to their chosen university. Miranda, a senior at BW High school after the Academy stated “Being able to put an experience like this on a resume could help me when it comes to applying for colleges and universities.” Makenna expressed that she would be the first person in her family to attend college after high school and that this Chinese learning experience would help “build a foundation for (her) college application.” Aiden particularly talked about the online journals he completed during the Academy that might help with his college application, as he said “I really appreciate that the Academy taught us how to make our own journal site online and required everyone to write a journal each day. It is a good way to tell what I did during the Academy. I am definitely going to put it on my college application resume.” What’s more, some participants also mentioned that the learning experiences at the Academy might help them get scholarships in colleges or universities, as Christina said, “Having it in my resume can help me get a scholarship, which I will really need, in order for me to go to college.” Therefore, participants shared the possible benefits from learning Chinese in the Academy for both college admission and scholarships.

In addition, participants pointed out that the Academy provided them the chance to experience college life. Specifically, the Chinese Academy in this study was held

on a university campus, where participants studied and lived for two weeks. They shared that the learning experiences on a university campus offered them a preview of college life, which could then help them prepare for college life. “As we had all Chinese classes at the University, this experience prepared me to get the feel of going to college,” Maria said. Miranda mentioned the dorm experiences during the Academy that prepared them to be college-like students, as she said “This is a great way to be independent and learn. It gets your taste for college, because you are by yourself in a dorm. You have to make it to class on time, and it’s very intense like college is going to be.” Therefore, studying and living on university campus was taken by participants, who were high school students, as a practical benefit that provided them “a preview for college life”.

To conclude, participants shared the practical benefits of learning Chinese for college application right after the Academy. It was mainly reflected in two aspects. First, the Chinese learning experiences in the Academy was considered to be useful to “enrich” and offered the opportunity to “shine” in their college applications,, which could increase their chances to enter the college of their choice. Second, the learning experiences on a university campus were regarded as a way to preview college life, which could then help them prepare for future college life.

Summary

This chapter first introduced two case studies of individual students whose experiences were representative of all participants for the purpose of providing a

general sense of the participants' learning experiences and their descriptions of their motivation to learn Chinese at different learning stages. Then, motivational factors from the adapted AMTB (See Table 3) were addressed based on the participants' learning experiences during and beyond the Academy including: integrative orientation, interest in foreign languages, attitudes toward the Chinese, motivational intensity, desire to learn Chinese, attitudes toward learning Chinese, and instrumental orientation. For each motivational factor, further themes that emerged from the qualitative data were presented and discussed in order to facilitate the later mixing of the qualitative data and the quantitative data.

The following Table 4 summarizes the qualitative themes for each motivational factor and also provides quotes from participants as typical examples for each theme.

Table 4. Themes for each motivational factors with examples

<i>Motivational Factor</i>	<i>Theme</i>	<i>Example</i>
Integrative Orientation (IO)	Willingness to Communicate	"Learning Chinese will enable me to communicate and share an even more special bond with people who speak or know Chinese."
	Openness to the Target Community	"I love languages and foreign cultures and I hope to someday visit China."
Interest in Foreign Languages (IFL)	Motivation to Learn Different Languages	"I want to learn as many languages as I can."
	An Expanded Worldview	"Learning languages can improve the perspective of the world."
Attitudes toward Chinese people (ACP)	Stereotypes	"They mostly stay to themselves, you know they are Chinese."
	"Aha!" Moments	"Chinese people are not always dull as I assumed before. They can be adorable."
Motivational Intensity (MI)	Motivated Behaviors	"During the class, I am very in, I always pay attention to what the teacher says and try to

	Motivating Influences	understand as much Chinese as possible.”
	Demotivating Influences	“They Yuan system made me want to learn more and to get more Yuan.”
		“I haven’t had a lot going on (with Chinese learning) as I am not having any classes. I feel that I am slowly forgetting things I learned in the Academy.....the less I remember, and the harder I think it’ll be to get back into it.”
Desire to Learn Chinese (DESIRE)	Intended Behaviors	“I plan to visit China after this Academy with my family to learn more. I also plan on pursuing to learn more Chinese in China, maybe in a study abroad program.”
	Expectancy	“I want to be able to speak Chinese pretty fluently, and talk as fast as the teachers can.”
Attitudes toward Learning Chinese (ALC)	From Challenging to Doable	“Before the Academy, I would say it was difficult, because Chinese is all new to me. As I started learning in the Academy, I found it was a lot smoother and a lot more fun than I ever thought.”
	From Unsure to Confident	“Before (the Academy), I was not sure if I really want to learn Chinese, so I came here (to the Academy) and tried out. After the two weeks of learning, I know that I want to keep learning it.”
Instrumental Orientation (INS)	Future Career	“Learning Chinese will produce a dramatic increase in my job opportunities in China.”
	College Application	“Being able to put a(n) (Chinese learning) experience like this on a resume could help me when it comes to applying for colleges and universities.”

CHAPTER 5: QUANTITATIVE RESULTS

To evaluate differences in participants' level of Chinese learning motivation during and beyond the immersion Academy, a repeated measures ANOVA was performed on SPSS, which involved one independent variable of time with three levels and one dependent variable of participants' motivation-related scores (see Table 5). Specifically, the repeated measurements of motivation were obtained for a single sample of 12 student participants the first day when they entered the Academy, the last day when the Academy completed, and again one semester after the Academy. The adapted AMTB (see Appendix I, J, K) was used as instrument collecting data from three item formats: Likert scale, rating scale, and multiple choice with ordinal responses. Particularly, as mentioned before, seven motivational factors concerning participants' Chinese learning motivation were included in the adapted AMTB, including integrative orientation, interest in foreign languages, attitudes toward Chinese people, motivational intensity, desire to learn Chinese, attitudes toward learning Chinese, and instrumental orientation (see Table 3).

Table 5. Variables of the repeated measures ANOVA

Independent Variable	Dependent Variable
Time 1 (at the beginning of the Academy)	Student participants' Chinese learning motivation scores consisted with seven motivational factor sub-scores.
Time 2 (at the end of the Academy)	
Time 3 (one semester after the Academy)	

This chapter reports the results of the statistical analyses. Specifically, for each motivational factor of the adapted AMTB, the same analysis and reporting procedures were applied. At the beginning, the reliability values (Cronbach's alpha) and

descriptive statistics (mean and standard deviation) of a certain factor were reported for its pre-, post-, and follow-up surveys respectively. Considering the fact that in repeated measures design, data for different conditions (time points in this case) come from the same group of participants, the obtained data are thus related to each other. In order to comply with the premise concerning data independence for parametric tests based on the normal distribution, the assumption of sphericity that the relationship between pairs of time points is similar (i.e. the level of dependence between pairs of groups is roughly equal) was added to the repeated measures ANOVA here through the Mauchly's test. Based on the results of the Mauchly's test of sphericity, the main ANOVA result of the factor (the F-value) was then reported accordingly with the value of criterion for significance (the α value) set at .05. Specifically, if the Mauchly's test statistic was non-significant (i.e. when the probably value $p > .05$), we concluded that the assumption of sphericity was met (i.e. the variances of differences between pairs of time points were roughly equal), and reported the sphericity-assumed F-value produced by SPSS; however, if Mauchly's test statistic was significant (i.e. when the probability value $p < .05$), we concluded that the assumption of sphericity was violated (i.e. the variances of differences between pairs of time points were significantly different) and reported the F-value with corrected degrees of freedom as produced by SPSS. The effect of changing the degrees of freedom was that the significance of the value of F changed. At last, when the sphericity-assumed F value or the F value with corrected degrees of freedom denoted overall significant difference in means (i.e. when the corresponding $\alpha < .05$),

a Bonferroni post hoc test was then conducted to determine exactly where those differences existed among means at three different time points.

The data reported in this chapter is about the reliability value, or the Cronbach's alpha value. As mentioned in chapter 3, due to the fact that not all targeted student participants completed the adapted AMTB carried out at three different time points, 12 out of 25 students were finally included as "real" participants of this study, from whom a full set of data (See Table 2) required by this study were collected. Data analysis results reported in this chapter were mainly based on the data from these 12 "real" participants, except for the Cronbach's alpha value for each motivational factor of the adapted AMTB carried out at different time points, which were based on data collected from the actual number of students who completed and submitted the survey. Thus, Cronbach's alpha values reported here were based on survey data from students with a sample size between 12 and 25, making these alpha values more reliable with a relatively large sample size (Javali, 2011).

Integrative Orientation (IO)

Integrative Orientation emphasized the importance of learning Chinese in order to permit social interaction with Chinese people or others who speak Chinese. This motivational factor consisted of five positively worded items. A high IO score (maximum = 35) indicated that learners were pursuing Chinese for social and/or cultural purposes and could be driven by a high level of motivation.

Reliability and Descriptive Statistics

The Cronbach's alpha for IO was .87, .80, .86 for the pre-, post-, and follow-up surveys respectively. According to George and Mallery (2003) and Kline (2000), reliability coefficients falling on or above 0.6 are regarded as acceptable, good, or excellent, in the range of 0.5 and 0.6 as poor, and below 0.5 as unacceptable (See Table 6). Therefore, the reliability of IO met the good standard.

Table 6. Levels of reliability

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent (high-stakes testing)
$0.7 \leq \alpha < 0.9$	Good (low-stakes testing)
$0.6 \leq \alpha < 0.7$	Acceptable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

(Adopted from Kline, 2000, p.13)

The following Table 7 presents the descriptive statistics for IO completed at three different time points, including means, standard deviations, and the number of participants. A mean score of 35 indicated participants' complete agreement with all five items included under this motivational factor.

Table 7. Descriptive statistics for IO

	Mean	Std. Deviation	N
IO-Pre	30.08	3.82	12
IO-Post	31.00	3.59	12
IO Follow-up	28.83	2.98	12

Mauchly's Test of Sphericity

Results of the Mauchly's test (See Table 8) show that the significant value is .48, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = 1.47$, $p = .48$.

Table 8. Mauchly's test of sphericity^a for *IO*

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound
Time points (pre-, post-, and follow-up)	.86	1.47	2	.48	.88	1.00	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

As to the fact that the assumption of sphericity is satisfied for the data of IO, the sphericity assumed F-value was reported to determine whether there were any significant differences among the three groups of IO scores with the criterion value of $\alpha = .05$. It indicated that participants' integrative orientation for learning Chinese was significantly different over time, $F(2, 22) = 4.20, p = .03$.

Bonferroni Post Hoc Test

To determine exactly where significant differences existed, we followed the ANOVA with the Bonferroni post hoc test to make multiple comparisons among time point means of the IO factor. The following estimated marginal means (See Table 9) were compared in the post hoc test.

Table 9. Estimated marginal means used for the Bonferroni post hoc test

	Estimated Marginal Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
IO-Pre	30.08	1.10	27.65	32.51
IO-Post	31.00	1.04	28.72	33.28
IO Follow-up	28.83	.86	26.94	30.73

Results of the Bonferroni post hoc test (See Table 10) show that no significant

differences were found among the six pairwise comparisons for IO. While this does not always happen, it is not surprising due to the fact that pairwise comparison tests and ANOVA do not exactly test the same null hypothesis (H_0) region in the parameters space. Therefore, significant differences may only appear between the different means combinations (the ANOVA) but not come-up when performing direct pairwise comparisons between the individual groups, as happened here to the IO factor.

Table 10. Pairwise comparisons for *IO* based on estimated marginal means

Measure (I)	Pairwise Comparison (J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Pre	Post	-.92	.60	.46	-2.60	.77
	Follow-up	1.25	.83	.48	-1.08	3.58
Post	Pre	.92	.60	.46	-.77	2.60
	Follow-up	2.17	.81	.06	-.11	4.44
Follow-up	Pre	-1.25	.83	.48	-3.58	1.08
	Post	-2.17	.81	.06	-4.44	.11

a. Adjustment for multiple comparisons: Bonferroni.

Figure 4 shows the profile plot of the estimated marginal means of participants' IO scores over time. An increase between the pre-mean and the post-means and a decrease between the post-mean and follow-up mean were found. Specifically, the post-mean of IO scores increased by 3.06% from the pre-mean; the follow-up mean of IO scores decreased by 7.00% from the post-mean; the follow-up mean of IO scores decreased by 4.16% from the pre-mean. Additionally, according to Table 9, the standard error of the estimated marginal IO follow-up mean (.86) is smaller than that of the estimated marginal IO pre-mean (1.10) and the estimated marginal IO

post-mean (1.04). That is to say, the estimated marginal IO follow-up mean was more accurate than both the estimated marginal pre-mean and the estimated marginal post-mean. More than that, it was 95 percent confident that the true IO post-mean was somewhere between 28.72 and 33.28 (See Table 9), which was very close to the maximum score for the current motivational factor of 35. It means that participants had very strong integrative orientation about learning Chinese immediately after the Academy.

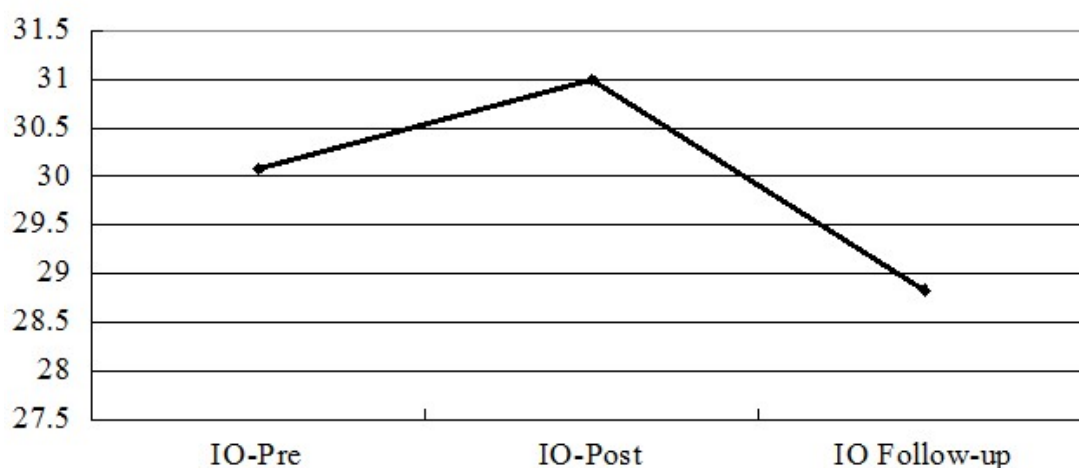


Figure 4. Estimated marginal means of *IO*

Interest in Foreign Languages (IFL)

This motivational factor asked the participants about their feelings concerning learning foreign languages or their states of wanting to know foreign languages. It consisted of six positively worded items. A high IFL score (maximum = 42) indicated high interest in foreign languages.

Reliability and Descriptive Statistics

The Cronbach's alpha for IFL was .82, .61, .63 for the pre-, post-, and follow-up

surveys respectively. Thus, the reliability of this factor met the acceptable to good standard (George & Mallery, 2003; Kline, 2000; See Table 6).

The following Table 11 presents the descriptive statistics for IFL completed at the three different time points, including means, standard deviations, and the number of participants. A mean score of 42 indicated participants' complete agreement with all six items included under this factor.

Table 11. Descriptive statistics for *IFL*

	Mean	Std. Deviation	N
IFL-Pre	38.42	3.75	12
IFL-Post	39.58	2.87	12
IFL Follow-up	39.33	2.84	12

Mauchly's Test of Sphericity

Results of the Mauchly's test (See Table 12) show that the significant value is .23, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = 2.97, p = .23$.

Table 12. Mauchly's test of sphericity^a for *IFL*

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound
Time points (pre-, post-, and follow-up)	.74	2.97	2	.23	.80	.91	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

The assumption of sphericity is satisfied for the data of IFL, the sphericity

assumed F-value was reported to determine whether there were any significant differences among the three groups of IFL scores with the criterion value of $\alpha = .05$. It indicated that participants' interest in foreign languages was not significantly different over time, $F(2, 22) = .90, p = .42$.

Figure 5 shows the profile plot of the means of participants' IFL scores over time. While no significant differences were found among the three means, there was an increase between the pre-mean and the post-mean and a decrease between the post-mean and the follow-up mean. Specifically, the post-mean of IFL scores increased by 3.02% from the pre-mean, the follow-up mean of IFL scores decreased by 0.63% from the post-mean, and the follow-up mean of IFL scores increased by 2.37% from the pre-mean. While there was a small amount of decrease from the post-mean to the follow-up mean, according to Table 11, the standard deviation decreased by 1.05% at the same time. That means, IFL scores collected in the follow-up survey were less spread out or were closer to their mean compared to the IFL scores collected in the post-survey, which made the follow-up mean of IFL scores more representative of all scores collected at this time point.

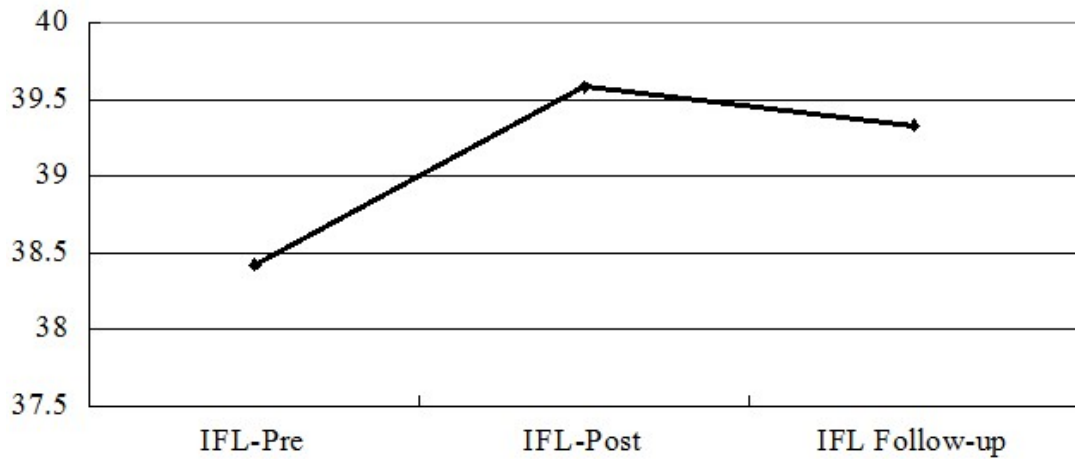


Figure 5. Means of *IFL*

Attitudes toward Chinese People (ACP)

This motivational factor asked the participants about their way of thinking or feelings about Chinese people. It consisted of seven positively worded items. A high ACP score (maximum = 49) indicated positive attitudes toward Chinese people.

Reliability and Descriptive Statistics

The Cronbach's alpha for ACP was .90, .86, .85 for the pre-, post-, and follow-up surveys respectively. Therefore, the reliability of this factor met the good to excellent standards (George & Mallery, 2003; Kline, 2000; See Table 6).

The following Table 13 presents the descriptive statistics for ACP completed at the three different time points, including means, standard deviations, and the number of participants. A mean score of 49 indicated participants' complete agreement with all seven items included under this factor.

Table 13. Descriptive statistics for *ACP*

	Mean	Std. Deviation	N
ACP-Pre	39.75	5.79	12

ACP-Post	41.83	5.27	12
ACP Follow-up	39.67	3.08	12

Mauchly's Test of Sphericity

Results of the Mauchly's test (See Table 14) show that the significant value is .69, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = .74$, $p = .69$.

Table 14. Mauchly's test of sphericity^a for ACP

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound
Time points (pre-, post-, and follow-up)	.93	.74	2	.69	.93	1.00	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

The assumption of sphericity is satisfied for the data of ACP, the sphericity assumed F-value was reported to determine whether there were any significant differences among the three groups of ACP scores with the criterion value of $\alpha = .05$. It indicated that participants' attitudes toward Chinese people were not significantly different over time, $F(2, 22) = 3.02$, $p = .069$.

Figure 6 shows the profile plot of the means of participants' ACP scores over time. While no significant differences were found among the three means, there was an increase between the pre-mean and the post-mean and a decrease between the post-mean and the follow-up mean. Specifically, the post-mean of ACP scores increased by 5.23% from the pre-mean, the follow-up mean of ACP scores decreased

by 5.16% from the post-mean, and the follow-up mean of ACP scores decreased by 0.20% from the pre-mean. While there was a small decrease from the pre-mean to the follow-up mean, according to Table 13, the standard deviation decreased greatly by 47% at the same time. That means, ACP scores collected in the follow-up survey were less spread out or were closer to their mean compared to that of the ACP scores collected in the pre-survey, which made the follow-up mean of ACP scores more representative of all scores collected at this time point.

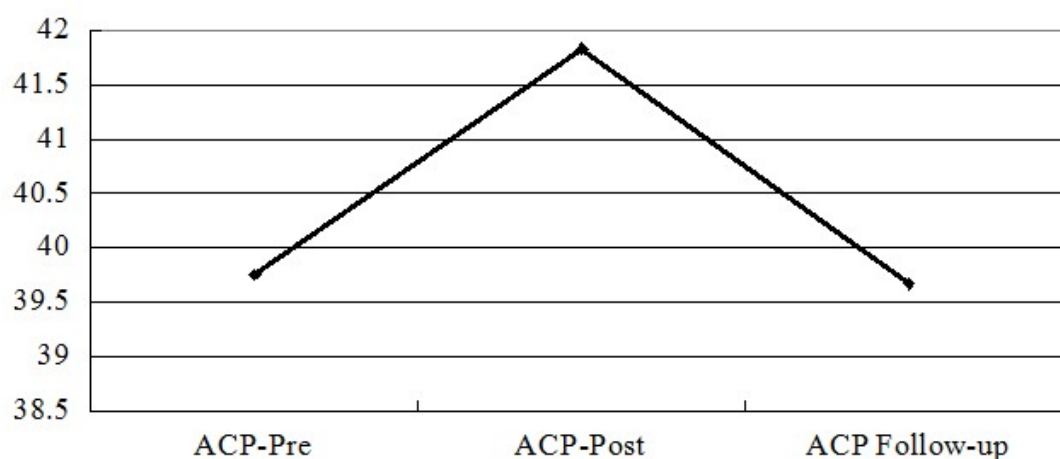


Figure 6. Means of *ACP*

Motivational Intensity (MI)

This motivational factor measured the intensity of participants' motivation to learn Chinese in terms of effort made in learning Chinese. It consisted of five positively worded items. A high MI score (maximum = 19) indicated learners' self report of a high degree of effort being spent in learning the language.

Reliability and Descriptive Statistics

The Cronbach's alpha for MI was .65, .61, .60 for the pre-, post-, and follow-up

surveys respectively after removing the item “When I am/were in Chinese classes, I (would) never say anything/answer only the easier questions/volunteer answers as much as possible”, which met the acceptable standard for reliability of this factor (George & Mallery, 2003; Kline, 2000; See Table 6). The removal of the item was not surprising, because the wording of this item asked participants to make the assumption that they were in Chinese classes, however, all participants had never really been in Chinese classes when the pre-survey was conducted, and most of them were not really in Chinese classes when the follow-up survey was conducted, which made this item confusing. The removal of this item thus helped improve the reliability of this factor.

The following Table 15 presents the descriptive statistics for MI completed at three different time points, including means, standard deviations, and the number of participants. A mean score of 19 indicated participants’ complete agreement with all five items included under this motivational factor.

Table 15. Descriptive statistics for *MI*

	Mean	Std. Deviation	N
MI-Pre	14.92	2.39	12
MI-Post	16.50	1.62	12
MI Follow-up	15.08	1.56	12

Mauchly’s Test of Sphericity

Results of the Mauchly’s test (See Table 16) show that the significant value is .54, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = 1.24, p = .54$.

Table 16. Mauchly's test of sphericity^a for *MI*

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound
Time points (pre-, post-, and follow-up)	.88	1.24	2	.54	.90	1.00	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

As to the fact that the assumption of sphericity is satisfied for the data of MI, the sphericity assumed F-value was reported to determine whether there were any significant differences among the three groups of MI scores with the criterion value of $\alpha = .05$. This score indicated that participants' motivational intensity was significantly different over time, $F(2, 22) = 4.70, p = .02$.

Bonferroni Post Hoc Test

To determine exactly where significant differences existed, we followed the ANOVA with the Bonferroni post hoc test to make multiple comparisons among time point means of the MI factor. The following estimated marginal means (See Table 17) were compared in the post hoc test.

Table 17. Estimated marginal means used for the Bonferroni post hoc test

	Estimated Marginal Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
MI-Pre	14.92	.69	13.40	16.44
MI-Post	16.50	.47	15.47	17.53
MI Follow-up	15.08	.45	14.09	16.08

Results of the Bonferroni post hoc test (See Table 18) show that the pairwise

difference between the pre-mean and the post-mean of the MI score was statistically significant, $p < .05$. This score revealed that participants' motivational intensity showed a significantly positive increase immediately after they completed the Academy compared to their motivational intensity at the beginning of the Academy. However, there was no significant difference in participants' MI scores when comparing between their scores obtained immediately after the Academy and one semester after the Academy, neither when comparing between scores obtained at the beginning of the Academy and one semester after the Academy. The results also suggested that student participants had the most intensive motivation for learning Chinese immediately after they completed the immersion Academy.

Table 18. Pairwise comparisons for *MI* based on estimated marginal means

Measure (I)	Pairwise Comparison (J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound
Pre	Post	-1.58*	.47	.02	-2.90	-.26
	Follow-up	-.17	.64	1.00	-1.97	1.63
Post	Pre	1.58*	.47	.02	.26	2.90
	Follow-up	1.42	.58	.10	-.23	3.06
Follow-up	Pre	.17	.64	1.00	-1.63	1.97
	Post	-1.42	.58	.10	-3.06	.23

*. The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Bonferroni.

Figure 7 shows the profile plot of the estimated marginal means of participants' MI scores toward learning Chinese over time. An increase between the pre-mean and the post-mean and a decrease between the post-mean and the follow-up mean were found. Specifically, the post-mean of MI scores increased by 10.59% from the

pre-mean, which was regarded as a statistically significant increase as shown in Table 18; the follow-up mean of MI scores decreased by 8.61% from the post-mean and the follow-up mean of MI scores increased by 1.07% from the pre-mean, which were regarded as not statistically significant as shown in Table 18. Additionally, according to Table 17, the standard error of the estimated marginal MI follow-up mean (.45) is smaller than that of the estimated marginal MI pre-mean (.69) and the estimated marginal MI post-mean (.47). That is to say, the estimated marginal MI follow-up mean was more accurate than both the estimated marginal pre-mean and the estimated marginal post-mean. More than that, it was 95 percent confident that the true MI post-mean was somewhere between 15.47 and 17.53 (See Table 17), which was very close to the maximum score for this factor of 19. It means that participants had very strong motivation toward learning Chinese immediately after the immersion Academy.

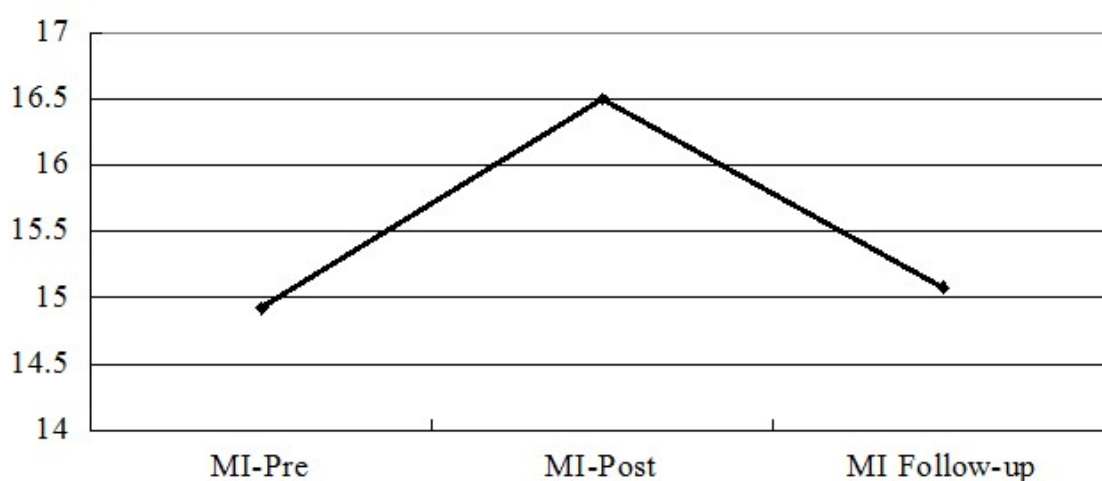


Figure 7. Estimated marginal means of *MI*

Desire to Learn Chinese (DESIRE)

This motivational factor asked the participants about their feeling of wanting to learn Chinese or their wish for learning Chinese. It consisted of five positively worded items. A high DESIRE score (maximum = 19) reflected learners' strong desire to learn Chinese.

Reliability and Descriptive Statistics

The Cronbach's alpha for DESIRE was .69, .62, .71 for the pre-, post-, and follow-up surveys respectively. Thus, the reliability of this factor met the acceptable to good standards (George & Mallery, 2003; Kline, 2000; See Table 6).

The following Table 19 presents the descriptive statistics for DESIRE completed at the three different time points, including means, standard deviations, and the number of participants. A mean score of 19 indicated participants' complete agreement with all five items included under this motivational factor.

Table 19. Descriptive statistics for *DESIRE*

	Mean	Std. Deviation	N
DESIRE-Pre	14.00	1.13	12
DESIRE-Post	14.33	.89	12
DESIRE Follow-up	13.50	2.11	12

Mauchly's Test of Sphericity

Results of the Mauchly's test (See Table 20) show that the significant value is .12, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = 4.25$, $p = .12$.

Table 20. Mauchly's test of sphericity^a for *DESIRE*

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound

Time points							
(pre-, post-, and follow-up)	.65	4.25	2	.12	.74	.83	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

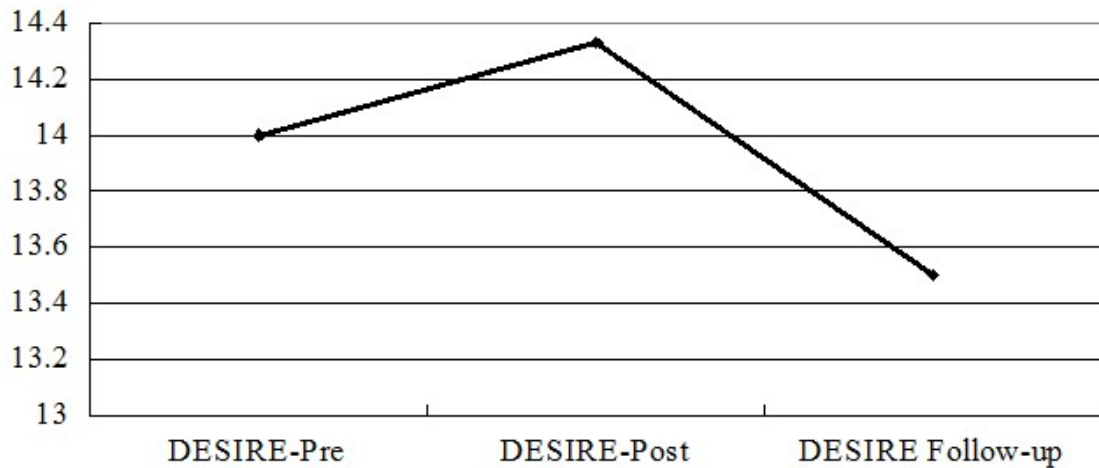
a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

As to the fact that the assumption of sphericity is satisfied for the data of DESIRE, the sphericity assumed F-value was reported to determine whether there were any significant differences among the three groups of DESIRE scores with the criterion value of $\alpha = .05$. It indicated that participants' desire to learn Chinese was not significantly different over time, $F(2, 22) = 1.40, p = .27$.

Figure 8 shows the profile plot of the means of participants' DESIRE scores over time. An increase between the pre-mean and the post-mean and a decrease between the post mean and the follow-up mean were found. Specifically, the post-mean of DESIRE scores increased by 2.36% from the pre-mean; the follow-up mean of DESIRE scores decreased by 5.79% from the post-mean; the follow-up mean of DESIRE scores decreased by 3.57% from the pre-mean. While there was a small increase from the pre-mean to the post-mean, according to Table 19, the standard deviation decreased by 21.24% at the same time. That means, DESIRE scores collected in the post-survey were less spread out or were closer to their mean compared to that of the DESIRE scores collected in the pre-survey, which made the post-mean of DESIRE scores more representative of all scores collected at this time point.

Figure 8. Means of *DESIRE*

Attitudes toward Learning Chinese (ALC)

This motivational factor asked the participants about their way of thinking or feelings about learning Chinese. It consisted of six positively worded items. A high ALC score (maximum = 42) indicated positive attitudes toward learning Chinese.

Reliability and Descriptive Statistics

The Cronbach's alpha for ALC was .94, .83, .89 for the pre-, post-, and follow-up surveys respectively. Thus, the reliability of this factor met the good to excellent standards (George & Mallery, 2003; Kline, 2000; See Table 6).

The following Table 21 presents the descriptive statistics for ALC completed at the three different time points, including means, standard deviations, and the number of participants. A mean score of 42 indicated participants' complete agreement with all six items included under this motivational factor.

Table 21. Descriptive statistics for *ALC*

	Mean	Std. Deviation	N
ALC-Pre	34.67	4.36	12

ALC-Post	38.08	3.55	12
ALC Follow-up	35.33	5.09	12

Mauchly's Test of Sphericity

Results of the Mauchly's test (See Table 22) show that the significant value is .06, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = 5.60, p = .06$.

Table 22. Mauchly's test of sphericity^a for ALC

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound
Time points (pre-, post-, and follow-up)	.57	5.60	2	.06	.70	.77	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

As to the fact that the assumption of sphericity is satisfied for the data of ALC, the sphericity assumed F-value was reported to determine whether there were any significant differences among the three groups of ALC scores with the criterion value of $\alpha = .05$. It indicated that participants' attitudes toward learning Chinese were significantly different over time, $F(2, 22) = 4.73, p = .02$.

Bonferroni Post Hoc Test

The repeated measures ANOVA only provided an overall test of significance for the mean differences between time points. When there was the significant difference, it only indicated the difference between at least two of the time point means. Because we had three different time points in this study (the pre-, post-, and follow-up survey),

to determine exactly where significant differences existed, we followed the ANOVA with the Bonferroni post hoc test to make multiple comparisons among the three time point means. The following estimated marginal means (See Table 23) were compared in the post hoc test.

Table 23. Estimated marginal means used for the Bonferroni post hoc test

	Estimated Marginal Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
ALC-Pre	34.67	1.26	31.90	37.43
ALC-Post	38.08	1.03	35.83	40.34
ALC Follow-up	35.33	1.47	32.10	38.57

Results of the Bonferroni post hoc test (See Table 24) show that the pairwise difference between the pre-mean and the post-mean of the ALC scores was statistically significant, $p < .05$. It revealed that participants' attitudes toward learning Chinese showed a significantly positive increase immediately after they completed the Academy compared to their attitudes at the beginning of the Academy. However, there was no significant difference in participants' ALC scores when comparing their attitudes immediately after the Academy and one semester after the Academy, neither when comparing the beginning of the Academy and one semester after the Academy. The results also suggested that student participants' had the most positive attitude toward Chinese learning immediately after they completed the immersion Academy.

Table 24. Pairwise comparisons for *ALC* based on estimated marginal means

Measure (I)	Pairwise Comparison (J)	Mean Difference (I-J)	Std. Error	Sig. ^a	95% Confidence Interval for Difference ^a	
					Lower Bound	Upper Bound

Pre	Post	-3.42*	.93	.01	-6.03	-.81
	Follow-up	-.67	1.51	1.00	-4.94	3.60
Post	Pre	3.42*	.93	.01	.81	6.03
	Follow-up	2.75	1.01	.06	-.09	5.59
Follow-up	Pre	.67	1.51	1.00	-3.60	4.94
	Post	-2.75	1.01	.06	-5.59	.09

*. *The mean difference is significant at the .05 level.*

a. *Adjustment for multiple comparisons: Bonferroni.*

Figure 9 shows the profile plot of the estimated marginal means of participants' ALC scores over time. An increase between the pre-mean and the post-mean and a decrease between the post-mean and the follow-up mean were found. Specifically, the post-mean of ALC scores increased by 9.84% from the pre-mean, which was regarded as a statistically significant increase as shown in Table 24; the follow-up mean of ALC scores decreased by 7.22% from the post-mean and the follow-up mean of ALC scores increased by 1.90% from the pre-mean, which were regarded as not statistically significant as shown in Table 24. Additionally, according to Table 23, the standard error of the estimated marginal ALC post-mean (1.03) is smaller than that of the estimated marginal ALC pre-mean (1.26) and the estimated marginal ALC follow-up mean (1.47). That is to say, the estimated marginal ALC post-mean was more accurate than either the estimated marginal pre-mean or the estimated marginal post-mean. More than that, it was 95 percent confident that the true ALC post-mean was somewhere between 35.83 and 40.34 (See Table 23), which was very close to the maximum score for this factor of 42. It means that participants had very high positive attitudes toward learning Chinese immediately after the immersion Academy.

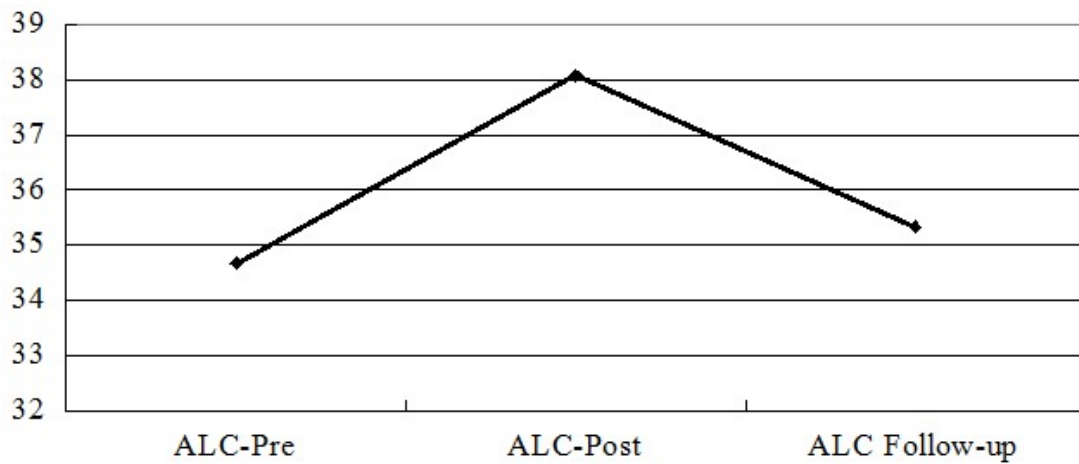


Figure 9. Estimated marginal means of *ALC*

Instrumental Orientation (INS)

This motivational factor stressed the pragmatic or utilitarian value of learning Chinese, such as getting a better job or pursuing a higher level of education in Chinese. It consisted of five positively worded items. A high INS score (maximum = 35) indicated that learners endorsed instrumental reasons for learning Chinese.

Reliability and Descriptive Statistics

The Cronbach's alpha for INS was .80, .80, .67 for the pre-, post-, and follow-up surveys respectively. Thus, the reliability of this factor met the acceptable to good standards (George & Mallery, 2003; Kline, 2000; See Table 6).

The following Table 25 presents the descriptive statistics for INS completed at three different time points, including means, standard deviations, and the number of participants. A mean score of 35 indicated participants' complete agreement with all five items included under this motivational factor.

Table 25. Descriptive statistics for *INS*

	Mean	Std. Deviation	N
INS-Pre	28.33	5.07	12
INS-Post	29.75	4.52	12
INS Follow-up	27.92	4.12	12

Mauchly's Test of Sphericity

Results of the Mauchly's test (See Table 26) show that the significant value is .62, which is larger than .05. Thus, the test indicated that the assumption of sphericity was met, $\chi^2(2) = .95, p = .62$.

Table 26. Mauchly's test of sphericity^a for INS

Within Subjects Effect	Mauchly's W	Approx Chi - Square	df	Sig.	Epsilon ^b		
					Greenhouse -Geisser	Huynh -Feldt	Lower- bound
Time points (pre-, post-, and follow-up)	.91	.95	2	.62	.92	1.00	.50

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept Within Subjects Design: time points

b. May be used to adjust the degrees of freedom for the averaged tests of significance.

Repeated Measures ANOVA

As to the fact that the assumption of sphericity is satisfied for the data of INS, the sphericity assumed F-value was reported to determine whether there were any significant differences among the three groups of INS scores with the criterion value of $\alpha = .05$. It indicated that participants' instrumental orientation was not significantly different over time, $F(2, 22) = 1.61, p = .22$.

Figure 10 shows the profile plot of the means of participants' INS scores over time. An increase between the pre-mean and the post-mean and a decrease between the post-mean and the follow-up mean were found. Specifically, the post-mean of INS scores increased by 5.01% from the pre-mean, the follow-up mean of INS scores

decreased by 6.15% from the post-mean, and the follow-up mean of INS scores decreased by 1.45% from the pre-mean. While there was a small amount of decrease from the post-mean to the follow-up mean, according to Table 25, the standard deviation decreased by 8.85% at the same time. That means, INS scores collected in the follow-up survey were less spread out or were closer to their mean compared to that of the INS scores collected in the post-survey, which made the follow-up mean of INS scores more representative of all scores collected at this time point.

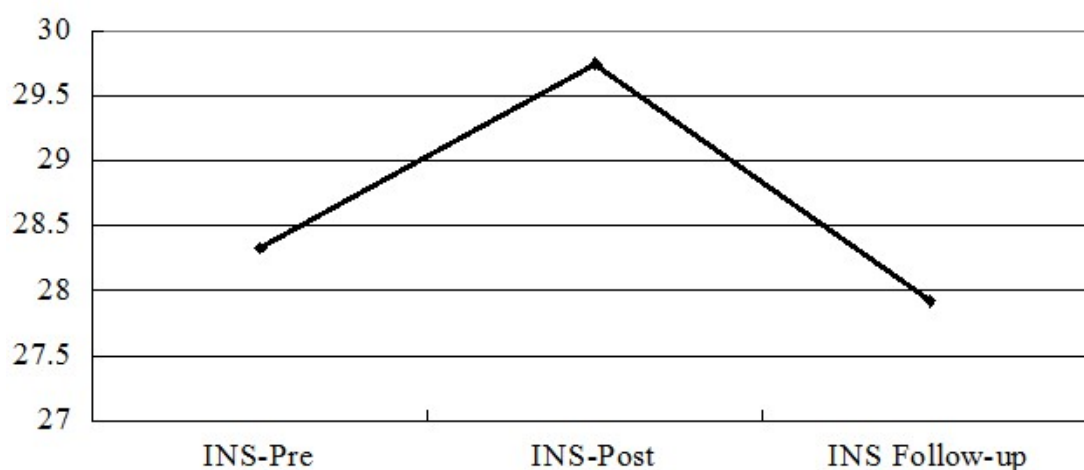


Figure 10. Means of *INS*

Summary

This chapter reports the results of statistical analyses based on data collected from the adapted AMTB with the purpose of identifying the differences in learners' level of Chinese learning motivation over time. For each motivational factor, the same reporting procedures were applied, including the report of reliability values and descriptive statistics for pre-, post-, and follow-up surveys respectively, the results of Mauchly's test of sphericity, the results of a repeated measures ANOVA, and finally

the results of a Bonferroni post hoc test only when a significant difference was found in ANOVA.

Statistical findings indicate all motivational factors met at least the acceptable standard of 0.6 (George & Mallery, 2003; Kline, 2000; See Table 2) for reliability and satisfied the sphericity assumption. All motivational factors indicated a growth from the pre-survey to the post-survey, with two factors (attitudes toward learning Chinese and motivational intensity) indicating significant growth; all motivational factors indicated an insignificant decrease from the post-survey to the follow-up survey. Additionally, the three motivational factors (interest in foreign languages, attitudes toward learning Chinese, and motivational intensity) indicated a growth from the pre-survey to the follow-up survey, and the other four factors (attitudes toward Chinese people, integrative orientation, instrumental orientation, and desire to learn Chinese) indicated an insignificant decrease from the pre-survey to the follow-up survey.

Table 27 summarizes the characteristics of each motivational factor from the adapted AMTB.

Table 27. Characteristics of each motivational factor included in the adapted AMTB

Motivational factor	Items	Cronbach's α <i>Pre</i>	Cronbach's α <i>Post</i>	Cronbach's α <i>Follow-up</i>	Sample Item & item format
Attitudes toward Chinese People (ACP)	7	.90	.86	.85	I would like to know more Chinese people. (<i>Likert scale</i>)
Interest in Foreign Languages (IFL)	6	.82	.61	.63	Studying a foreign language is an enjoyable experience. (<i>Likert</i>

Attitudes toward Learning Chinese (ALC)	6	.94	.83	.89	<i>scale)</i> I love learning Chinese. (<i>Likert scale)</i>
Integrative Orientation (IO)	5	.87	.80	.86	Studying Chinese can be important for me because it will enable me to better understand and appreciate Chinese culture and history. (<i>Likert scale)</i>
Instrumental Orientation (INS)	5	.80	.80	.67	Studying Chinese can be important for me because I'll need it for my future career. (<i>Likert scale)</i>
Motivational Intensity (MI)	5	.65	.61	.60	My motivation to learn Chinese is..... (<i>rating scale)</i>
Desire to Learn Chinese (DESIRE)	5	.69	.62	.71	If it were up to me whether or not to take Chinese, I..... (<i>multiple choice with ordinal responses)</i>

CHAPTER 6: QUALITATIVE & QUANTITATIVE INTEGRATION

In order to provide a more complete picture of student participants' Chinese learning motivation during and beyond the Chinese Academy, the qualitative data and the quantitative data were mixed together in this chapter. The major procedures used were a merged data analysis comparison via a joint display, which was then followed by a side-by-side comparison (Creswell & Plano Clark, 2011; Bustamante, 2014). First of all, the main findings from the qualitative strand and the quantitative strand were merged based on seven motivational factors (see Table 3). Merged findings were illustrated by a joint display as shown in Table 28. Second, a side-by-side comparison was used for merged data under each motivational factor to present and discuss both the quantitative results and the qualitative results together. This chapter serves as a summary of the results of current study.




Merged Data Analysis Comparison

The following joint display arranges motivational factors by qualitative themes and statistical stage reports, and presents congruent and discrepant findings with explanations. Specifically, the first column reports motivational factors from the adapted AMTB (see Table 3) based on Gardner's AMTB (1985b, 2004) and socio-educational model (See Figure 2). As opposed to linguistic goals focused on students' ability to read, write, speak, and understand a new language, these motivational factors examined student learning motivation from non-linguistic aspects, such as improved understanding of the target community, desire to continue studying

Chinese, and an interest in learning Chinese. The second column is the quantitative data analysis results that identify differences in participants' level of Chinese learning motivation over time. Particularly, for each motivational factor, descriptive statistics of mean and standard deviation at different time points (at the beginning of the Academy, at the end of the Academy, and one semester after the Academy) as corresponding to the three different learning stages (preactional stage, actional stage, and postactional stage) were reported, which were followed by the F-value of repeated measures ANOVA with the significance criterion (the α value) set at .05. The third column is the qualitative data analysis results that provide a deeper understanding of participants' Chinese learning motivation through personal perspectives of individual participants from the Academy. Particularly, for each motivational factor, themes that emerged from the qualitative data were presented. The fourth column is a comparison between the quantitative data results and the qualitative data results. Particularly, for each motivational factor, the "+" sign indicates the quantitative results and the qualitative results being congruent; the "-" sign indicates the discrepancy; the "±" sign indicates partial congruent and partial discrepant. The final column presents explanations for either a congruent result or a discrepant result under each motivational factor.

Table 28. Joint display

<i>Motivational factors</i>	<i>Quan. data analysis results</i>	<i>QUAL. data analysis results</i>	<i>Congruent (+) / Discrepant(-) / Partial congruent (±)</i>	<i>Explanation</i>
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IO	M <i>pre</i> = 30.08 SD <i>pre</i> =3.82	Theme 1: Willingness to Communicate		Partial discrepancy caused by the wording of items under the IO factor used in the follow-up survey
	M <i>post</i> =31.00 SD <i>post</i> =3.59	Theme 2: Openness to the Target Community		
	M <i>follow-up</i> = 28.83 SD <i>follow-up</i> =2.98			
	F(2, 22) = 4.20 <i>p</i> = .03	Theme 3: Cultural Affective		
IFL	M <i>pre</i> = 38.42 SD <i>pre</i> =3.75	Theme 1: Learning Different Languages		1. Increase from <i>pre</i> to <i>post</i> . 2. Increase from <i>Pre</i> to <i>follow-up</i> . 3. Decrease from <i>post</i> to <i>follow-up</i> with decrease of SD.
	M <i>post</i> =39.58 SD <i>post</i> =2.87	Theme 2: A World View		
	M <i>follow-up</i> = 39.33 SD <i>follow-up</i> =2.84			
	F(2, 22) = .90 <i>p</i> = .42			
ACP	M <i>pre</i> = 39.75 SD <i>pre</i> =5.79	Theme 1: Stereotypes		1. Increase from <i>pre</i> to <i>post</i> . 2. Small decrease (by 0.2%) from <i>pre</i> to <i>follow-up</i> with big decrease of SD (by 46.8%).
	M <i>post</i> =41.83 SD <i>post</i> =5.27	Theme 2: “Aha!” Moments		
	M <i>follow-up</i> = 39.67 SD <i>follow-up</i> =3.08	Theme 3: People are People		
	F(2, 22) = 3.02 <i>p</i> = .069			
MI	M <i>pre</i> = 14.92 SD <i>pre</i> =2.39	Theme 1: Motivated Behaviors		1. Significant increase from <i>pre</i> to <i>post</i> . 2. Increase from <i>Pre</i> to <i>follow-up</i> . 3. Decrease from <i>post</i>
	M <i>post</i> =16.50 SD <i>post</i> =1.62	Theme 2:		

	$M_{follow-up} = 15.08$ $SD_{follow-up} = 1.56$ $F(2, 22) = 4.70$ $p = .02$	Motivational Complexity	+	to <i>follow-up</i> with decrease of SD.
DESIRE	$M_{pre} = 14.00$ $SD_{pre} = 1.13$ $M_{post} = 14.33$ $SD_{post} = .89$ $M_{follow-up} = 13.50$ $SD_{follow-up} = 2.11$ $F(2, 22) = 1.40$ $p = .27$	Theme 1: Intended Behaviors Theme 2: Expectancy	±	Partial discrepancy caused by the wording of items under the DESIRE factor used in the follow-up survey.
ALC	$M_{pre} = 34.67$ $SD_{pre} = 4.36$ $M_{post} = 38.08$ $SD_{post} = 3.55$ $M_{follow-up} = 35.33$ $SD_{follow-up} = 5.09$ $F(2, 22) = 4.73$ $p = .02$	Theme 1: From Challenging to Doable Theme 2: From Unsure to Willing to Continue Learning	+	1. Significant increase from <i>pre</i> to <i>post</i> . 2. Increase from <i>Pre</i> to <i>follow-up</i> .
INS	$M_{pre} = 28.33$ $SD_{pre} = 5.07$ $M_{post} = 29.75$ $SD_{post} = 4.52$ $M_{follow-up} = 27.92$ $SD_{follow-up} = 4.12$ $F(2, 22) = 1.61$ $p = .22$	Theme 1: College Application Theme 2: Future Career	+	1. Increase from <i>pre</i> to <i>post</i> . 2. Small decrease (by 1.4%) from <i>pre</i> to <i>follow-up</i> with big decrease of SD (by 18.7%).

Integrative Orientation (IO)

The qualitative data revealed participants' integrative motivation throughout the entire learning process. Despite a relatively high starting point, participants were even more integratively-motivated to learn Chinese after the Academy. Before the Academy, participants showed their willingness to communicate with nearby relatives or friends who know or speak Chinese and expressed their interest in Chinese culture. More than that, participants' curiosity about the differences between Chinese and western culture fostered their learning interest. During the Academy, in the Chinese immersion environment, participants actively used Chinese in communicating with both teachers and classmates. Speaking Chinese with native speakers helped them feel "a closer bond" with them, which further increased their willingness to communicate. Moreover, the culture immersion experience exposed participants to Chinese culture while learning language, which further promoted their interest in Chinese culture and Chinese community. One semester after the Academy, participants expressed their desire to use Chinese in communicating with people around the world and showed their interest in going to China in order to experience the local culture.

The quantitative findings reported a significant change of participants' integrative orientation from pre-survey to post-survey to follow-up survey ($F(2, 22) = 4.20, p < .05$). Particularly, participants' scores suggested an increase in integrative orientation from pre-survey to post-survey ($M_{pre} = 30.08, M_{post} = 31.00$). As beginning learners, participants tasted the excitement of getting to know the Chinese language and Chinese culture for the first time in the Academy, plus their experiences

of speaking Chinese in an immersion environment during the Academy, all of which promoted their desire to communicate in Chinese and be more open to the Chinese community. Thus, an increase of integrative orientation by the end of the Academy, or at the post-survey time point, was expected. On the other hand, participants' scores suggested a decrease from pre-survey to follow-up survey ($M_{pre} = 30.08$, $M_{follow-up} = 28.83$), contradicting the qualitative results. A more logical explanation is possible problems with the survey items. By examining the five items under the IO factor used in the follow-up survey (see Table 29), it is not difficult to find that these items assume that participants were "studying Chinese" at the time of the survey. The phrase "studying Chinese" is ambiguous, which may refer to learning Chinese by oneself at home or learning Chinese at school. However, for participants in this study, while some learned Chinese by themselves at home in the following semester after the Academy, most of them did not take any Chinese classes because Chinese was not offered at the school where they attended (see the section "Demotivating Influences" in this dissertation). Participants could have interpreted "studying Chinese" as taking classes at school, which then leads to the low score in the follow-up survey.

Table 29. Items under IO from the follow-up survey

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1. Studying Chinese can be important for me because it will allow me to meet and converse with more and varied people.
 2. Studying Chinese can be important for me because I will be able to participate more freely in the activities of other cultural groups.
 3. Chinese can be important to me because it will allow me to be more at ease with people who speak Chinese.
 4. Studying Chinese can be important for me because it will enable me to better understand and appreciate Chinese culture and history.
 5. My motivation to learn Chinese in order to communicate with Chinese speaking people
-

is weak 1 2 3 4 5 6 7 strong.

Therefore, the qualitative findings and quantitative results regarding integrative orientation were partially discrepant. The qualitative findings provided evidence that the participants' experiences during the Academy promoted students' social and/or cultural learning purposes, which could be driven by a high level of Chinese learning motivation. The quantitative results found that participants' integrative orientation was greatly improved immediately after the Academy, it also reported that their integrative orientation decreased one semester after the Academy. In this case, the partial discrepancy could be more related to the wording of the items included under the factor than to a lack of integrative motivation from the participants, as was evident in the qualitative data. In this regard, the use of mixed methods in an intervention convergent design is beneficial not only for obtaining complementary data, but also for illuminating issues emerging in the study.

Interest in Foreign Languages (IFL)

The qualitative data revealed a continuing increase of participants' interest in foreign languages, especially immediately after the Academy. Before the Academy, participants expressed their interest in learning different languages and noted the importance of gaining a different "world view" through learning languages. Since all participants are English native speakers, learning other languages was regarded as a way to help expand their "English perspective". Learning Chinese in the Academy for two weeks, participants expressed their desire to try and learn more languages, especially when they realized their "potential" in learning Chinese during the

Academy and the joy of knowing different languages. At the same time, they shared that knowing Chinese language helped to open up their vision of the world. One semester after the Academy, participants maintained great interest in learning languages, which was reflected in their application for new language programs and interest in both language and culture. The social requirement for learning different languages and learning Chinese to be “a world citizen” were also emphasized in the participants’ accounts.

According to the quantitative results, no significant statistical change was reported from pre-survey to post-survey to follow-up survey ($F(2, 22) = .90, p > .05$), however, participants’ interest in foreign languages increased overall (see Figure 2). Taking into account the short time of the Academy of only two weeks, the small amount of increase was considerably acceptable in this study. Particularly, participants’ scores suggested an increase of interest in foreign languages from pre-survey to post-survey ($M_{pre} = 38.42, M_{post} = 39.58$), and an increase from pre-survey to follow-up survey ($M_{pre} = 38.42, M_{follow-up} = 39.33$). Since the “productive” Chinese learning experiences at the Academy not only helped participants see their “great learning potential”, but also felt the joy of knowing different languages, an increase of interest in learning foreign languages was expected. After the Academy, a small decrease was found ($M_{post} = 39.58, M_{follow-up} = 39.33$) along with a decrease of standard deviation ($SD_{post} = 2.87, SD_{follow-up} = 2.84$). That means, although the mean of IFL scores decreased from post-survey to follow-up survey, IFL scores collected from the follow-up survey were less spread out compared to the IFL

scores collected from the post-survey, which suggests that participants' interest in foreign languages were more consolidated as a whole group one semester after the Academy, or at the follow-up survey time point.

Therefore, qualitative findings and quantitative results regarding interest in foreign languages were congruent. It provided evidence that participants' experiences during the Academy, plus their experiences beyond the Academy concerning the social requirement to be “a world citizen” and their interest in learning different languages, promoted their interest in learning different languages or their wanting to know other foreign languages.

Attitudes toward Chinese People (ACP)

The qualitative data revealed a change in participants' attitudes toward the Chinese people. Before the Academy, due to limited communication and contact with Chinese people, participants shared some stereotypical assumptions about Chinese people, such as Chinese people having their own small groups consisting only of Chinese, Chinese people not being willing to express their opinions, and Chinese people being smart in math and science. Studying and living in the Academy for two weeks, through learning Chinese culture and direct contact with Chinese teachers both in and out of the Academy, participants' attitudes toward Chinese people became more objective and holistic. Participants were able to experience different (and specific) aspects about the Chinese culture and people, such as being respectful to the elders, being “adorable” and “funny”. One semester after the Academy, participants who visited China were able to experience Chinese culture and people first hand which

helped them reflect on their prior attitudes, and at the same time, added to their knowledge about Chinese people, thereafter developed a more holistic picture about Chinese people, specifically participants learned more details and not just over-generalizations about Chinese people.

According to the quantitative results, no significant statistical change was reported from pre-survey to post-survey to follow-up survey ($F(2, 22) = 3.02, p > .05$), however, participants' attitude scores about Chinese people increased from pre-survey to post-survey ($M_{pre} = 39.75, M_{post} = 41.83$), meaning they demonstrated changed attitudes toward Chinese people after the Academy. Taking into account the short time of the Academy of only two weeks, the small amount of increase was considerably acceptable in this study. Because of direct contact with many teachers who are Chinese native speakers during the Academy and immersion in Chinese culture in the Academy, participants gained a more comprehensive and objective perspective about Chinese people, which helped to improve their understanding about Chinese people. Compared to the one-sided stereotypical assumptions participants had before the Academy, an improvement of their attitudes was expected. On the other hand, a decrease by 0.2% of ACP means was found from pre-survey to follow-up survey ($M_{pre} = 39.75, M_{follow-up} = 39.67$) along with a decrease by 46.8% of ACP standard deviation ($SD_{pre} = 5.79, SD_{follow-up} = 3.08$). That means, while the mean of ACP scores of the follow-up survey decreased by 0.2% from the mean of the pre-survey, compared with its decrease of standard deviation by 46.8%, the decrease was negligible based on the fact that a smaller standard deviation suggests participants'

improved attitudes toward Chinese people being more consolidated as a whole group one semester after the Academy, or at the follow-up survey time point.

Therefore, qualitative findings and quantitative results regarding attitudes toward Chinese people were congruent. It provided evidence that participants' experiences during the Academy, plus their experiences of visiting China after the Academy, improved their attitudes about Chinese people.

Motivational Intensity (MI)

The qualitative data revealed several changes of participants' motivational levels for learning Chinese. While starting with a relatively high starting point, participants were more motivated to learn Chinese especially right after the Academy. Before the Academy the participants were actively engaged in online discussions about Chinese language and Chinese learning. During the Academy, participants shared positive learning experiences that increased their motivation for learning Chinese, including Academy teachers' enthusiasm for and commitment to teaching; Chinese classes with the Yuan incentive, Can-do statements, and family groups; and the Chinese immersion atmosphere, the no-grading system, and campus living with a group of students sharing the same interest in Chinese learning. In such a motivating environment, participants not only actively learned Chinese in class, but also autonomously learned Chinese outside of class. In the following semester after the Academy, participants learned and practiced Chinese in various ways, such as speaking Chinese with friends, using Chinese in Chinese restaurants, learning Chinese with family relatives, and teaching others to learn Chinese. Several participants who visited China reported that

their experiences in China motivated them to continue learning Chinese. However, at the same time, participants also reported issues in their daily lives that made them feel less motivated to learn Chinese, including Chinese classes not being available at school, learning difficulties emerging in their self-learning of Chinese, and not having time to study Chinese.

The quantitative findings reported a significant change of participants' motivational intensity for learning Chinese from pre-survey to post-survey to follow-up survey ($F(2, 22) = 4.70, p < .05$). Particularly, participants' scores suggested a significant increase in motivational intensity from pre-survey to post-survey ($M_{pre} = 14.92, M_{post} = 16.50, p < .05$) and a non-significant increase from pre-survey to follow-up survey ($M_{pre} = 14.92, M_{follow-up} = 15.08, p > .05$). Because of participants' positive learning experiences in the Academy which the participants reported were due to the Academy teachers, Chinese class experiences, and the Academy environment, an increase of motivational intensity was expected. After the Academy, a decrease was found ($M_{post} = 16.50, M_{follow-up} = 15.08$), which can be explained by the practical issues as referred to by participants of not having time for learning, not having Chinese classes available at school, and learning difficulties that emerged in their self-learning of Chinese. A decrease in students' motivational intensity was thus expected. However, despite the partial decrease, participants still kept higher motivational intensity ($M_{follow-up} = 15.08$) comparing with that of before the Academy ($M_{pre} = 14.92$).

Therefore, qualitative findings and quantitative results regarding motivational

intensity were congruent. It provided evidence that participants' experiences during the Academy, plus their experiences of practicing Chinese and visiting China after the Academy, motivated them to learn Chinese. However, participants' experiences of no access to Chinese classes at school, no time for studying Chinese, and no support in self-learning of Chinese after the Academy negatively influenced their Chinese learning motivation.

Desire to Learn Chinese (DESIRE)

The qualitative data revealed participants' desire to learn Chinese as consistent throughout the entire learning and reporting process. Before the Academy, participants shared what they intended to learn in the Academy and their expectations were focused on being able to speak Chinese. Learning Chinese for two weeks in the Academy, participants shared their intentions about continuing learning Chinese, including taking Chinese classes, self-learning Chinese at home, and studying abroad in China. Moreover, based on what they had learned during the Academy and their communication experiences with Chinese native speakers, participants expressed their expectations to "expand" their current knowledge and reach a higher level of proficiency in Chinese one semester after the Academy.

According to the quantitative results, no significant statistical change was reported from pre-survey to post-survey to follow-up survey ($F(2, 22) = 1.40, p > .05$), however, participants' desire to learn Chinese increased from pre-survey to post-survey ($M_{pre} = 14.00, M_{post} = 14.33$). Taking into account the short time of the Academy of only two weeks, the small amount of increase was considerably

acceptable in this study. Studying Chinese in the Academy for two weeks, as beginning learners, while participants were satisfied with what they had learned during the Academy, at the same time, they also realized that they had much to learn and planned to continue learning Chinese. Thus, an increase in desire for learning Chinese by the end of the Academy, or at the post-survey time point, was expected. On the other hand, participants' scores suggested a decrease from pre-survey to follow-up survey ($M_{pre} = 14.00$, $M_{follow-up} = 13.50$), contradicting the qualitative results. While it may be explained by the difficulties participants encountered in self-learning of Chinese after the Academy (see the section "Demotivating Influences" in this dissertation), as difficulties could erode people's learning desire, a more logical explanation was the problems within survey items themselves. Looking at the five items under the DESIRE factor used in the follow-up survey (see Table 30), we can see that except for the fifth item, the remaining four items set up hypothetical situations in order to measure participants' learning desire. By further analysis, we can see that misleading assumptions are covered by hypothetical situations, which could lead to inaccurate measurement of participants' desire. For example, in item 2, as the hypothetical situation is that there was a Chinese club at school, it assumes that if a student had strong desire to learn Chinese, he or she would choose to go to the club. However, this is not always the case in reality, because there is possibility that a student who desires to learn Chinese but does not like to join a club. Participants could have chosen "No" to item 2 because of their dislike of clubs, which then leads to the low score in the follow-up survey. The same applies to item 1 assuming that

students were able to communicate in Chinese while the participants in this study could only carry on very basic conversations in Chinese; item 3 assumed that Chinese classes were available at school when in reality Chinese classes were not available at school where most participants attended; and item 4 assumed that students liked to visit neighborhood families while some students may dislike visiting neighbor families.

Table 30. Items under DESIRE from the follow-up survey

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1. If I had the opportunity to speak Chinese outside of school, I would
 2. If there were a Chinese Club in my school, I would
 3. If it were up to me whether or not to take Chinese, I would
 4. If there were Chinese-speaking families in my neighborhood, I would:
 5. My desire to learn Chinese is weak 1 2 3 4 5 6 7 strong.
-

Therefore, qualitative findings and quantitative results regarding desire to learn Chinese were partially discrepant. The qualitative findings provided evidence that participants' experiences during the Academy enhanced their interest in learning Chinese or their desire for learning Chinese, while the quantitative results found that participants' Chinese learning desire increased immediately after the Academy and reported that their desire decreased one semester after the Academy. In this case, the partial discrepancy was more related to the wording of the items included under the factor than to a lack of learning desire from the participants, as was evident in the qualitative data.

Attitudes toward Learning Chinese (ALC)

The qualitative data revealed a constant change of participants' attitudes toward

learning Chinese. Before the Academy, participants regarded learning Chinese as "difficult" and "challenging" mainly due to two reasons: Chinese being a different and unique language, and Chinese characters being complex. Meanwhile, as novice learners, participants shared uncertainty about learning Chinese in the Academy. Immersed in learning Chinese in the Academy for two weeks, participants began to realize that learning Chinese was "doable" based on their learning experiences during the Academy. The inclusion of various classroom activities that created a "fun" and "enjoyable" learning environment, a festival-based context that made learning "comprehensible", and the integration of iPads provided easy access to learn. Moreover, as participants got to know more about the Chinese language during the Academy, they developed a more optimistic view about learning Chinese with its pinyin system, the no conjugation requirement, and the comparison with other languages that helped them learn. These insights allowed participants to see and experience that learning Chinese was "doable." In addition, participants shared their confidence in learning Chinese based on what they had completed in two weeks' study in the Academy. More than that, their voluntary use of strategies, such as using hand motions to help with Chinese tone pronunciation, adjusting mouth shapes and tongue placement to improve pinyin pronunciation, and using radicals to memorize Chinese characters not only increased participants' Chinese learning confidence, but also showed their commitment to learning Chinese. One semester after the Academy, based on the Chinese basic knowledge learned in the Academy, participants expressed confidence in continuing learning Chinese in the future, and at the same time,

emphasized that learning Chinese took time and efforts.

The quantitative findings reported a significant change in the participants' attitudes toward learning Chinese from the pre-survey to the post-survey to the follow-up survey ($F(2, 22) = 4.73, p < .05$). Particularly, participants' scores indicated a significant increase in attitudes toward learning Chinese from pre-survey to post-survey ($M_{pre} = 34.67, M_{post} = 38.08, p < .05$) and a non-significant increase from pre-survey to follow-up survey ($M_{pre} = 34.67, M_{follow-up} = 35.33, p > .05$), indicating the improvement of participants' attitudes toward learning Chinese after the Academy. Because of the positive and enjoyable learning experiences during the Academy as well as further independent exploration of the Chinese language, participants realized that learning Chinese was "doable". Compared to their negatively-assumed impression of Chinese language as being difficult and "daunting" before the Academy, an increase of positive attitudes toward learning Chinese was expected. After the Academy, a decrease was found ($M_{post} = 38.08, M_{follow-up} = 35.33$), which could be caused by the difficulties participants encountered in self-learning of Chinese after the Academy (see the section "Demotivating Influences" in this dissertation). Compared with participants' highly positive attitudes right after the Academy, the emerging difficulties could lead them to clearly see the reality of learning Chinese that requires both time and effort. Thus, a decrease of participants' attitudes toward learning Chinese was expected here. However, despite the partial decrease, participants still kept positive attitudes ($M_{follow-up} = 35.33$) when compared with that of before the Academy ($M_{pre} = 34.67$).

Therefore, the qualitative findings and quantitative results regarding attitudes toward learning Chinese were congruent providing evidence that participants' experiences during the Academy improved their attitudes about learning Chinese.

Instrumental Orientation (INS)

The qualitative data consistently revealed participants' instrumental orientation throughout the learning process. Learning Chinese for the purpose of opening doors for future careers was frequently mentioned by participants before, during, and after the Academy. Specifically, participants regarded learning Chinese as helpful to expand career potential as a way to prepare for their intended career, and as beneficial for their career development. In addition, right after the Academy, participants, who were high school students at the time of the Academy, pointed out the practical benefits of learning Chinese for college application. Specifically, they regarded the Chinese learning experiences in the Academy as helpful to “enrich” and “shine” their college application resume, which thereafter could increase their chance to enter the college of their choice; they also considered the learning experience of living on a university campus as a way to preview college life.. However, based on participants' accounts, enhancing their college application was not the exclusive purpose for learning Chinese, but this was combined with other integrative (see the section “integrative orientation” in this dissertation) or instrumental (see the section “future career” in this dissertation) purposes.

According to the quantitative results, no significant statistical change was reported from pre-survey to post-survey to follow-up survey ($F(2, 22) = 1.61, p > .05$),

however, participants' instrumental orientation increased from pre-survey to post-survey ($M_{pre} = 28.33$, $M_{post} = 29.75$). Taking into account the short time of the Academy of only two weeks, the small amount of increase was considerably acceptable in this study. After studying in the Academy for two weeks, besides being instrumentally-motivated for long-term goals concerning future career development, participants often voiced their short-term goals regarding the benefit of this experience for their college applications and college choices. Instrumentally driven by both long-term goals and short-term goals, an increase of participants' instrumental orientation was thus expected. On the other hand, a decrease by 1.4% of INS means was found from pre-survey to follow-up survey ($M_{pre} = 28.33$, $M_{follow-up} = 27.92$), along with a decrease by 18.7% of INS standard deviation ($SD_{pre} = 5.07$, $SD_{follow-up} = 4.12$). While the mean of INS scores of the follow-up survey decreased by 1.4% from the mean of the pre-survey, compared with its decrease in standard deviation by 18.7%, the decrease was negligible based on the fact that a smaller standard deviation suggests participants' instrumental orientation was more consolidated as a whole group one semester after the Academy, or at the follow-up survey time point.

Therefore, qualitative findings and quantitative results regarding instrumental orientation were congruent. It provided evidence that participants' experiences during the Academy helped them further see different pragmatic or utilitarian value in learning Chinese.

Summary

This chapter compared findings from qualitative and quantitative data sources through a merged data analysis comparison via a joint display, which was then followed by a side-by-side comparison (Creswell & Plano Clark, 2011; Bustamante, 2014). According to the analysis, convergence between qualitative and quantitative results was found for five motivational factors, including interest in foreign languages (IFL), attitudes toward Chinese people (ACP), motivational intensity (MI), attitudes toward leaning Chinese (ALC), and instrumental orientation (INS). Specifically, quantitative findings from these five motivational factors reported a general increase or consolidation after the Academy, which were congruent with their corresponding qualitative findings indicating a positive improvement after the Academy. Particularly, for two motivational factors, MI and ALC, a significant increase was found before the Academy to after the Academy. Partial convergence between qualitative and quantitative results was found for integrative orientation (IO) and desire to learn Chinese (DESIRE). Specifically, qualitative findings from these two motivational factors indicated an improvement immediately after the Academy which continued one semester after the Academy; the quantitative findings reported an increase immediately after the Academy but a big decrease one semester after the Academy. A further look at the survey items under these two motivational factors, IO and DESIRE, found that the partial discrepancy was caused by the wording of survey items containing misleading assumptions.

By comparing the qualitative data and quantitative data of this study, a more

complete picture of participants' Chinese learning motivation during and beyond the immersion Academy has been formed. Based on the analysis results, we have found that while participants in this study had a high, positive Chinese learning motivation before the Academy as reflected in their desire to learn Chinese, their curiosity in Chinese culture and their positive engagement in discussions about learning Chinese, participants' "positive", "enjoyable" and "productive" learning experiences during the Academy further promoted and increased their motivation. However, participants' experiences after the Academy, which included a lack of access to Chinese classes at their respective high schools, challenges experienced while pursuing the learning of Chinese independently through self-learning efforts, and finally, a lack of time to study Chinese due to their busy lives, negatively influenced their Chinese learning motivation.

CHAPTER 7: CONCLUSION

This chapter provides the conclusion to the study. It begins with summaries and a discussion of the findings according to the three research questions of the study. Following the discussion, implications, limitations, and suggestions for future research are provided.

Summary and Discussion of Findings

Despite the fact that Chinese is one of the critical languages as claimed by the U.S. government and has consistently been one of the most popular languages in the United States²¹, the number of students enrolled in Chinese classes is still low (Rhodes & Pufahl, 2009) mainly because Chinese is regarded by many English speakers as one of the most difficult languages to learn²². The unbalanced relationship between Chinese popularity and low enrollment in Chinese programs in the United States inspired this study to investigate students' motivation for learning Chinese, which is regarded as a key component for language learning (Gardner, 1985a; Dörnyei & Ottó, 1998; Spolsky, 2000; Elyildirim & Ashton, 2006; Deci & Ryan, 1985; Dörnyei & Ushioda, 2009) that affects both learners' initiation and persistence in learning (Dörnyei, 2005; Masgoret & Gardner, 2003).

As reviewed in the literature, while only a few studies have been conducted specifically on Chinese learning motivation, the majority of them have been conducted through either a quantitative approach (e.g., Comanaru & Noels, 2009;

²¹ See <http://www.alsintl.com/blog/top-10-languages/>

²² See <http://www.effectivelanguagelearning.com/language-guide/language-difficulty>

Dretzke & Jordan, 2010; Lu, 2007; Lu & Li, 2008; Wen, 1997; Wen, 2011) or a qualitative approach (e.g., Lin, 2013; Wang, 2010). From the methodology perspective, both approaches have their advantages and disadvantages. On one hand, the quantitative method makes motivation measurable but ignores listening to the voices of learners; on the other hand, the qualitative method examines views and perspectives of the learners but limits the generalizability of the research results. In the face of the dilemma of choosing either quantitative or qualitative approach, in order to provide a comprehensive view about language learning motivation, this study adopted the mixed methods approach to look at the dynamics of a group of high school students' Chinese learning motivation both quantitatively and qualitatively.

Foreign language immersion programs, with its popularity in United States, are increasingly viewed by educators and parents as a highly effective way for teaching foreign languages (Curtain & Dahlberg, 2010). In recent years, Chinese immersion programs have been built up across the country to help language learners not only learn the language, but also develop positive attitudes toward those who speak the language and toward their culture (Met, 1993). Additionally, according to the review of the literature, studies conducted on language immersion programs largely focus on learning outcomes of learners (e.g., Bialystok, 2001; Curtain & Dahlberg, 2010; Genesee, 2008), but ignore the learning experiences of learners. This study thus put the investigation of Chinese learning motivation in the context of a Chinese immersion program, particularly through examining the learning experiences of students during and beyond the immersion program to examine their learning

motivation.

Based on the documented topical and methodological gaps in research on Chinese learning motivation and immersion education, this study employed the mixed methods intervention convergent case study design (see Chapter 3 for detailed information) exploring the development and dynamics of students' Chinese learning motivation as associated with their learning experiences during and beyond an immersion program. Particularly, the case involved in the current study was a STARTALK residential immersion program at UNL. Through studying the case, students' motivation towards learning Chinese was then explored. Moreover, the study adopted Gardner's socio-educational model (2006, 2010) which advocates the importance of individual difference variables in learning a new language, and Dörnyei and Ottó's process-oriented model (1998, 2005) which advocates the dynamic character and temporal variation of motivation, as two theoretical frameworks guiding this research project.

Through analyzing and comparing the qualitative data and quantitative data collected for this study, the major findings were summarized based on the three research questions:

Qualitative Question

How do student participants describe their motivation towards Chinese learning before, during and after the residential Chinese immersion program?

According to Gardner (2010) and Ahmadi (2011), the complexity of motivation requires that it is to be looked at in its totality and in relation to learners' learning

experiences. By analyzing qualitative data collected throughout the three motivational stages: the preactional phase, the actional phase and the postactional phase, as adopted from Dörnyei and Ottó's process-oriented model of student motivation (1998, 2005), participants' motivation towards learning Chinese was reported based on the totality of their motivational performances as reflected in their experiences during and beyond the immersion program.

At the preactional phase, which corresponded to the time period before the program, participants showed positive motivation for learning Chinese through their language performances. By sharing their intentions and expectations about Chinese learning, participants showed their desire to learn Chinese. Specifically, participants expressed their intentions to learn both the Chinese language and Chinese culture, and their expectation to speak Chinese. Besides the learning desire, participants revealed both an integrative and instrumental orientation for Chinese learning. As regards integrative orientation, participants expressed their desire to communicate with nearby relatives, or friends who know or speak Chinese and their interest in Chinese culture. Participants' curiosity about the difference between Chinese and western culture and the "uniqueness" of Chinese culture also fostered their learning interest. As regards instrumental orientation, participants' expressed their purpose for learning Chinese as enhancing their career potential. Although integrative orientation and instrumental orientation are two general inclinations for learning languages, the two orientations "need not be independent"; instead they can positively relate to each other to strengthen motivation (Gardner, 2010, p.17-18). Participants' integrative orientation

with interpersonal quality and their instrumental orientation with practical quality as mentioned above did not contradict each other, instead they were related to each other and directed the participants towards a set of learning goals, which thereafter strengthened their Chinese learning motivation. In addition, participants expressed their interest in learning different languages and indicated the importance of learning different languages to gain a greater "world view". Having benefitted from prior language learning experiences, they also shared experiences of viewing the world through different languages. What's more, to prepare themselves for learning Chinese in the Academy, participants were actively engaged in online discussions about the Chinese language and Chinese learning. Everything considered, participants' motivation toward Chinese learning before the program was positive, which supports Dörnyei's (1998, 2005) claim that individual motivation provided the primary impetus to initiate the learning process.

At the actional phase, which corresponded to the time period during the program, specifically from the beginning of the program to the end of the program, participants showed higher motivation for learning Chinese as compared with their motivation before the Academy. Living and studying in the program for two weeks, participants shared that their experiences in the Academy positively impacted their Chinese learning motivation. First of all, in an immersion environment, they not only learned Chinese, but also about the Chinese culture. As they learned more, participants realized that Chinese was not "daunting" but "doable", especially with its Pinyin system, the absence of conjugations in grammar, and its relatedness with other

languages. More than that, through speaking Chinese with native Chinese speakers in the program, participants were further integratively motivated to learn more Chinese to connect with and build a closer bond with Chinese speaking people. In addition, participants realized the greatness of Chinese culture and expressed their desire to visit China someday; they also noted that learning Chinese opened their mind to experience and see more of the world. Learning Chinese culture and communicating with native Chinese speakers in the program allowed participants to obtain a more comprehensive and objective attitude toward the Chinese people. Particularly, participants shared how the Academy experience was motivating them to learn Chinese. They talked about the Yuan incentive, the flashcard game, the Can-do statements, family groups, the immersion environment, the boarding experience, the no-grading system, the comprehensible learning context, learning technology, learning strategies, the learning while doing and playing atmosphere, and the “comfortable” learning environment with supportive teachers and friends, which helped them enjoy learning Chinese and further stimulated their desire to keep learning. More importantly, realizing how much they had learned and the progress they had made in two weeks, participants’ learning confidence greatly increased, which thereafter encouraged them to continue learning Chinese, for some to learn more foreign languages. At the same time, besides the long-term instrumental goal for career development, students realized and shared the short-term instrumental goal of learning Chinese for college application. This confirmed previous studies (e.g., Downson & McInerney, 2001; Wentzel, 1996) that students motivated to learn

Chinese were concerned about their well-being including the need to fulfill their immediate goals. Everything considered, the positive learning experiences during the program positively promoted participants' motivation toward learning Chinese.

At the postactional phase, which corresponded to the time period after the program, specifically the following semester after the program in this study, participants showed a relatively lower but still positive motivation for learning Chinese as compared to their motivation right after the Academy. Based on what they had learned during the program, participants expressed their desire to communicate with Chinese speakers around the world and actively sought opportunities to practice speaking Chinese with either family friends who spoke Chinese or Chinese international students at school. Several participants visited China during the holidays and expressed their openness to the Chinese community and their interest in Chinese local culture. Moreover, these participants reported that their experiences in China motivated them to continue learning Chinese. Specifically, participants mentioned that the Chinese program was the “kick-starter” in their Chinese learning, and that the basic Chinese knowledge they had learned in the program played the role of “a solid base” for them to continue learning Chinese. Participants' motivational intensity was negatively influenced post Academy by challenges that made it “almost impossible” for them to keep learning Chinese due to a lack of Chinese classes being offered at their school and their “busy” schedule with other subjects. Even for those participants who ended up self-learning Chinese at home, learning without feedback from teachers made it difficult to continue developing their language skills. This confirms the

findings of Rugarcía in 2001, who stated that immediate feedback triggers students' reflection towards their own development and could become an element in developing favorable attitudes towards their own learning (as cited in Pineda, 2011). Everything considered, participants' motivation toward Chinese learning in the following semester after the program was positive but slightly lower than immediately after the immersion language program due to learning obstacles.

All in all, participants' motivation towards Chinese learning changed throughout the three motivational stages, which is echoed in the literature by researchers Wen (1997) and Lin (2013), who found that learners' motivation to begin learning Chinese is different from their motivation to sustain involvement in Chinese learning. In this study, while a relatively high positive motivation was evident prior to the program, participants were further motivated to learn Chinese right after the immersion program because of their positive learning experiences during the immersion program. One semester after the Academy, although participants' Chinese learning motivation was not as strong as right after the immersion program due to a lack of learning opportunities and less language exposure, it still remained positive. The development of participants' learning motivation as a result of different learning experiences during and beyond the immersion program is in line with what Ushioda (2001) pointed out that subjects' experiences were "a significant aspect of how subjects perceived their motivational evolution" (p.111).

Quantitative Question

Are there statistical differences in participants' motivation towards Chinese

learning, as measured by the adapted Attitude/Motivation Test Battery (AMTB), from the beginning to the end to one semester after the immersion program?

By analyzing quantitative data collected with the adapted AMTB at the end of each motivational stage (Dörnyei & Ottó, 1998, 2005), specifically the first day when participants entered the program (or before the immersion program), the last day of the program (or right after the program), and one semester after the program, the change and difference of participants' motivation towards Chinese learning were reported based on motivational factors that are derived from Gardner's socio-educational model (2006, 2010) and Attitude/Motivation Test Battery (AMTB) (1985b, 2004).

The quantitative findings revealed growth of participants' motivation from before the immersion program to right after the program as reflected in all seven motivational factors. Particularly, significant growth was found with participants' motivational intensity and attitudes toward learning Chinese. From before the immersion program to one semester after the program, a positive growth or change was found with participants' interest in foreign languages, attitudes toward Chinese people, instrumental orientation, motivational intensity, and attitudes toward learning Chinese; a decrease was found with participants' integrative orientation and desire to learn Chinese. A further inspection of items included under the two decreased factors exposed wording issues causing misleading assumptions that may have led participants to different interpretations and caused the discrepancy found in the qualitative findings.

Mixed Methods Question

How does the convergence of the qualitative findings from the interviews, observations, and documents and the quantitative findings from the concurrent survey through the intervention trial provide an enhanced understanding of the case?

In response to the “emic-etic dilemma” in the investigation of motivation (McInerney, 1998, p.3), when researchers faced the dilemma of choosing either quantitative or qualitative approach to study motivation, Dörnyei and Ushioda (2011) claimed that “motivation research has reached a transition stage when it would benefit from complementing the traditional research techniques” (p.212). In recent years, with the development of mixed methods, researchers (e.g., Chen, 2006; Dörnyei, 2007) began adopting the mixed methods approach to study language learning motivation. Wesely (2010), in her study about language learning motivation of early adolescent, suggested the use of mixed methods approach which she claimed was “an ideal research structure” by “looking at the motivation of a particular group both quantitatively and qualitatively” (p.296). In order to develop a complete picture of high school students’ Chinese learning motivation in the context of an immersion program, this study employed a mixed methods intervention convergent case study design. It is also consistent with Järvelä & Volet’s (2004, p.196) suggestion as “an attempt to capture the complexity and interactive nature of motivation in real-life dynamic learning environments”.

By collecting and analyzing both qualitative data focused on participants’ voices

and experiences and quantitative data focusing on statistical measurement of motivation, the mixed methods approach employed in this study benefitted from the use of both the qualitative and quantitative traditions.. While the qualitative data, consisting of interviews, observation notes, documents, and products, provided an in-depth understanding about participants' experiences during and beyond the immersion program; the quantitative data, consisting of surveys, assisted in predicting the overall trend of participants' motivation towards Chinese learning.

By bringing together both forms of data, it enabled the researcher to gain a complete picture of the participants' Chinese learning motivation. In this study, after the qualitative data and the quantitative data were collected and analyzed separately in chapter 4 and 5, the two databases were then compared in chapter 6 looking for congruence, discrepancy and relationships. On one hand, congruent findings between the two strands of data helped to further confirm the results of the study; on the other hand, discrepancy was found with the two motivational factors: integrative orientation and desire to learn Chinese. A further examination of existing data of the two motivational factors revealed issues with the wording of instrument items. Thus the use of mixed methods in this intervention convergent design is beneficial not only for obtaining complementary data, but also useful for illuminating and further leading to resolve issues emerging in the study.

Overall, the mixed methods approach employed in this study provided greater insight into high school students' Chinese learning motivation during and beyond the immersion program than could be obtained by either qualitative approach or

quantitative approach alone. By collecting and analyzing both qualitative and quantitative data, this study reported rich and thick findings not only addressing the development of participants' Chinese learning motivation, but also their learning experiences. Furthermore, by mixing and comparing results from the two sets of databases, the study provided an enhanced understanding of the case through looking at congruencies and reexamination of discrepancies. The mixed methods case study design employed in this project provided a way to investigate language learning motivation by using both qualitative data and quantitative data which was lacking in previous studies on motivation.

In conclusion, the findings from this study provide evidence for the dynamics of students' Chinese learning motivation throughout different learning stages and the role of the immersion program in promoting and enhancing the learning motivation. While there existed a high baseline, participants' Chinese learning motivation was further enhanced after living and studying in the immersion program for two weeks. Particularly of note, in the following semester after the program, participants were motivated to continue learning Chinese based on what they had learned in the program, however participants' motivation weakened when participants returned to their daily lives and the challenges of continuing their Chinese learning and study became real. The lack of Chinese class offerings at their local schools, the limited time available to pursue study due to the demands of their other school subjects, and the challenges encountered when trying to pursue self-study of Chinese contributed to the waning of motivation. This reflects the "complex" reasons for student learning

motivation that Tinto (1975) described. An examination of the complexity of motivation through the lens of mixed methods research approach contributed to a better understanding of students' learning motivation fluctuations, which has implications for how to intervene educationally when faced with a decrease in motivation.

Implications

Based upon the findings of this study, a number of implications can be drawn for educators working within Chinese programs, particularly immersion programs, as to how to promote and sustain students' learning motivation both during and beyond the program. Although the setting of this study was a Chinese program, some of the implications may apply to other formal or informal school settings, especially with the learning of less commonly taught languages (LCTLs).

First of all, considering that many students are less likely to have prior exposure to a foreign language, especially LCTLs, it is suggested that language programs offer students some exposure before they formally start learning the language. According to Lin (2013), appropriate exposure to a language would "empower" students to take ownership in learning. In this study, many students talked about the two Youtube videos²³ that the program shared with them before the program, which present a general introduction to the Chinese language and Chinese culture. Based on students' accounts, these videos not only provided an idea about what they were going to learn,

²³ See <https://www.youtube.com/watch?v=2IqdV5EfByg>
http://www.ted.com/talks/shaolan_learn_to_read_chinese_with_ease#t-168680

but also, to some extent, helped them prepare for learning. Moreover, the exposure to Chinese characters stimulated heated online discussions about learning Chinese among all participants, and precluded the learning in the immersion program. For some language programs, if possible, an ideal way to provide students prior exposure to a foreign language would be to offer on-site or online workshops to introduce the target-language-related knowledge and explain the rationale for the immersion program. In this way, students get warm-ups that can help prepare them for learning the language. In addition, language programs can also prepare and send out newsletters with information regarding the target-language learning to students' parents or significant others, whose role in students' learning of a new language is not negligible (Gardner, 1985a). Many participants in this study mentioned during the interview that their significant others, particularly parents and friends, led and encouraged them to learn new languages. Reaching out to parents, or significant others can thus help support students to enhance their new language learning, either by seeking resources for them to extend learning or providing mental support when they encountered difficulties.

Second, program teachers should prepare for the reality that there will most likely be some anxiety as regards learning a new language, especially LCTLs and languages that have a different writing system than their L1, by some students. As can be seen from this study, students' learning motivation fluctuates throughout the learning process. The changing quality of motivation and attitudes allows for possibilities of educational intervention. Based on students' experiences in this study, the program

teachers and program administration should collaborate to help develop students' interest and increase involvement in learning. Teachers play a crucial role in impacting students' learning motivation (Anderman & Anderman, 2010; Dörnyei & Ushioda, 2011). This study revealed the importance of the role of the teacher in the learning process. A key element and responsibility of the teacher is to establish a relationship of mutual trust and respect with students (Alison & Halliwell, 2002). This mainly involves talking with students to learn about their needs and sharing with students learning experiences to encourage their learning. In doing so, teachers show caring for students' learning, which will reinforce their commitment towards learning. Particularly for an immersion program, since many students may have no previous experience learning in an immersion setting, it is suggested for teachers to check in with students to see how they are coping with the immersion setting and then provide feedback and suggestions for their learning, such as checking with their Can-do statements and stamp sheets as what the teachers did in this study to track students' learning progress. Additionally, it is important to create a supportive and comfortable learning environment. According to Dörnyei and Ushioda (2011), "learner involvement will be highest in a psychologically safe classroom climate in which students are encouraged to express their opinions and in which they feel that they are protected from ridicule and embarrassment" (p.110). Participants in this study reported that teachers' "fun" and "positive" instructional methods were one important factor that made them feel motivated to learn. Thus, for teachers, rather than assuming the traditional role as someone who passes on knowledge to students, they assume a

more facilitative role in helping students learn through various pedagogical strategies, such as designing learning activities to help students apply what they have learned; adopting motivating stimulus like the Yuan incentive in this study to promote learning; integrating both language and culture to not only teach students linguistic knowledge but also develop their cross-cultural understandings; using authentic materials to help students appreciate the cultural aspects of the target community; implementing thematically organized curriculum to help students learn in context and enjoy the learning process; adopting the family group approach as in the Academy of this study to cultivate a sense of team spirit and at the same time switching members between different groups to help students work with different people; setting learning goals like the Can-do statements in this study for each class to help students track their learning progress; and using the target language to help students get familiar and used to the language. While teachers need to adopt different pedagogical strategies in ways that are appropriate to specific learning context, the rule of thumb is that students are the center of learning. In such a language classroom where students not only feel the enjoyment of learning but also a sense of belonging, their motivation to learn the language thereafter increases.

In addition, for program administration, it is recommended to invest more resources on educational technology, like computers and iPads. It is necessary that technology be available in the classrooms, which can open another door for students to explore both the target language and the target community. With technology, students can practice language skills by utilizing different learning strategies, which

Saville-Troike (2006) defines as the techniques that students adopt in their efforts to learn a new language. Moreover, utilizing educational technology would help to answer students' demand for more dynamic activities in the classroom, thereafter be expected to enhance students' learning motivation as voiced by participants in this study.

Furthermore, one of the disadvantages to a summer immersion program is that students will eventually leave to go back to schools. For participants in this study, this was a difficult situation because of the lack of Chinese classes offered at schools where they went; as a result, many students did not have access to the network of learning support, but could only rely on what they had learned in the Academy and what they took home with them. In order to maintain students' motivation for continuing learning Chinese, it is suggested for the program to share learning resources, such as online Chinese courses, Chinese learning websites, and appropriate learning materials, with students before they leave the program. The program can also share other Chinese learning opportunities with students, such as studying abroad programs. Particularly, the Academy of this study shared and encouraged the students to apply for scholarships to study Chinese abroad. With the right support, students can keep learning Chinese either by themselves or through other projects, thereby benefiting from the Chinese foundation they have laid during the program. Additionally, if possible, to create interactional opportunities, the program can introduce and help students get access to some local Chinese speaking communities or help them get connected with overseas Chinese speaking communities online.

Through using the target language in spontaneous conversations, students can develop language proficiency and cross-cultural understandings at the same time, thus encourage them to extend learning Chinese. As Duff (2012) argues, besides concerted efforts and strategic practice, learning a new language requires opportunities to access linguistic and interactional resources to sustain students' involvement in learning. With opportunities to use Chinese, the learners' views of themselves might change based on the responses and feedback they receive from the communication, thereby sustaining their motivation to move forward on the learning trajectory and make continuous progress. The available interactional options and resources tend to exert long lasting influence and be sensitive to the dynamic and temporal nature of students' language learning motivation.

Last, but not least, more Chinese programs need to be established in schools to help students keep motivated in learning. The access to language programs in schools will have a huge impact on students, especially those who wanted to learn LCTLs. As Duff (2012) argues, besides efforts and practice, learning a new language requires learning opportunities to help sustain learners' involvement in learning, which in turn would impact learning. In this study, many participants mentioned that no access to Chinese classes at school made them feel less motivated to learn Chinese due to a lack of support and lack of regular and organized learning. Therefore, the context in which students study provides motivation for them to continue Chinese learning. Particularly, for learners of LCTLs with few available learning opportunities, without benefit of access to language programs in schools would make it difficult to move forward on

the learning trajectory and to make continuous language progress. The establishment of critical language programs in schools is thus imminent. Moreover, it is also the societal call with the U.S. government support for learning foreign languages and emphasis on the Americans' communicative competence in critical need foreign languages, particularly after the September 11 attacks in 2001.

Limitations

This study has several limitations. The first limitation was associated with sampling. As described in Chapter 3, purposeful sampling was applied in this study for recruiting participants. Although all students participated in the STARTALK immersion program at UNL were targeted, only 12 of them voluntarily completed all required procedures for data collection, including surveys, interviews, observation notes, documents, and products. Despite the broad gathering of data from each of the 12 involved participants, the small sample size of participants limited the generalizability of the findings from this study to a large population of Chinese learners or other educational settings, however, the multiple sources of data provided an in-depth understanding of the case under study, which was also the purpose of the current mixed methods case study.

The second limitation concerned the time period of the immersion program involved in this study, which lasted only two weeks, a typical feature of many STARTALK summer programs. While it was an immersion program where students were exposed to Chinese language and culture all day long during the program, the

short-term period posed great challenges to see significant change of participants' Chinese learning motivation from before the program to after the program, especially when compared with those long-term programs. With this in consideration, in order to provide a more accurate picture of students' motivational dynamics, both quantitative data looking at the general trend of students' motivation development and qualitative data examining students' Chinese learning experiences concerning their learning motivation were collected. The two strands of data provided different but complementary data about students' Chinese learning motivation, which consequently presented a holistic picture of the case under study.

Another important limitation has to do with me as one of the instructors in the immersion program. Although I only provided two days of lessons toward the end of the program, my role as a participant researcher may have caused restrictions or hesitation for some participants in sharing information that they considered would indicate a “negative” view, especially during face-to-face interviews. However, in order to overcome this problem to some extent, two doctoral students majoring in education and not directly related to this program were invited to conduct two thirds of face-to-face interviews with student participants, and I conducted the remaining one third. Thus, interviews conducted by the two “outsider researchers” triangulated with the interviews conducted by me as the “insider researcher”.

Future Research

Based on the present study, potential avenues for future research are provided.

Since this study is specifically set in a Chinese immersion program, future studies can examine students' Chinese learning motivation in new contexts and settings, such as at school or in study abroad programs, to see the trajectory of students' Chinese learning motivation throughout the learning process. It would be interesting to compare the development of students' Chinese learning motivation between different settings with the aim of determining how immersion learning compares to other forms of study. In addition, since this study only dealt with a student group of a limited number of high school students, future research could explore Chinese learning motivation of middle school or college level students, whose learning experience may reveal more information about the dynamics of their motivation. Another area of inquiry could be to expand the scope of the research to the field in general, specifically exploring programs of other LCTLs in order to see if the findings of this study apply to other languages. Furthermore, to access more information, voices from teachers and parents about their perspectives on students' motivation could be included in future studies.

Lastly, this study has shown that the use of mixed methods and the socio-educational model along with process-oriented model provide new insight into the field of language learning motivation research. Future research could further explore these methodological and theoretical spaces.

As the Chinese language is regarded by many English speakers as “difficult” and “challenging,” learning motivation becomes very important for Chinese learners. This study investigated the dynamics of students' Chinese learning motivation before,

during and after an immersion program as associated with their learning experiences.

Based on the findings, teachers and program administration can help students sustain and enhance learning motivation through positively affecting their learning experiences. Findings of this study also support Dörnyei and Ushiota' (2011) claim that students' motivation can be “worked on” and increased.

REFERENCES

- Ahmadi, M. (2011). *The effect of integrative and instrumental motivation on Iranian EFL learners' language learning*. Retrieved from http://eltvoices.in/Volume1/Issue2/EVI12_2.pdf
- Al-Tamimi, A. & Shuib, M. (2009). Motivation and attitudes towards learning english: A study of petroleum engineering undergraduates at hadhramout. *GEMA Online Journal of Language Studies*, 9(2), 29-55.
- Alison, J., & Halliwell, S. (2002). *Challenging classes: Focus on pupil behavior*. London: CILT.
- Anderman, E.M., & Anderman, L.H.(2010). *Classroom Motivation*. Upper Saddle River, NJ: Merrill.
- Andersen, A. W.(2014). *Parent reasons for enrollment at one dual-language Chinese immersion elementary school program*. Retrieved from <http://scholarsarchive.byu.edu/etd/4126>
- Asia Society and The College Board. (2008, April). *Chinese in 2008: An Expanding Field*. Retrieved from <http://www.cal.org/heritage/newsletter/Field-Report.pdf>
- Azarnoosh, M., & Birjandi, P. (2012). Junior high school students' L2 motivational self system: Any gender differences? *World Applied Sciences Journal*, 20 (4), 577-584
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: W. H. Freeman and Company.

- Bartley, D. (1970). The importance of the attitude factor in language dropout: A preliminary investigation of group and sex differences. *Foreign Language Annals*, 3(3), 383-393.
- Bazeley, C. (2013). *Qualitative Data Analysis Practical Strategies*. Los Angeles, CA: Sage.
- Bernaus, M., & Gardner, R. C. (2008). Teacher motivation strategies, student perceptions, student motivation, and English achievement. *The Modern Language Journal*, 92(2), 387-401.
- Bernaus, M., Masgoret, A.-M., Gardner, R. C., & Reyes, E. (2004). Motivation and attitudes toward learning languages in multicultural classrooms. *International Journal of Multilingualism*, 1, 75-89.
- Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. New York: Cambridge University Press.
- Birkbichler, D. (2007). Lost in translation: A review of the federal government's efforts to develop a foreign language strategy. Testimony before the Senate Subcommittee on Oversight of Homeland Security and Governmental Affairs, January 15.
- Brecht, R. D. (2007). National language educational policy in the nation's Interest: Why? How? Who is responsible for what? *Modern Language Journal*, 91(2), 264-265.
- Brown, J. D. (2000). *Principles of language learning and teaching*. New Jersey: Prentice Hall.

- Brown, J. D. (2001). *Using surveys in language classrooms*. Cambridge: Cambridge University Press.
- Bustamante, C.(2014). *Professional development on Web 2.0 for teachers of Spanish: A mixed methods case study*. Retrieved from <http://digitalcommons.unl.edu/dissertations/AAI3616795/>
- Campbell, R. N., Gray, T. C., Rhodes, N. C., & Snow, M. A. (1985). Foreign language learning in the elementary schools: A comparison of three language programs. *The Modern Language Journal*, 69, 44–54.
- Cenoz, J., & Genesee, F. (1998). Psycholinguistic perspectives on multilingualism and multilingual education. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilingualism and multilingual education* (pp. 16-32). Clevedon, UK: Multilingual Matters.
- Center for Applied Linguistics. (2011a). *Directory of foreign language immersion programs in U.S. schools*. Retrieved from <http://www.cal.org/resources/immersion/>
- Center for Applied Linguistics. (2011b). *Directory of two-way bilingual immersion programs in the U.S.* Retrieved from <http://www.cal.org/twi/directory>
- Chen, J. (2006). *Balancing goals and emotional responses to learning Chinese as a heritage language*. Retrieved from <http://repositories.lib.utexas.edu/handle/2152/2842>

- Cloud, N. Genesee, F., & Hamayan, E. (2000). *Dual language instruction: A handbook for enriched education*. Boston: Heinle & Heinle.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). London, England: RoutledgeFalmer.
- Comanaru, R. and Noels, K.A. (2009) Self-determination, motivation, and the learning of Chinese as a heritage language. *Canadian Modern Language Review*, 66, 131-158.
- Covington, M. V. (1984). The motive for self-worth. In R. Ames & C. Ames (Eds.), *Research on Motivation in Education* (Vol. I, pp. 77-113). New York: Academic Press, Inc.
- Crookes, G., & Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language Learning*, 41(4), 469–512.
- Creswell, J. W. (2007a). *Qualitative inquiry and research design. Choosing among five main approaches*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2007b). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd Ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

- Curtain, H., & Dahlberg, C.A. (2010). *Languages and children: Making the match, 4th Edition*. Boston, MA: Pearson Education.
- Deci, E.L., & Ryan, R.M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Ding, S., & Saunders, R. (2006). Talking up China: An analysis of cultural power and the global popularization of the Chinese language. *East Asia: An International Quarterly*, 23(2), 3-33.
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *Modern Language Journal*, 78(3), 273-284.
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31(3), 117-135.
- Dörnyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualisation of student motivation. *British Journal of Educational Psychology*, 70, 519-538.
- Dörnyei, Z. (2001a). *Teaching and Researching Motivation*. UK, Harlow: Pearson Education.
- Dörnyei, Z. (2001b). New themes and approaches in second language motivation research. *Annual Review of Applied Linguistics*, 21, 43–59.

- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.
- Dörnyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford: Oxford University Press.
- Dörnyei, Z., Csizer, K., & Nemeth, N. (2006). *Motivation, language attitudes and globalization: Hungarian perspective*. Clevedon: Multilingual Matters.
- Dörnyei, Z., & Ottó, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics (Thames Valley University, London)*, 4, 43-69.
- Dörnyei, Z., & Ushioda, E. (2009). Motivation, language identities and the L2 self: A theoretical overview. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 1-9). Bristol, UK: Multilingual Matters.
- Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Harlow: Longman.
- Dowson, M., & McInerney, D. (2001). Psychological parameters of students' social and work avoidance goals: A qualitative investigation. *Journal of Educational Psychology*, 93, 35-42.
- Dretzke, B. J. & Jordan, K. (2010). Expanding secondary school Chinese language programs: A study of potential challenges. *American Secondary Education*, 38(2), 57-73.
- Duff, P. (2012). Identity, agency, and second language acquisition. In A. Mackey & S. Gass (Eds.), *Handbook of second language acquisition* (pp. 410-426). London:

Routledge.

Ellis, R. (1997). *The study of second language acquisition*. Oxford: Oxford University Press.

Elyildirim, S., & Ashton, S. (2006). Creating positive attitudes towards English as a foreign language. *English Teaching Forum*, 44(4), 2-11.

Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry: A guide to methods*. Newbury Park, CA: SAGE.

Faez, F., Majhanovich, S., Taylor, S., Smith, M., & Crowley, K. (2011). The power of “Can Do” statements: Teachers’ perceptions of CEFR-informed instruction in French as a second language classrooms in Ontario. *The Canadian Journal of Applied Linguistics, Special Issue*, 14, 1-19.

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of Mixed Methods Research*. 4. 6-16.

Ferro, S. (2014). *Chinese language teachers' pedagogical beliefs and self-reported implementation of standards-based, learner-centered instruction in the United States*. Retrieved from <http://hdl.handle.net/1920/8964>

Fishman, J. A. (2001). 300-plus years of heritage language education in the United States. In J. K. Peyton, D. A. Ranard, & S. McGinnis (Eds.), *Heritage languages in America. Preserving a national resource* (pp. 81–89). McHenry, IL: Center for Applied Linguistics.

- Ford, M. E., & Nichols, C. W. (1991). Using goal assessment to identify motivational patterns and facilitate behavioral regulation and achievement. In M. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement: Vol. 7. Goals and self-regulatory processes* (pp.61-84). Greenwich, CT: JAI Press.
- Forrest, L.B. (2007, November). *K-12 foreign language program models: Comparing learning outcomes*. Paper presented at the American Council on the Teaching of Foreign Languages Conference (ACTFL) in San Antonio, TX.
- Forrest, L.B. (2011, November). *Comparing program models and student proficiency outcomes*. Paper presented at the American Council on the Teaching of Foreign Languages Conference (ACTFL) in Denver, CO.
- Freedman, S. G. (2004, June 16). After Sputnik it was Russian; After 9/11 should it be Arabic? *The New York Times*.
- Garcia, T. (1999). Maintaining the motivation to learn: An introduction to the special issue of 'Learning and Individual Differences'. *Learning and Individual Differences*, 11(3), 231–232.
- Gardner, R. C. (1968). Attitudes and motivation: Their role in second-language acquisition. *TESOL Quarterly*, 2(3), 141-150.
- Gardner, R. C. (1979). Social psychological aspects of second language acquisition. In H. Giles & R. St. Clair (Eds.), *Language and Social Psychology*. Oxford: Basil Blackwell.

- Gardner, R. C. (1981). Second language learning. Chapter VI in R. C. Gardner & R. Kalin (Eds.), *A Canadian social psychology of ethnic relations*. Toronto: Methuen.
- Gardner, R. C. (1983). Learning another language: A true social psychological experiment. *Journal of Language and Social Psychology*, 2, 219-239.
- Gardner, R. C. (1985a). *Social psychology and second language learning: the role of attitudes and motivation*. Baltimore, Maryland: Edward Arnold.
- Gardner, R. C. (1985b). *The Attitude/Motivation Test Battery [Technical Report]*. Retrieved from <http://publish.uwo.ca/~gardner/..docs/AMTB manual.pdf>
- Gardner, R.C. (1990). Attitudes, Motivation and Personality as predictors of success in Foreign Language Learning. In T. S. Parry & C. W. Stansfield (Eds), *Language aptitude reconsidered* (pp.179-221). Englewood Cliffs, New Jersey: Prentice Hall Regents.
- Gardner, R. C. (2000). Correlation, causation, motivation, and second language acquisition. *Canadian Psychology*, 41, 10-24.
- Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp.1-19). Honolulu, HI: The University of Hawaii, Second Language Teaching & Curriculum Center.
- Gardner, R. C. (2004). *Attitude/Motivation Test Battery: International AMTB Research Project*. Retrieved from <http://publish.uwo.ca/~gardner/docs/englishamtb.pdf>

- Gardner, R. C. (2006). The socio-educational model of second language acquisition: a research paradigm. *EUROSLA Yearbook*, 6, 237–260.
- Gardner, R. C. (2010). *Motivation and Second Language Acquisition: The socio-educational Model*. New York: Peter Lang Publishing, Inc.
- Gardner, R. C., Lalonde, R. N., & Pierson, R. (1983). The socio-educational model of second language acquisition: An investigation using LISREL causal modeling. *Journal of Language and Social Psychology*, 2, 51-65.
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second language acquisition. *Canadian Journal of Psychology*, 13, 266-272.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, M.A.: Newbury House.
- Gardner, R. C., & MacIntyre, P. D. (1991). An instrumental motivation in language study: Who says it isn't effective? *Studies in Second Language Acquisition*, 13, 57-72.
- Gardner, R. C., & MacIntyre, P. D. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language Teaching*, 26(1), 1-11.
- Gardner, R. C., Moorcroft, R., & Metford, J. (1989). Second language learning in an immersion programme: Factors influencing acquisition and retention. *Journal of Language and Social Psychology*, 8, 287-305.
- Gas, S., & Selinker, L. (2001). *Second language acquisition: An introductory course*. NJ: Lawrence Erlbaum Associates, Inc.

- Genesee, F. (1982). Second language learning through immersion: A review of U.S. programs. *Review of Educational Research*, 55, 541-561.
- Genesee, F. (2007). Top ten most consistent findings from research on foreign language immersion. *The ACIE Newsletter*, 10(3), 7, 10.
- Genesee, F. (2008). Dual language in the global village. In T.W. Fortune & D. J. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 22-45). Clevedon, England: Multilingual Matters.
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference. 11.0 update (4th ed.)*. Boston: Allyn & Bacon.
- Graham, S. (1994). Classroom motivation from an attributional perspective. In O'Neil, H.F. Jr. and Drillings, M. (Eds), *Motivation: Theory and Research* (pp.31-48). Hillsdale, NJ: Lawrence Erlbaum.
- Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y.S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp.191-215). Thousand Oaks, CA: Sage.
- Guilloteaux, M. J. (2007). *Motivating language learners: A classroom-oriented investigation of teachers' motivation practices and students' motivation*. Retrieved from <http://eprints.nottingham.ac.uk/10271/>
- Hakuta, K. (1986). *Mirror of language: The debate on bilingualism*. New York: Basic Books.

Holobow, N., Genesee, F., Lambert, W., Gastright, J., & Met, M. (1987).

Effectiveness of partial French immersion for children from different social class and ethnic backgrounds. *Applied Psycholinguistics*, 8, 137-152.

Jackson, F., & Malone, M. (2009, April 5). *Building the foreign language capacity we need: Toward a comprehensive strategy for a national language framework*.

Retrieved from

<http://www.cal.org/resource-center/publications/building-foreign-language-capacity>

Järvelä, S., & Niemivirta, M. (2001). Motivation in context: Challenges and possibilities in studying the role of motivation in new pedagogical cultures. In S. Volet & S. Järvelä (Eds.), *Motivation in learning context: Theoretical and methodological implications* (pp.105-127). Amsterdam: Pergamon Press.

Järvelä, S., & Volet, S. (2004). Motivation in real-life, dynamic, and interactive learning environments: stretching constructs and methodologies. *European Psychologist*, 9(4), 193-197.

Javali, B. (2011). *Effect of varying sample size in estimation of coefficients of internal consistency*. Retrieved from

http://www.webmedcentral.com/wmcpdf/Article_WMC001649.pdf

Johnson, B., & Onwuegbuzie, A. (2006). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.

Kline, P. (2000). *The handbook of psychological testing* (2nd ed.). London:Routledge.

- Kormos, J., & Csizer, K. (2010). A comparison of the foreign language learning motivation of Hungarian dyslexic and non-dyslexic students. *International Journal of Applied Linguistics*, 20(2), 232-250.
- Kyriacou, C., & Zhu, D. (2008). Shanghai pupil's motivation towards learning English and the perceived influence of important others. *Educational Studies*, 34(2), 97-104.
- Lenker, A., & Rhodes, N. (2007). *Foreign language immersion programs Features and trends over 35 years*. Retrieved from <http://www.cal.org/resource-center/briefs-digests/digests>
- Li, D., & Duff, P. A. 2008. Issues in Chinese heritage language education and research at the postsecondary level. In A. W. He & Y. Xiao (Eds.), *Chinese as a Heritage Language: Fostering Rooted World Citizenry* (pp.13-33). Honolulu: University of Hawaii at Manoa, National Foreign Language Resource Center.
- Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Bakers, CA: Sage.
- Lindholm-Leary, K. (2001). *Dual language education*. Clevedon. England: Multilingual Matters.
- Lindholm-Leary, K. (2011). Student outcomes in Chinese two-way immersion programs: Language proficiency, academic achievement, and student attitudes. In D. J. Tedick, D. Christian, & T. W. Fortune (Eds.), *Immersion education: Practices, policies, possibilities* (pp. 81 -103). Clevedon, England: Multilingual Matters.

- Lindholm-Leary, K., & Howard, E. (2008). Language development and academic achievement in two-way immersion programs. In T.W. Fortune & D. J. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 177-200). Clevedon, England: Multilingual Matters.
- Lin, Y. (2013). *A sociocultural approach to the study of motivation and attitudes towards the learning of mandarin Chinese in the U.S.: Secondary school students' perceptions*. Retrieved from <http://academiccommons.columbia.edu/catalog/ac%3A166779>
- Liu, M. (2012). Motivation in Chinese university EFL learners in varying learning context. *TESL Reporter*, 45(2), 17–39.
- Locke, E. A., & Latham, G. P. (1990). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, NJ: Prentice Hall.
- Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science*, 15(5), 265-268.
- Lu, X. (2007). *Motivation orientations in Chinese learning: Heritage and non-heritage college students in the United States*. Retrieved from <http://gradworks.umi.com/32/91/3291581.html>
- Lu, X., & Li, G. (2008). Motivation and achievement in Chinese language learning: A comparative analysis. In A. W. He, & Y. Xiao (Eds.), *Chinese as a heritage language: Fostering rooted world citizenry* (pp.89-108). Honolulu: University of Hawai'i, National Foreign Language Resource Center.

- Lunenburg, C. (2011). Goal-setting theory of motivation. *International Journal of Management, Business, and Administration*, 15(1), 1-6.
- MacIntyre, P. D., & Gardner R. C. (1991). Language anxiety: Its relationship to other anxieties and to processing in native and second languages. *Language Learning*, 41, 513-534.
- MacIntyre, P. D., Richard C., Zoltán D., & Kimberly N. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *Modern Language Journal*, 82, 545-62.
- Masgoret, A. M., Bernaus, M., & Gardner, R. C. (2001). Examining the role of attitudes and motivation outside of the formal classroom: A test of the mini-AMTB for children. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 281-295). Honolulu, HI: The University of Hawaii, Second Language Teaching & Curriculum Center.
- Masgoret, A. M., & Gardner, R. C. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*, 53(1), 123-163.
- Maxcy, S. J. (2003). Pragmatic threads in mixed methods research in the social sciences: the search for multiple modes of inquiry and the end of the philosophy of formalism. In Tashakkori, A., & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks, CA: Sage Publications.

- McDonough, S. (1983). *Psychology in foreign language teaching*. George Allen & Unwin: London.
- McInerney, D. M. (1998, April). *Multidimensional aspects of motivation in cross-cultural settings and ways of researching this*. Paper presented at the American Educational Research Association Annual Meeting, San Diego, CA.
- Mehrpour, S., & Vojdani, M. (2012). Globalization and EFL learning motivation: A new perspective on integrative vs. instrumental motivation among Iranian learners of English. *Open Journal of Modern Linguistics*, 2(2), 43-50.
- Meredith, J. (1998). Building operations management theory through case and field research. *Journal of Operations Management*, 11(3), 239–256.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.
- Met, M. (1993). *Foreign Language Immersion Programs*. Retrieved from <http://www.cal.org/resource-center/briefs-digests/digests>
- Middleton, J. A., & Tolk, Z. (1999). First steps in the development of an adaptive theory of motivation. *Educational Psychologist*, 34(2), 75–85.
- Moeller, A. (2013). *Journal writing tips for STARTALK Chinese summer academy at University of Nebraska-Lincoln*. Unpublished material, University of Nebraska-Lincoln.
- Moeller, A., & Hurlbut, S. (2013). *Survey for Assessing the Impact of the STARTALK Chinese Academy*. Unpublished material, University of Nebraska-Lincoln.
- Moeller, A., & Yu, F. (2015). NCSSFL-ACTFL Can-Do statements: An effective tool

- for improving language learning within and outside the classroom. *Dimension: Proceedings of the Southern Conference on Language Teaching*, 50-69.
- Moiinvaziri, M. (2008). *Motivational orientation in English language learning: A study of Iranian undergraduate students*. Retrieved from <http://www.usingenglish.com/articles/motivational-orientation-in-english-language-learning.html>
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained. Methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, 1, 48–76.
- Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40, 120-123.
- Morse, J. M, & Niehaus, L. (2009). *Mixed methods design: Principles and procedures*. Walnut Creek, CA: Left Coast Press.
- Murphy, P. K., & Alexander, P. A. (2000). A motivated exploration of motivation terminology. *Contemporary Educational Psychology*, 25(1), 3–53.
- National Standards in Foreign Language Education Project (NSFLEP). (1999). *Standards for foreign language learning: Preparing for the 21st century (SFL)*. Lawrence, KS: Allen Press.
- Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools*, 13(1), 48-63.
- Oxford, R., & Shearin, J. (1994). Language learning motivation: expanding the theoretical framework. *Modern Language Journal*, 78(1), 12-28.

- Pineda, S. (2011). *Attitude, motivation, and English language learning in a Mexican college context*. Retrieved from <http://hdl.handle.net/10150/145743>
- Plano Clark, V. L. (2005). *Cross-disciplinary analysis of the use of mixed methods in physics education research, counseling psychology, and primary care*. Retrieved from <http://digitalcommons.unl.edu/dissertations/AAI3163998/>
- Purdie, N. (2003). *Self-Identity and Positive Outcomes of Schooling for Indigenous Australian Students*. Retrieved from <http://www.aare.edu.au/publications-database.php/3957/self-identity-and-positive-outcomes-of-schooling-for-indigenous-australian-students>
- Ragin, C.C. (1992). Introduction: Cases of "what is a case." In Ragin, C.C. and H.S. Becker(Eds.), *What is a case? Exploring the foundations of social inquiry*(pp.1–17). Cambridge: Cambridge University Press.
- Rallis, S. F., & Rossman, G. B. (2003). Mixed methods in evaluation contexts: A pragmatic framework (pp. 491-512). In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage.
- Rhodes, N., & Pufahl, I. (2009). Foreign language teaching in U.S. schools: Results of a national survey. *Center for Applied Linguistics*. Retrieved from <http://www.cal.org/resource-center/publications/foreign-language-teaching-in-u.s.-schools-results-of-a-national-survey>

- Robinson, W. (2010). Consumerism and recovery: What world language teachers can learn from the economy. *The TFLTA Journal*, 2, 2-9. Retrieved from <http://www.tflta.org/uploads/1/0/6/9/10696220/tfltajournal2.pdf>
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9(1), 41-51.
- Ruther, N. L. (2003). *The international and foreign language human capital challenge of the U.S. federal government*. Paper presented at Duke University Conference on Global Issues in International Education.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Ryu Yang, J. S.(2003). Motivational orientations and selected learner variables of East Asian language learners in the United States. *Foreign Language Annals*, 36(1), 44-56.
- Sandelowski, M. (2003) Tables of tableaux? The challenges of writing and reading mixed methods studies. In Tashakkori, A. and Teddlie, C. (Eds), *Handbook of Mixed Methods in Social and Behavioral Research* (pp.321–350). Thousands Oaks, CA: Sage.
- Saville-Troike, M. (2006). *Introducing second language acquisition*. New York: Cambridge University Press.
- Silverman, D. (2000). *Doing qualitative research. A practical handbook*. London: Sage Publications.

- Spolsky, B.(2000). Anniversary article: Language motivation revisited. *Applied Linguistics* 21 (2), 157-169.
- Stake R.E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications, Inc.
- Stake, R.E. (2000). Case studies. In Denzin, N.K. and Y.S. Lincoln (Eds.), *Handbook of qualitative research*(pp.435–454). Thousand Oaks, CA: Sage Publications Inc.
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- Sun, J. (2011). *Chinese as “species” in the American high school*. Retrieved from <https://etda.libraries.psu.edu/paper/12190/7394>
- Sung, H., & Padilla, A. M. (1998). Students motivation, parental attitudes, and involvement in the learning of Asian languages in elementary and secondary schools. *The Modern Language Journal*, 82(8), 205-216.
- Swain, M., & Lapkin, S. (1991). Additive bilingualism and French immersion education: The roles of language proficiency and literacy. In A. Reynolds (Ed.). *Bilingualism, multiculturalism, and second language learning: The McGill conference in honour of Wallace E. Lambert* (pp.120-157). Hillsdale, NJ: Erlbaum.
- Syed, Z. (2001). Notions of self in foreign language learning: A qualitative analysis. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 127–148). Honolulu, HI: University of Hawaii Press.

- Tarhan, H., & Turkey, A. (2014), Motivation, learner identity and language learning. *International Journal on New Trends in Education and Their Implications*, 5(1), 183-197.
- Tashakkori, A. & Teddlie, C. (Eds.). (2010). *Sage handbook of mixed methods in social & behavioral research* (2nd ed.). CA: SAGE Publications, Inc.
- Taylor, D. M., Meynard, R., & Rheault, E. (1977). Threat to ethnic identity and second-language learning. In H. Giles, *Language, ethnicity and intergroup relations* (pp. 99-118). Academic Press.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods researching: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: Sage.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tremblay, P. F., & Gardner, R. C. (1995). Expanding the motivation construct in language learning. *Modern Language Journal*, 79, 505-518.
- Turnbull, M., Lapkin, S., & Hart, D. (2001). Grade 3 immersion students' performance in literacy and mathematics: Province-wide results from Ontario (1998-99). *The Canadian Modern Language Review*, 58 (1), 9-26.
- Urdu, T., & Schoenfelder, E. (2006). Classroom effects on student motivation: Goal structures, social relationships, and competence beliefs. *Journal of School Psychology*, 44, 331-349.

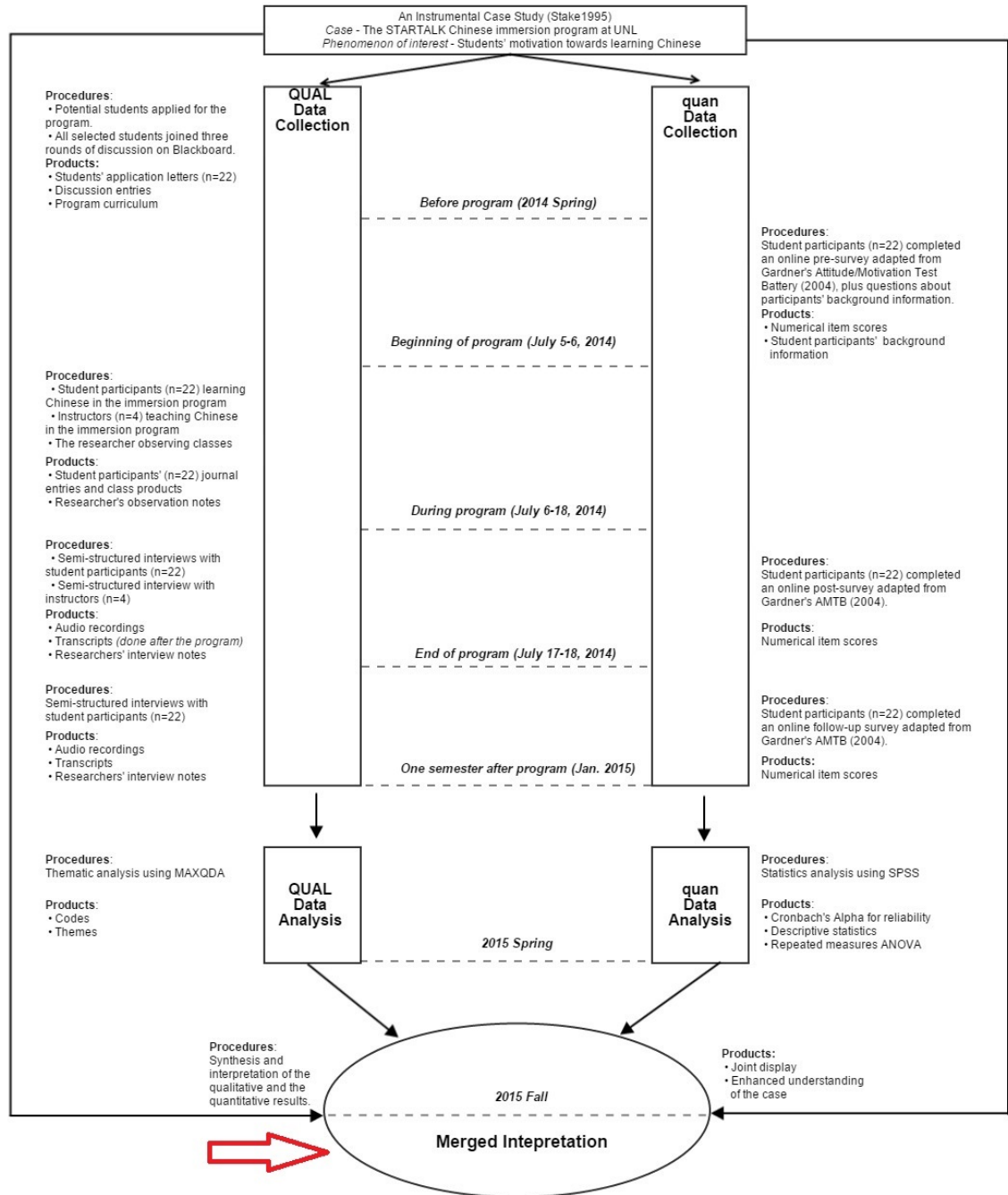
- U.S. Department of Education, Office of Postsecondary Education. (2008). *Enhancing foreign language proficiency in the United States: Preliminary results of the National Security Language Initiative*. Retrieved November 2, 2009, from <http://www.ed.gov/about/inits/ed/competitiveness/nsli>
- Ushioda, E. (1994). L2 motivation as a qualitative construct. *Teanga, 14*, 76– 48.
- Ushioda, E. (1996) Developing a dynamic concept of L2 motivation. In Hickey, T. and Williams, J. (Eds), *Language, Education and Society in a Changing World* (pp. 239– 45). Dublin/Clevedon: IRAAL/Multilingual Matters.
- Ushioda, E. (2001). Language learning at university: Exploring the role of motivational thinking. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 93–125). Honolulu, HI: University of Hawai'i Press.
- Ushioda, E. (2006). Language motivation in a reconfigured Europe: Access, identity, autonomy. *Journal of Multilingual and Multicultural Development, 27*(2), 148-161.
- Vaezi Z (2009). Language learning motivation among Iranian undergraduate students. *Iranian Journal of Language Studies, 3*(1), 79-104.
- Valdes, G. (2001). Heritage language students: Profiles and possibilities. In J.K. Peyton, D.A. Ranard & S. McGinnis (Eds.), *Heritage Language in America: Preserving a national resource* (pp.37-77). McHenry, IL: Center for Applied Linguistics.
- Van Houten, J. (2007). NCSSFL's LinguaFolio project. In Cherry, C., & Bradley, L.

- (Eds). *Dimension: Proceedings of the Southern Conference on Language Teaching* (pp. 1-12). Valdosta, GA: SCOLT Publications.
- Van Lier, L. (1996). *Interaction in the language curriculum: Awareness, autonomy, and authenticity*. London: Longman.
- Volet, S. (2001). Emerging trends in recent research on motivation in learning contexts. In S. Volet, & S. Järvelä (Eds.), *Motivation in learning contexts: Theoretical advances and methodological implications*, (pp. 319–334). Oxford: Pergamon.
- Volet, & S. Järvelä (Eds.), *Motivation in learning contexts: Theoretical advances and methodological implications* (pp. 105–127). Oxford: Pergamon.
- Wang, A. H. (2010). Motivating U.S. students to learn Chinese as a second language: Understanding the interactions between motivation, ethnicity, and teaching strategies. In J. Chen, C. Wang, & J. Cai (Eds.), *Teaching and learning Chinese: Issues and perspectives* (pp.116- 135). Information age publishing, a volume in Chinese American Education Research and Development Association book series.
- Weiner, B. (1992). *Human Motivation: Metaphors, Theories and Research*. Newbury Park, CA: Sage.
- Wen, X. (1997), Motivation and Language Learning with Students of Chinese. *Foreign Language Annals*, 30(2): 235–251.
- Wen, X. (2011). Chinese language learning motivation: A comparative study of heritage and non-heritage learners. *Heritage Language Journal*, 8(3), 41-66.

- Wentzel, K. R. (1996). Social and academic motivation in middle school: Concurrent and long-term relations to academic effort. *Journal of Early Adolescence*, 16, 390-406.
- Wesely, P. M. (2009). *The language learning motivation of early adolescent French and Spanish elementary immersion program graduates*. Retrieved from http://conservancy.umn.edu/bitstream/handle/11299/54992/Wesely_umn_0130E_10435.pdf?sequence=1
- Wesely, P. M. (2010). Language Learning Motivation in Early Adolescents: Using Mixed Methods Research to Explore Contradiction. *Journal of Mixed Methods Research*, 4(4), 295-312.
- Wiley, T. G. (2001). On defining heritage languages and their speakers. In J. K. Peyton, D. A. Ranard, & S. McGinnis (Eds.), *Heritage languages in America: Preserving a national resource* (pp. 29-36). McHenry, IL/Washington, DC: Delta Systems/Center for Applied Linguistics.
- Williams, M., & Burden, R. (1999). Students' developing conceptions of themselves as language learners. *Modern Language Journal*, 83(2), 193-201.
- Yin, R. (2009). *Case Study Research: Design and Methods* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Zafarghandi, A., & Jodai, H. (2012). *Attitudes toward English & English learning at an Iranian Military University: A preliminary survey*. Retrieved from <http://eric.ed.gov/?id=ED528150>

APPENDICES

Appendix A: Procedural Diagram



A Mixed Methods Convergent Case Study Design for Chinese Learning Motivation of High School Students in an Immersion Program

Appendix B: Institutional Review Board Approval

July 3, 2014

Fei Yu

Teaching, Learning and Teacher Education

409 N 25th Street, Apartment 4, Lincoln, NE 68503

Aleidine Moeller

Teaching, Learning and Teacher Education

115 HENZ, UNL, 68588-0355

IRB Number: 20140714554 EP

Project ID: 14554

Project Title: Attitudes, Motivation, and Chinese Language Learning: A Mixed Methods Case Study with a STARTALK Program

Dear Fei:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46). Your project has been approved as Expedited Categories 6 and 7.

Date of EP Review: 7/3/2014

You are authorized to implement this study as of the Date of Final Approval: 07/03/2014. This approval is Valid Until: 07/02/2015.

1. The stamped and approved informed consent documents have been uploaded to NUgrant (file with -Approved.pdf in the file name). Please distribute these documents to participants. If you need to make changes to the documents, please submit the revised documents to the IRB for review and approval prior to using them.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- * Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- * Any serious accidental or unintentional change to the IRB-approved protocol that

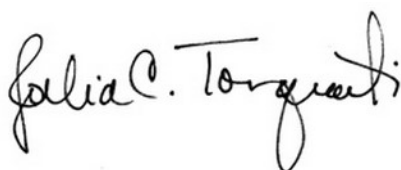
involves risk or has the potential to recur;

- * Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- * Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- * Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,



Julia Torquati, Ph.D.
Chair for the IRB



Appendix C: Youth Assent Form for Student Participants



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Department of Teaching, Learning and Teacher Education

Youth Assent Form

IRB# 14554

Attitudes, Motivation, and Chinese Language Learning: A Mixed Methods Case Study with a STARTALK Program

We are inviting you to participate in this research because you are a student enrolled in the 2014 STARTALK Chinese Summer Academy at UNL. We are interested in the impact of the STARTALK Academy on your attitudes and motivation towards Chinese learning both during and after the Academy.

Your participation will involve completing the following tasks:

- Finish three surveys about your attitudes and motivation towards Chinese learning (approximately 30 minutes each).
- If selected, having one or two interview(s) about your views on the impact of the STARTALK Academy on your attitudes and motivation towards Chinese learning (approximately 45-60 minutes each). You can choose to have the interview(s) face to face, online or by phone. Before an interview is conducted, you will receive an invitation email from the investigator.

The interview(s) will be audio recorded with the permission from both you and your parents or legal guardians. Responses will be transcribed and analyzed with the purpose of the study.

- Completing an online portfolio (approximately 10 minutes daily), daily journals (approximately 15 minutes daily), and online discussion (approximately 20 minutes total), which are a regular part of the Academy and requires no additional work on your part .

Please note that two of the surveys, one interview, and the E-portfolio procedures will also be used as part of a study conducted by Dr. Ali Moeller and Dr. Sheri Hurlbut, entitled "Assessing the impact of the UNL STARTALK Chinese Academy".

Signing this consent form also gives permission to the researchers of this study to carry out two class observations (approximately 1 hour each), where you are enrolled in, respectively during the first week of the Academy and the second (last) week. The two observations will mainly record teacher's practice and students' behavior during class activities. Any student or teacher names will not be recorded during observations. All the data collected will only be analyzed and used for the purpose of this study.

There are not many risks in participating in this research. Potential risks involve fatigue or other risks normally associated with using a computer monitor and keyboard, such as eyestrain. There are no direct benefits to you by participating in the research. You may choose not to participate further in the research at any time without penalties for doing so.

We will keep your personal information confidential, to help protect your confidentiality, all data collected from this study will be associated with you only through a pseudonym--not your real name. Any data analysis will be conducted after the Academy is over and any data published resulting from this study will make no reference to you as an individual subject.

We will also ask your parents or legal guardians for their permission for you to participate in this study. Please talk this over with them before you decide whether or not to participate.

If you have any questions at any time, please ask one of the researchers.

☐ By checking this box, you consent to the audio recording of the interviews associated with this study.

Signature of Subject

Date

Signature of Investigator

Date

Investigators:

Fei YU
Teaching, Learning and Teacher Education
University of Nebraska-Lincoln
Lincoln, NE 68588-0355
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402-4294092

Aleidine J. Moeller, Ph.D.
Edith S. Greer Professor
University of Nebraska-Lincoln
Lincoln, NE 68588-0355
amoeller2@unl.edu
402-4722020

Appendix D: Parent/Legal Guardian Informed Consent Form



COLLEGE OF EDUCATION AND HUMAN SCIENCES
Department of Teaching, Learning and Teacher Education

Parent/Legal Guardian Informed Consent Form
IRB# 14554

Title:

Attitudes, Motivation, and Chinese Language Learning: A Mixed Methods Case Study with a STARTALK Program

Purpose:

We are inviting your child/legal ward to participate in this research because your child is a student enrolled in the 2014 STARTALK Chinese Summer Academy at UNL. The purpose of this study will be to investigate the impact of a STARTALK Chinese language program on students' attitudes and motivation towards learning Chinese. It is expected that this study will provide broader views and comprehensive understandings on how to promote motivation towards Chinese learning, which would consequently enhance students' learning outcomes and contribute to the continuous development of STARTALK programs.

Procedures:

You child/legal ward will be asked to complete the following tasks as part of the research: 1) completing three online surveys (approximately 30 minutes each) respectively at the beginning and the end of the Academy and one semester after the Academy, 2) if selected, completing one or two face-to-face/online/phone interviews (approximately 45-60 minutes each) respectively at the end of the Academy and one semester after the Academy, *which will be audio recorded with the permission from both you and your child or legal ward*, and 3) completing the E-portfolio, online discussion and daily journals during the Academy, which are completed as a regular part of the Academy and require no additional work on the part of your child/legal ward.

Please note that two of the surveys, one interview, and the E-portfolio procedures will also be used as part of a study conducted by Dr. Ali Moeller and Dr. Sheri Hurlbut, entitled "Assessing the impact of the UNL STARTALK Chinese Academy".

Signing this consent form also gives permission to the researchers of this study to carry out two class observations (approximately 1 hour each), where your child/legal ward is enrolled in, respectively during the first week of the Academy and the second (last) week. The two observations will mainly record teacher's practice and students' behavior during class activities. Any student or teacher names will not be recorded during observations. All the data collected will only be analyzed and used for the purpose of this study.

Benefits:

There are no direct benefits to your child/legal ward by participating in the research.

Risks and/or Discomforts:

There are not many risks in participating in this research. Potential risks involve fatigue or other risks normally associated with using a computer monitor and keyboard, such as eyestrain.

Confidentiality:

We will keep your child's/legal ward's personal information confidential. To help ensure confidentiality, all data collected from this study will be associated with your child/legal ward only through a pseudonym-not his or her real name. This pseudonym will be used to identify him or her in all paper and computer files, so there will be no means for identifying the responses given as a part of this study with any personal information. In addition, only researchers will have access to the pseudonyms, and this information will be kept in a secure manner (on password-protected computers in a secured facility). Any data published resulting from this study will make no reference to your child/legal ward as an individual subject.

Compensation:

Your child/legal ward will receive no compensation for participating in this study.

Opportunity to Ask Questions:

You and your child/legal ward may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may contact the investigator(s) at the phone numbers below. Please contact the University of Nebraska-Lincoln Institutional Review Board at (402) 472-6965 to voice concerns about the research or if you have any questions about your child's/legal ward's rights as a research participant.

Freedom to Withdraw:

Participation in this study is voluntary. You and your child/legal ward can refuse to participate or withdraw at any time without harming your and their relationship with the researchers or the University of Nebraska-Lincoln, or in any other way receive a penalty or loss of benefits to which you or they are otherwise entitled.

Consent, Right to Receive a Copy:

You are voluntarily making a decision whether or not to allow your child/legal ward participate in this research study. Your child/legal ward will also agree to be included within the study by providing assent if they are above the age of seven years old. Your signature certifies that you have decided to allow them to participate having read and understood the information presented. You will be given a copy of this parental/legal guardian consent form to keep.

☐

By checking this box, you consent to the audio recording of the interviews with your child or legal ward associated with this study.

Name of Child to be Included:

(Name of Child: Please print)

Name & Signature of Parent/Legal Guardian:

(Name of Parent/Legal Guardian: Please print)

(Signature of Parent/Legal Guardian)

Date

Name and Phone number of investigator(s)

Fei YU, PhD Student at UNL, Principal Investigator Phone: (402) 429-4092

Dr. Aleidine Moeller, UNL, Secondary Investigator Phone: (402) 472-2024

Appendix E: Interview Protocol for Student Participants

Date: _____

Interviewer: _____

Interviewee: _____

Introduction:

Thank you for taking the time to meet with me today. I have several questions to go through, and this interview should take no more than one hour. Keep in mind that there are no right or wrong answers. All thoughts are important so please don't be afraid to give your opinion. With your permission I will be recording this interview so that it can be transcribed and codified *after* the STARTALK Academy ends. When I report results from this study, no specific names will be given. Your identity in this research will be kept confidential.

What I'm interested in finding out today is how you understand, describe, and interpret the impact of this STARTALK Academy on your attitudes and motivation towards Chinese learning. I really want to know your perspectives, so please feel free to discuss your views. Are you ready to start? Are there any questions before we begin?

Interviews conducted with STARTALK student participants may include, but will not be limited to, the following questions:

1	What motivated you to attend this Chinese Academy?
2	What are your general thoughts about Chinese language?
3	What are your general thoughts about Chinese people?
4	<p>What are your general thoughts about learning Chinese?</p> <p>Tell me something that you like and don't like about learning Chinese.</p> <p>Do you think it is good to know Chinese? Why or why not?</p>
5	How do you describe your Chinese learning experience in this Academy?

	<p>What do you like or dislike about your experience in this Academy? Tell me some memories or stories about your experience.</p>
6	<p>What role do you think this Academy plays in your Chinese learning?</p> <p>What experiences are most helpful/useful to you?</p> <p>Have you found any difficulties in learning Chinese? What do you usually do with these difficulties? Give me an example.</p>
7	<p>Have you ever been really proud about the fact that you can speak Chinese?</p> <p>Have you ever been nervous about speaking Chinese?</p>
8	<p>Have you ever attended other language programs besides this one?</p> <p>If YES, have you noticed any differences between this program and the other language programs you've ever attended? What are special characteristics of this Academy?</p>
9	<p>In general, do you think that it is important or good for people to learn a second language? Why or why not?</p>
10	<p>How important do you think it is to be interested in (/having positive attitudes and high motivation for) the language you are learning? (Very important, quite important, Not so important, not important at all)</p> <p>Why?</p>
11	<p>How do you describe your level of motivation when you learn Chinese in the Academy?</p>

	<p>Does the Academy experience motivate you to learn harder?</p> <p>If YES, how do you think it motivates you?</p>
12	<p>Will you continue learning Chinese (e.g. taking a Chinese course; learning Chinese by yourself; keep using Chinese pinyin) after the STARTALK Chinese Academy?</p> <p>If no, why?</p> <p>If yes, what makes you make this decision?</p> <p>To what extent did the STARTALK experience influences your decision regarding continue/stop learning Chinese? Please explain why and how.</p>
13	<p>If you have a chance to recommend this Academy to other students, would you like to do that?</p> <p>What would you say to convince them to attend this Academy?</p>
14	<p>Do you have anything else you'd like to add to this interview? Please feel free to share any ideas.</p>

(Thank the participant and assure him/her of confidentiality of response.)

Appendix F: Observation Protocol

Date of Observation: _____

Time: _____

Total Length of Observation: _____

Purpose of this study: To investigate the impacts of a STARTALK Chinese language program on students' attitudes and motivation towards Chinese learning.

Descriptive Notes	Reflective Notes

Appendix G: Blackboard Discussion Questions

Topic #1 June 23:

Please watch this YouTube video (<http://www.youtube.com/watch?v=2IqdV5EfByg>) and then respond to the following questions:

1. What are three things in the video that you found intriguing and increased your curiosity about Chinese?
2. Of all the information presented in the video, what do you think is most relevant to you personally if you were planning to travel there in the near future?
3. Why does the video say that "China is one big contradiction that refuses to be placed in a box"?

After you have answered these questions yourself, go and read the posts of your fellow STARTALK classmates and respond to at least two of them. Check back a few times to see how the discussion is going and join in again.

Topic #2 June 30:

Please watch a TED talk (http://www.ted.com/talks/shaolan_learn_to_read_chinese_with_ease#t-168680) about Chinese characters and post your answers to the following questions. If you have any other thoughts or questions regarding this topic, feel free to include them in your response.

1. For English speakers, it is very natural to draw an analogy between Chinese characters and English letters. According to this talk, how do the Chinese characters work different from English letters?
2. Did you catch any other differences between Chinese and English (or any languages you have ever learned)? Are there any similarities?

Don't forget to respond to other people's posts and questions.

Appendix H: Journal Writing Tips²⁴

At the onset of your daily journal, please provide answers to the following questions:

1. Make a list of the five best things about today
2. Write about a significant moment and what made it significant
3. List any challenges you experienced today
4. Write about one challenge and how you addressed it

While writing your journals, keep the following tips in mind:

Record what you *think, see or hear* and summarize these in your journal at the end of the day

Use *concrete, clear and explicit* statements and provide specific examples where appropriate

Connect prior learning and new learning

Avoid using non-descriptive words such as good, like, awesome, cool .

Focus on the following W's: *what, why, where and when*

²⁴ Adopted from Moeller (2013).

Appendix I: Adapted Attitude/Motivation Test Battery²⁵ for Pre-survey

Section I.

Directions:

Following are a number of statements with which some people agree and others disagree. Please choose one alternative for each statement according to the amount of your agreement or disagreement with that item. The following sample item will serve to illustrate the basic procedure.

Spanish football players are much better than Brazilian football players.

Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6	7

In answering this question, you should have circled one alternative. Some people would have chosen “Strongly Disagree”, others would have circled “Strongly Agree”, while others would have circled any of the alternatives in between.

The one you choose indicates your own feelings based on everything you know and have heard.

Note: there is no right or wrong answer.

1	I would like to know more Chinese people.	1	2	3	4	5	6	7
2	If I were visiting a foreign country, I would like to be able to speak the language of the people.	1	2	3	4	5	6	7
3	I love learning Chinese.	1	2	3	4	5	6	7
4	Chinese people are sincere and honest.	1	2	3	4	5	6	7
5	Studying Chinese can be important for me because I'll need it for my future career.	1	2	3	4	5	6	7
6	I would like to get to know Chinese people better.	1	2	3	4	5	6	7
7	I wish I could speak another language perfectly.	1	2	3	4	5	6	7
8	I plan to learn as much Chinese as possible.	1	2	3	4	5	6	7
9	Studying Chinese can be important for me because I will be able to participate more freely in the activities of other cultural groups.	1	2	3	4	5	6	7
10	I have a favorable attitude towards Chinese people.	1	2	3	4	5	6	7
11	I would really like to learn a lot of foreign languages.	1	2	3	4	5	6	7
12	The more I learn about Chinese people, the more I like them.	1	2	3	4	5	6	7
13	Studying Chinese can be important for me because other people will respect me more if I have a knowledge of a	1	2	3	4	5	6	7

²⁵ Section I and II are adapted from: Gardner, R.C. (1985).

Section III is adapted from Gardner, R. C. (2004).

	foreign language.							
14	I enjoy meeting and listening to people who speak other languages.	1	2	3	4	5	6	7
15	Studying a foreign language is an enjoyable experience.	1	2	3	4	5	6	7
16	The more I get to know Chinese people, the more I want to be fluent in their language.	1	2	3	4	5	6	7
17	Learning Chinese is really great.	1	2	3	4	5	6	7
18	Studying Chinese can be important to me because it will allow me to be more at ease with people who speak Chinese.	1	2	3	4	5	6	7
19	Studying Chinese can be important for me because it will allow me to meet and converse with more and varied people.	1	2	3	4	5	6	7
20	Chinese should be an important part of the school program.	1	2	3	4	5	6	7
21	Studying Chinese can be important for me because it will make me a more knowledgeable person.	1	2	3	4	5	6	7
22	I will enjoy learning Chinese.	1	2	3	4	5	6	7
23	Studying Chinese can be important for me because it will enable me to better understand and appreciate Chinese culture and history.	1	2	3	4	5	6	7
24	Studying Chinese can be important to me because I think it will someday be useful in getting a good job.	1	2	3	4	5	6	7

Section II.

Directions:

Please answer the following items by circling the alternative which appears most applicable to you.

Note: there are no right or wrong answers.

25. If there were a local Chinese T.V. station, I would:

- a) never watch it.
- b) turn it on occasionally.
- c) try to watch it often.

26. When I heard a Chinese song on the radio, I would

- a) change the station.
- b) listen to the music, paying attention only to the easy words.
- c) listen carefully and try to understand all the words.

27. If I had the opportunity to speak Chinese outside of school, I would

- a) never speak it.
- b) speak it occasionally, using English whenever possible.
- c) speak Chinese most of the time, using English only if really necessary.

28. If there were a Chinese Club in my school, I would:

- a) definitely not join.
- b) attend meetings once in a while.
- c) be most interested in joining.

29. If it were up to me whether or not to take Chinese, I

- a) would not take it.
- b) don't know whether I would take it or not.
- c) would definitely take it.

30. If there were Chinese-speaking families in my neighbour-hood, I would:

- a) never speak Chinese to them.
- b) speak Chinese with them sometimes.
- c) speak Chinese with them as much as possible.

31. If I had a problem understanding something taught in a Chinese class, I would

- a) just forget about it.
- b) only seek help just before a test.
- c) immediately ask the teacher for help.

32. If I were in Chinese class, I would

- a) never say anything.
- b) answer only the easier questions.
- c) volunteer answers as much as possible.

33. If Chinese were not offered by the UNL STARTALK Academy, I would:

- a) not bother learning Chinese at all.
- b) pick up Chinese in everyday situations (i.e., watch Chinese movies, read Chinese books and newspapers, try to speak it whenever possible, etc.).
- c) try to obtain lessons in Chinese somewhere else.

Section III.

Directions:

The following items ask you to rank various topics from low to high. Marking a "1" indicates a low score (i.e. very low interest, weak desire, unfavorable attitude) and a "7" indicates a high score (i.e. very high interest, strong desire, favorable attitude).

Note: there is no right or wrong answer.

34	My motivation to learn Chinese in order to communicate with Chinese speaking people is Weak 1 2 3 4 5 6 7 Strong
35	My attitude toward Chinese speaking people is Unfavorable 1 2 3 4 5 6 7 Favorable
36	My interest in foreign languages is Very low 1 2 3 4 5 6 7 Very high
37	My desire to learn Chinese is Weak 1 2 3 4 5 6 7 Strong
38	My attitude toward learning Chinese is Unfavorable 1 2 3 4 5 6 7 Favorable
39	My motivation to learn Chinese for practical purpose (e.g. To get a job, a better salary, better grades) is Weak 1 2 3 4 5 6 7 Strong
40	My motivation to learn Chinese is Very low 1 2 3 4 5 6 7 Very high

Appendix J: Adapted Attitude/Motivation Test Battery²⁶ for Post-survey

Section I.

Directions:

Following are a number of statements with which some people agree and others disagree. Please choose one alternative for each statement according to the amount of your agreement or disagreement with that item. The following sample item will serve to illustrate the basic procedure.

Spanish football players are much better than Brazilian football players.

Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6	7

In answering this question, you should have circled one alternative. Some people would have chosen “Strongly Disagree”, others would have circled “Strongly Agree”, while others would have circled any of the alternatives in between.

The one you choose indicates your own feelings based on everything you know and have heard.

Note: there is no right or wrong answer.

1	I would like to know more Chinese people.	1	2	3	4	5	6	7
2	If I were visiting a foreign country, I would like to be able to speak the language of the people.	1	2	3	4	5	6	7
3	I love learning Chinese.	1	2	3	4	5	6	7
4	Chinese people are sincere and honest.	1	2	3	4	5	6	7
5	Studying Chinese can be important for me because I'll need it for my future career.	1	2	3	4	5	6	7
6	I would like to get to know Chinese people better.	1	2	3	4	5	6	7
7	I wish I could speak another language perfectly.	1	2	3	4	5	6	7
8	I plan to learn as much Chinese as possible.	1	2	3	4	5	6	7
9	Studying Chinese can be important for me because I will be able to participate more freely in the activities of other cultural groups.	1	2	3	4	5	6	7
10	I have a favorable attitude towards Chinese people.	1	2	3	4	5	6	7
11	I would really like to learn a lot of foreign languages.	1	2	3	4	5	6	7
12	The more I learn about Chinese people, the more I like them.	1	2	3	4	5	6	7
13	Studying Chinese can be important for me because other people will respect me more if I have a knowledge of a	1	2	3	4	5	6	7

²⁶ Section I and II are adapted from: Gardner, R.C. (1985).

Section III is adapted from Gardner, R. C. (2004).

	foreign language.							
14	I enjoy meeting and listening to people who speak other languages.	1	2	3	4	5	6	7
15	Studying a foreign language is an enjoyable experience.	1	2	3	4	5	6	7
16	The more I get to know Chinese people, the more I want to be fluent in their language.	1	2	3	4	5	6	7
17	Learning Chinese is really great.	1	2	3	4	5	6	7
18	Studying Chinese can be important to me because it will allow me to be more at ease with people who speak Chinese.	1	2	3	4	5	6	7
19	Studying Chinese can be important for me because it will allow me to meet and converse with more and varied people.	1	2	3	4	5	6	7
20	Chinese should be an important part of the school program.	1	2	3	4	5	6	7
21	Studying Chinese can be important for me because it will make me a more knowledgeable person.	1	2	3	4	5	6	7
22	I really enjoy learning Chinese.	1	2	3	4	5	6	7
23	Studying Chinese can be important for me because it will enable me to better understand and appreciate Chinese culture and history.	1	2	3	4	5	6	7
24	Studying Chinese can be important to me because I think it will someday be useful in getting a good job.	1	2	3	4	5	6	7

Section II.

Directions:

Please answer the following items by circling the alternative which appears most applicable to you.

Note: there are no right or wrong answers.

25. If there were a local Chinese T.V. station, I would:

- a) never watch it.
- b) turn it on occasionally.
- c) try to watch it often.

26. When I heard a Chinese song on the radio, I would

- a) change the station.
- b) listen to the music, paying attention only to the easy words.
- c) listen carefully and try to understand all the words.

27. If I had the opportunity to speak Chinese outside of school, I would

- a) never speak it.
- b) speak it occasionally, using English whenever possible.
- c) speak Chinese most of the time, using English only if really necessary.

28. If there were a Chinese Club in my school, I would:

- a) definitely not join.
- b) attend meetings once in a while.
- c) be most interested in joining.

29. If it were up to me whether or not to take Chinese, I

- a) would not take it.
- b) don't know whether I would take it or not.
- c) would definitely take it.

30. If there were Chinese-speaking families in my neighbour-hood, I would:

- a) never speak Chinese to them.
- b) speak Chinese with them sometimes.
- c) speak Chinese with them as much as possible.

31. When I have a problem understanding something taught in Chinese class, I

- a) just forget about it.
- b) only seek help just before a test.
- c) immediately ask the teacher for help.

32. When I am in Chinese class, I

- a) never say anything.
- b) answer only the easier questions.
- c) volunteer answers as much as possible.

33. If Chinese were not offered by the UNL STARTALK Academy, I would:

- a) not bother learning Chinese at all.
- b) pick up Chinese in everyday situations (i.e., watch Chinese movies, read Chinese books and newspapers, try to speak it whenever possible, etc.).
- c) try to obtain lessons in Chinese somewhere else.

Section III.

Directions:

The following items ask you to rank various topics from low to high. Marking a "1" indicates a low score (i.e. very low interest, weak desire, unfavorable attitude) and a "7" indicates a high score (i.e. very high interest, strong desire, favorable attitude).

Note: there is no right or wrong answer.

34	My motivation to learn Chinese in order to communicate with Chinese speaking people is Weak 1 2 3 4 5 6 7 Strong
35	My attitude toward Chinese speaking people is Unfavorable 1 2 3 4 5 6 7 Favorable
36	My interest in foreign languages is Very low 1 2 3 4 5 6 7 Very high
37	My desire to learn Chinese is Weak 1 2 3 4 5 6 7 Strong
38	My attitude toward learning Chinese is Unfavorable 1 2 3 4 5 6 7 Favorable
39	My motivation to learn Chinese for practical purpose (e.g. To get a job, a better salary, better grades) is Weak 1 2 3 4 5 6 7 Strong
40	My motivation to learn Chinese is Very low 1 2 3 4 5 6 7 Very high

Appendix K: Adapted Attitude/Motivation Test Battery²⁷ for Follow-up Survey

Section I.

Directions:

Following are a number of statements with which some people agree and others disagree. Please choose one alternative for each statement according to the amount of your agreement or disagreement with that item. The following sample item will serve to illustrate the basic procedure.

Spanish football players are much better than Brazilian football players.

Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
1	2	3	4	5	6	7

In answering this question, you should have circled one alternative. Some people would have chosen “Strongly Disagree”, others would have circled “Strongly Agree”, while others would have circled any of the alternatives in between.

The one you choose indicates your own feelings based on everything you know and have heard.

Note: there is no right or wrong answer.

1	I would like to know more Chinese people.	1	2	3	4	5	6	7
2	If I were visiting a foreign country, I would like to be able to speak the language of the people.	1	2	3	4	5	6	7
3	I love learning Chinese.	1	2	3	4	5	6	7
4	Chinese people are sincere and honest.	1	2	3	4	5	6	7
5	Studying Chinese can be important for me because I'll need it for my future career.	1	2	3	4	5	6	7
6	I would like to get to know Chinese people better.	1	2	3	4	5	6	7
7	I wish I could speak another language perfectly.	1	2	3	4	5	6	7
8	I plan to learn as much Chinese as possible.	1	2	3	4	5	6	7
9	Studying Chinese can be important for me because I will be able to participate more freely in the activities of other cultural groups.	1	2	3	4	5	6	7
10	I have a favorable attitude towards Chinese people.	1	2	3	4	5	6	7
11	I would really like to learn a lot of foreign languages.	1	2	3	4	5	6	7
12	The more I learn about Chinese people, the more I like them.	1	2	3	4	5	6	7
13	Studying Chinese can be important for me because other people will respect me more if I have a knowledge of a	1	2	3	4	5	6	7

²⁷ Section I and II are adapted from: Gardner, R.C. (1985).

Section III is adapted from Gardner, R. C. (2004).

	foreign language.							
14	I enjoy meeting and listening to people who speak other languages.	1	2	3	4	5	6	7
15	Studying a foreign language is an enjoyable experience.	1	2	3	4	5	6	7
16	The more I get to know Chinese people, the more I want to be fluent in their language.	1	2	3	4	5	6	7
17	Learning Chinese is really great.	1	2	3	4	5	6	7
18	Studying Chinese can be important to me because it will allow me to be more at ease with people who speak Chinese.	1	2	3	4	5	6	7
19	Studying Chinese can be important for me because it will allow me to meet and converse with more and varied people.	1	2	3	4	5	6	7
20	Chinese should be an important part of the school program.	1	2	3	4	5	6	7
21	Studying Chinese can be important for me because it will make me a more knowledgeable person.	1	2	3	4	5	6	7
22	I really enjoy learning Chinese.	1	2	3	4	5	6	7
23	Studying Chinese can be important for me because it will enable me to better understand and appreciate Chinese culture and history.	1	2	3	4	5	6	7
24	Studying Chinese can be important to me because I think it will someday be useful in getting a good job.	1	2	3	4	5	6	7

Section II.

Directions:

Please answer the following items by circling the alternative which appears most applicable to you.

Note: there are no right or wrong answers.

25. If there were a local Chinese T.V. station, I would:

- a) never watch it.
- b) turn it on occasionally.
- c) try to watch it often.

26. When I heard a Chinese song on the radio, I would

- a) change the station.
- b) listen to the music, paying attention only to the easy words.
- c) listen carefully and try to understand all the words.

27. If I had the opportunity to speak Chinese outside of school, I would

- a) never speak it.
- b) speak it occasionally, using English whenever possible.
- c) speak Chinese most of the time, using English only if really necessary.

28. If there were a Chinese Club in my school, I would:

- a) definitely not join.
- b) attend meetings once in a while.
- c) be most interested in joining.

29. If it were up to me whether or not to take Chinese, I

- a) would not take it.
- b) don't know whether I would take it or not.
- c) would definitely take it.

30. If there were Chinese-speaking families in my neighbour-hood, I would:

- a) never speak Chinese to them.
- b) speak Chinese with them sometimes.
- c) speak Chinese with them as much as possible.

31. When I have a problem understanding something taught in Chinese class, I

- a) just forget about it.
- b) only seek help just before a test.
- c) immediately ask the teacher for help.

32. When I am in Chinese class, I

- a) never say anything.
- b) answer only the easier questions.
- c) volunteer answers as much as possible.

33. If Chinese were not offered by the UNL STARTALK Academy, I would:

- a) not bother learning Chinese at all.
- b) pick up Chinese in everyday situations (i.e., watch Chinese movies, read Chinese books and newspapers, try to speak it whenever possible, etc.).
- c) try to obtain lessons in Chinese somewhere else.

Section III.

Directions:

The following items ask you to rank various topics from low to high. Marking a "1" indicates a low score (i.e. very low interest, weak desire, unfavorable attitude) and a "7" indicates a high score (i.e. very high interest, strong desire, favorable attitude).

Note: there is no right or wrong answer.

34	My motivation to learn Chinese in order to communicate with Chinese speaking people is Weak 1 2 3 4 5 6 7 Strong
35	My attitude toward Chinese speaking people is Unfavorable 1 2 3 4 5 6 7 Favorable
36	My interest in foreign languages is Very low 1 2 3 4 5 6 7 Very high
37	My desire to learn Chinese is Weak 1 2 3 4 5 6 7 Strong
38	My attitude toward learning Chinese is Unfavorable 1 2 3 4 5 6 7 Favorable
39	My motivation to learn Chinese for practical purpose (e.g. To get a job, a better salary, better grades) is Weak 1 2 3 4 5 6 7 Strong
40	My motivation to learn Chinese is Very low 1 2 3 4 5 6 7 Very high

Appendix L: Background Questionnaire for Student Participants²⁸

1. Full name _____ Age _____ Gender: _____ Ethnicity: _____
2. Grade in School (academic year 2014/2015) _____
3. Your native language(s) _____
4. Languages spoken with parents at home _____
5. Other language(s) you have studied
 - a. Language 1 _____ Number of semesters studied _____
 - b. Language 2 _____ Number of semesters studied _____
 - c. Language 3 _____ Number of semesters studied _____
 - d. Language 4 _____ Number of semesters studied _____
 - e. Language 5 _____ Number of semesters studied _____
6. Is Chinese offered at your school? Y N
7. Have you ever spent time in China?
Y (if you do not mind, please specify where and for how long) _____ N
8. Does anyone in your family speak Chinese? Y N
9. Where did/do you go to
 - (9a) Elementary School?
 - _____ A public monolingual school
 - _____ A public bilingual school
 - _____ A private monolingual school
 - _____ A private bilingual school
 - (9b) Middle School?
 - _____ A public monolingual school
 - _____ A public bilingual school
 - _____ A private monolingual school
 - _____ A private bilingual school
 - (9c) High School?
 - _____ A public monolingual school
 - _____ A public bilingual school
 - _____ A private monolingual school
 - _____ A private bilingual school

²⁸ Adopted from Moeller, A. and Hurlbut, S. (2013).