CHINESE LANGUANGE LEARNER'S

MOTIVATION, INTENDED EFFORT, AND CONTINUATION OF STUDY

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

In Partial Fulfillment
of the Requirements of the Degree

Doctor of Education

By

Qianqian Wang

December 2014

CHINESE LANGUANGE LEARNER'S

MOTIVATION, INTENDED EFFORT, AND CONTINUATION OF STUDY

A Dissertation for the Degree
Doctor of Education

By

Qianqian Wang

Approved by Dissertation Committee:

_____
Dr. Weihua Fan, Chairperson

_____
Dr. Xiaohong Wen, Committee Member

_____
Dr. Catherine Horn, Committee Member

_____
Dr. Cheryl Craig, Committee Member

_____
Dr. Robert McPherson, Dean
College of Education

December 2014

Acknowledgement

I would like to express my deepest gratitude to my supervisor, Dr. Weihua Fan, for her generous support and detailed guidance throughout my study at University of Houston. She has always been keen on sharing her experience and suggesting fascinating and challenging research ideas for me to work on. Dr. Xiaohong Wen must also be acknowledged for her invaluable contributions throughout the course of my candidacy and dissertation work. It has been a great honor and truly enjoyable experience to work under her supervision. I would also like to extend my appreciation to my other committee members: Dr. Horn, Dr. Craig, for sound suggestions and comments in the dissertation proposal and the final defense. Insightful inputs from my committee members greatly improve my dissertation work, and I would like to gratefully acknowledge their contributions.

I am indebted to many of my family, friends and colleagues. Through their sincere suggestions and fruitful discussions, this dissertation has been shaped and improved in so many ways. In particular I would like to thank my parents and my husband, whose moral support has been crucial in the final stretch of the dissertation, as well as Xiaoqing Hu, Dianhan Zheng, Fan Wu and many others whom I did not cite explicitly.

CHINESE LANGUANGE LEARNERS'

MOTIVATION, INTENDED EFFORT, AND CONTINUATION OF STUDY

An Abstract
of a Dissertation Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements of the Degree

Doctor of Philosophy

By

Qianqian Wang

December 2014

Wang, Qianqian. "Chinese Language Learners' Motivation, Intended Effort, and Continuation of Study." Unpublished Doctor of Education Dissertation, University of Houston, December 2014

Abstract

Motivation has been widely recognized as one of the key factors in second language (L2) learning and teaching. Yet very few motivational studies have examined adolescents' motivation to learn a specific L2 within the framework of the contemporary expectancy-value theory, even less empirical research has been done in the Chinese as a Second Language (CSL) setting. It is unclear whether there are differences between boys' and girls' perceptions of expectancies for success, task values, and task difficulty in CSL learning. Furthermore, while most research associates motivation with language proficiency, a limited number of CSL studies have addressed the relations between motivation and motivational behaviors such as intended effort and continuation of study.

One important purpose of the present study is to apply expectancy-value theory to develop a reliable and valid CSL Learning Motivation Scale which assesses adolescents' motivation. Based on the literature review, the results of item examination, and expert feedback, a 34-item CSL Learning Motivation Scale was constructed. I conducted a Principal Component Analysis (PCA) to examine the factor structures of the final 34 items based on responses from the 219 students in Grade 6-12 at secondary schools in Southwestern United States. The results yielded five factors: ability/expectancy-related beliefs, intrinsic value-linguistic interests, intrinsic value-cultural interests, utility/attainment value, and perceived task difficulty. The final 34-item CSL Learning Motivation Scale displayed high internal consistency (α=.92). The reliabilities of the above five factors were .87, .80, .84, .92, and .86, respectively.

Furthermore, this study examined if adolescents' expectancy-value motivation in CSL learning significantly predicted their motivational behaviors. The results of regression analysis demonstrated that expectancy-value constructs explained 64% of the variance in intended effort and 74% of the variance in continuation of study. Specifically, expectancy/ability beliefs, intrinsic value-linguistic interests, utility/attainment value, and task difficulty perceptions significantly predicted students' intended efforts. Expectancy/ability beliefs, intrinsic value-linguistic interests, and utility/attainment value significantly predicted continuation of study. In addition, this study attempted to explore gender differences in expectancy-value motivation in the CSL setting. MANOVA analyses revealed that gender differences in these motivational constructs were not significant.

Table of Contents

List of Tables

Chapter I

Introduction

Statement of Problem

For several decades, motivation has been widely recognized as one of the key factors that influence second language (L2) learning experiences and outcomes (Dörnyei, 2001, 2005; Gardner, 1985; Gardner & Lamber, 1959). Research suggests that language learning motivation is as important as language aptitude for predicting L2 outcomes (Gardner, 1972, 1985). Individuals who lack sufficient motivation cannot achieve long-term L2 success even with outstanding language aptitudes (Gardner, 1985; Dörnyei, 1998). High motivation helps make up for considerable deficiencies in individuals' language aptitude and learning conditions (e.g., Gardner & Lambert, 1959; Gardner, 1985; Jafari, 2013). Specifically, motivation serves as students' inner drive to initiate L2 learning, exert efforts, and sustain learning activities until they achieve desired language proficiency (e.g., Dörnyei, 1994a, 2001; Ushioda, & Dörnyei, 2012; Yu & Downing, 2012).Therefore, the examination of the nature of motivational constructs and ways to enhance positive motivation in classroom is critical for L2 education.

There are two main streams in the literature of L2 motivational research. One stream comprises of a series of studies on the basis of Gardner's social-educational model. Gardner and Lambert (1972) intensively studied L2 learners' motivation in Canada, where French and English are the two official languages, and proposed a socio-educational model. This model includes two major orientations: integrative and instrumental orientations. Learners with integrative motivation opt to learn a new language to become a part of the target social or cultural community; whereas learners

with instrumental motivation want to learn a new language for future opportunities. This model is one of the most influential theories that explain the role of motivation in L2 learning experiences and outcomes (Gardner, 1979, 1985, 1988; Gardner & Lambert, 1972). Since the 1970s, Gardner and Lambert's theory and later models developed by Gardner and his associates have inspired many empirical investigations in Canada and beyond. Early evidence supported that integrative and instrumental orientations significantly influenced L2 attainment (e.g., Gardner, 1985; Gardner & MacIntyre, 1993; Tremblay & Gardner, 1995).

In the 1990s, scholars opened a new "agenda" for L2 motivation research (e.g., Crookes & Schmidt, 1991; Dörnyei, 1990, 1994; Oxford & Shearin, 1994). This stream consists mainly of a series of research studies focusing on motivational factors that were associated with the mainstream educational/ psychological theories. Research under this realm articulated that the early social-educational model showed a limited vision of L2 learners' motivation and only explained why students decide to learn L2 in specific sociocultural contexts (Crookes & Schmidt, 1991; Dörnyei, 2001; Noels, Pelletier, Clément &Vallerand, 2003). With an effort to gain a more comprehensive understanding of L2 learning motivation, a growing number of L2 studies referred to the mainstream psychological/educational theories and studied relevant motivation constructs in the L2 classroom. In particular, the mainstream motivation factors describe the cognitive aspects of motivation in learning, and these elements were lacking in Gardner's model. The following motivational factors have been studied in the prior L2 research: intrinsic motivation (e.g., Dörnyei, 1990, 1994; Noels et al., 2003; Williams & Burden, 1997), instrumental/extrinsic-related motivation (e.g., Dörnyei, 1990, 1994; Oxford & Shearin,

1994; Wen, 2011), self-concept-related motivation (e.g., Cho, 2013; Dörnyei, 1990, 1994a, 1994b; Wen, 2013), and goal-related motivation (e.g., Nunn, 2008; Oxford & Shearin, 1994; Schmidt, Boraie & Kassagby,1996).

Although L2 research has examined some important motivation factors, only a few studies have adopted the mainstream motivation models. For example, self-determination theory and goal theory have been applied to the L2 settings. Empirical data from these studies demonstrated that motivational constructs within these models played a significant role in L2 learning. For instance, Noels et al. (2003) applied the self determination model to study Canadian learners' motivation to learn Chinese as a L2, and developed a novel scale to measure intrinsic and extrinsic motivation. In a later study, empirical evidence suggested that both intrinsic and extrinsic motivation played critical roles in Chinese language learning (Comanaru & Noels, 2009). Tercanlioglu (2004) adopted achievement goal theory and measured the relationship between goal-theory-related motivation and ESL (English as a second language) achievement. The results showed that ESL students placed most emphasis on task mastery goals that were negatively correlated with work-avoidance, and were positively correlated to language achievement (TOEFL test scores).

A prominent mainstream motivation model---expectancy-value theory has been understudied in L2, despite the fact that this model has been widely applied in many different academic fields, such as math, science, language arts, and sports (see a review, Wigfield & Eccles, 2000). This model provides a comprehensive framework for understanding adolescents' learning motivation and academic experiences (Eccles et al., 1983). In particular, this model proposes the following key motivational factors that may

influence students' achievement-related choice, behavior and persistence: expectancies for success of a specific task, task values (intrinsic value, attainment value, and utility value), as well as task difficulty perceptions (Eccles et al., 1983; Eccles & Wigfield, 2002). Few empirical motivational studies have systematically explored the core constructs of the contemporary expectancy-value model in a specific L2 context. Although self-confidence and instrumentality (a component related to the utilitarian benefits and importance of L2) has been examined in L2 settings (e.g., Csizér & Dörnyei, 2005; Dörnyei & Clement, 2001; Sung, 2013), students' expectancy for success in the future, the unique contribution of each task value (i.e., intrinsic value, utility value, and attainment value), and perceived task difficulty have not been thoroughly studied. To conclude, the field of L2 is in lack of a comprehensive and relevant questionnaire to measure motivation within the framework of expectancy-value theory.

Another limitation of current L2 research is that relatively less research has been done regarding CSL learning settings, though much is known about the achievement motivation of students who study European languages as L2s in European or Canadian environment (e.g., Csizér & Dörnyei, 2006; Noels et al., 2003; Tremblay & Gardner, 1995). Given that L2 motivation is subject to considerable contextual factors (e.g., Dörnyei, 1998; Dörnyei & Clement, 2001; Wen, 2011), learning motivation may vary depending on the actual language learning situation, the data gathering instruments and data processing techniques, the backgrounds of the participants, the sample size, and other geographic and geopolitical factors. Exploring CSL learning motivation in a specific academic setting may yield important findings to help us develop a deeper and fuller understanding of L2 motivation.

Chinese as a Second Language Learning Motivation. In the past several years, the Chinese language is gaining popularity worldwide. In 2013, around 5,370,000 people (5,000,000 from overseas) took the Chinese Proficiency Test which is a standardized test of Standard Chinese language proficiency for non-native speakers ("More foreigners taking HSK Chinese language exam", 2014). For comparison, in 2010, only 750,000 people (670,000 from overseas) took the test (Dillion, 2010, January 20). In the United States, according to a survey conducted by the Center for Applied Linguistics, the proportion of middle and high schools offering the Chinese language course rose from one percent in 1997 to four percent in 2008 among America's private and public schools which offer at least one foreign language (Dillion, 2010, January 20). Furthermore, in 2007, The College Board decided to offer the Chinese Advanced Placement (AP) Examination which signified the importance of the language ("2007 AP Chinese Language", 2014) at the secondary schools.

Increasing scholarly attention has been paid to the examinations of the language learning motivation in CSL settings in the U.S. For example, Yang (2003) investigated integrative and instrumental motivation orientations among 341 students enrolled in the Korean, Chinese, and Japanese classrooms at college level in the Midwestern U.S. The results suggested that East Asian language learners were highly influenced by integrative motivation orientation. Lu and Li (2008) studied 120 college students' integrative and instrumental orientations in the CSL classroom in the Western New York, and found both motivational orientations were important to students' self-confidence. These studies focused on two motivation orientations proposed by Gardner and Lambert (1972), but demonstrated inconsistent findings. Wen (2011) suggested that contextual factors, such as

a particular language learning situation, the sample size, and the geographic locations of sampling may contribute the variances in the research findings.

CSL studies also examined some motivational factors that were associated with the mainstream educational/psychological models. Wen (1997) found that intrinsic interest in Chinese culture motivated college students to start CSL learning at the beginning level, and expectations of learning task retained students for the intermediate level. Rueda and Chen (2005) studied 150 college students enrolled in Chinese language classes in the southern California area and found that self-efficacy and task value significantly predicted learning effort. Moreover, recent CLS research suggested that self-confidence significantly influenced college students' continuation of studies in the Chinese language and culture (e.g., Wen, 2013).

However, prior CSL research has some limitations that need to be addressed. First, the mainstream educational/psychological models have not yet been much examined among the CSL learners, even less research has looked into the contemporary expectancy-value model. A variety of CSL empirical studies still employed the traditional Gardner and Lambert's (1972) model to investigate the Chinese language learners' integrative and instrumental motivational orientations in the U.S (e.g., Lu & Li, 2008; Yang, 2003). The adoption of a wider vision of motivation would help understand the multi-faceted nature of CSL learning.

Second, in the CSL literature, the mainstream motivation constructs were relatively less studied at the secondary school level. Prior CSL motivation research mainly focused on the higher education settings. For example, Rueda and Chen (2005) measured self-efficacy and task value in their study of 150 college students enrolled in

Chinese language classes. Wen (1997, 2011, and 2013) studied CSL learners' intrinsic value, expectations of learning task, and self-confidence at the college level. Empirical data from the CSL classroom in secondary schools may be valuable to the field.

Third, although prior CSL research showed significant gender differences in motivational orientation-related factors (e.g., Sung & Padilla, 1998), few studies have looked into the gender gaps in the motivational factors that are related to the mainstream educational/psychological theories. For example, it is still unclear if expectancy-value factors vary across boys and girls enrolled in the Chinese classes. Since the investigation of gender differences in students' motivation helped explain why male and female differ in their educational achievement and performance (see review by Fan, 2011), it is important for the present study to examine gender differences within the expectancy-value framework and provide more updated and detailed evidence.

Fourth, few CSL studies have adopted the mainstream models to investigate how motivational factors influence motivational behaviors such as "the amount of effort the students intended to exert on learning a given language (Csizér & Dörnyei, 2005, p.20)" and students' intention to pursue future studies regarding a given language (Csizér & Dörnyei, 2005; Wen, 2011). Csizér and Dörnyei (2005) noted that motivational behaviors are the mediating link between motivation and language learning outcomes such as the grade and L2 proficiency. Specifically, although motivation may contribute to the success of L2 learning, motivational behaviors may affect the strength of the relations between motivation and L2 outcomes. It is important for L2 scholars to examine the relations between motivation and motivational behaviors (Csizér & Dörnyei, 2005). Some CSL studies have looked into this issue and found positive relations between motivation and

motivational behaviors (e.g., Rueda & Chen, 2005; Wen, 2011, 2013). However, less empirical evidence has documented the relations between expectancy-value factors and motivational behaviors in the CSL settings. This study takes a unique approach to study the relations between motivation and motivational behavior and thus extends the prior CSL research.

Research Goals

In an attempt to address the research needs stated above, the present study applies expectancy-value theory to study adolescents' motivation and motivational behaviors in CSL learning settings. The first purpose of this research is to construct a reliable and valid scale to measure students' motivation in CSL classrooms. In particular, the present research adapted motivational constructs from relevant questionnaires to develop a situation-specific scale, named CSL Learning Motivation Scale, to measure adolescents' motivation to learn CSL. The scale assessed expectancy-value-related constructs and incorporated social milieu into the scale. Second, after the scale was constructed, the psychometric properties were assessed to evaluate the reliability and validity of the measurement. Third, this study utilized the newly developed CSL Learning Motivation Scale to examine (a) adolescents' motivation to learn Chinese language as a second language in middle and high schools in the US, (b) gender differences in students' perceptions of expectancy/ability related concepts, perceived task values, and task difficulty, and (c) the relationship between these motivational constructs and motivational behaviors such as intended effort and continuation of studies. Consequently, this study promises advances in understanding CSL learners' motivation and motivational behaviors.

This study has three research questions:

1. Are there gender differences in students' perceptions of expectancy, task values, and task difficulty?
2. What are the relations between expectancy-value constructs and students' intended effort in CSL learning?
3. What are the relations between expectancy-value constructs and continuation of CSL study?

Significance of the Present Study

Understanding CSL learners' motivational beliefs, gender differences in motivation, and the role of motivation in motivational behaviors may provide valuable insights into how to enhance CSL teaching and learning. This study contributes to the field of CSL education by constructing a unique CSL Learning Motivation Scale within the scope of the contemporary expectancy-value theory. Moreover, this scale extended prior CSL research by assessing adolescents' motivation in American middle and high schools. Additionally, it examined CSL learners' gender differences in expectancy ability/expectancy-related beliefs, intrinsic value-linguistic interests, intrinsic value-cultural interests, attainment/utility value, and perceived task difficulty. Furthermore, this study also investigated the relations between the abovementioned motivational factors and motivational behaviors, and suggested the expectancy-value constructs in general played an important role in CSL learning behaviors.

Practically, this scale is expected to measure CSL learners' motivation precisely in secondary school settings and help Chinese teachers better identify the sources of adolescents' motivation. The research findings help teachers conduct evidence-based

practices to enhance CSL instruction. Specifically, Chinese teachers could incorporate motivation into the classroom instruction and design age-appropriate and effective instructional activities that help boost learning motivation, enhance motivational behaviors, and improve academic performance. Ultimately, learners' high motivation and positive experiences in CSL classrooms may help decrease the drop-out rates.

Socially, motivating adolescents' to purse CSL study can prepare them to compete in the global marketplace. A good CSL program can equip students with the language and cultural skills that they need, help students think globally, encourage them to participate in exchange or study aboard program and other international opportunities. Furthermore, the successes of CSL programs in the United States help promote mutual understanding, cultural exchanges and economic collaboration between China and the United States.

Terms and Definitions

This study established the following terms and their definitions to clarify the specific aspects of this study.

1. Ability/expectancy-Related Items: a student's beliefs about his/her competence to perform a specific task (Eccles & Wigfield, 1995).
2. Intrinsic value-linguistic interests: the degree to which a student views the language learning tasks as interesting and enjoyable (Dörnyei, 1998, Wen, 2013).
3. Intrinsic value-cultural interests: the degree to which a student views learning Chinese culture as interesting and enjoyable (Csizér & Dörnyei, 2005).
4. Attainment value: the degree to which a student views learning Chinese as important (Eccles & Wigfield, 1995).

5. Attainment value-social milieu: the degree to which people around the student view learning Chinese as important (Csizér & Dörnyei, 2005; Eccles & Wigfield, 1995).
6. Utility value: the degree to which a student views learning Chinese as useful in a variety of long-and short-range goals (Eccles & Wigfield, 1995).
7. Utility value-social milieu: the degree to which people around the student view learning Chinese as useful in a variety of long-and short-range goals (Csizér & Dörnyei, 2005; Eccles & Wigfield, 1995).
8. Task difficulty: the degree to which a student views learning CSL as difficult (Eccles & Wigfield, 1995).
9. Required effort: the amount of effort required to do well in CSL classes (Wen, 2011).
10. Intended effort: the degree to which a student plans to exert efforts in learning Chinese language (Wen, 2011).
11. Continuation of study: the degree to which a student intends to enroll in Chinese or Chinese-related courses in the future (Wen, 2011).

Chapter II

Literature Review

The Basis of Motivation in L2

The literature of L2 motivation has documented the applications of various educational/psychological theories and models, including theories from social-educational and psychological perspectives (Dörnyei, 2001, 2005; Gardner, 1985). In the early phase, the original impetus for L2 motivational research derived from social psychology. Gardner and Lambert (1972) proposed a socio-educational theory which contains two orientations: integrative and instrumental motivations. This model helps identify students' attitudes towards a specific L2 which may further influence how successful they will be in language acquisition. Learners with integrative motivation opt to learn a new language to communicate with the people who speak the language and become a part of the target social or cultural community. Falk (1978) stated that the most successful learners of a target language tend to like the people that speak the language, admire the target culture, and have a willingness to become familiar with or even integrate into the society in which the language is used. On the other hand, learners with instrumental motivation choose to learn a new language because of practical reasons. Put another way, these learners have the desire to obtain practical benefits from L2 acquisition (Hudson 2000). Specifically, learners with this orientation emphasize the pragmatic values of the target language, such as fulfilling a college or school language requirement, reading and translating technical materials, applying for a job, and achieving higher salary or higher social status. However, integrative and instrumental motivations are not necessarily mutually exclusive. Researchers (e.g., Clement, Gardner, & Smythe,

1977; Gardner & Smythe, 1975) found that both orientations correlated positively. Learners may possess a combination of both motivations while learning L2 (Brown, 2000). For instance, in the United States, an international student may learn English for academic purposes and at the same time is willing to become integrated with the people and culture of this country.

A particular strength of Gardner's theory is that "it has originated from, and was extensively tested by empirical research" (Dörnyei, 1998, p. 122). A considerable number of studies have investigated the motivational factors within this model but demonstrated conflicting findings (see review by Au, 1988). Early evidence suggested that integrative orientation contributed to the achievement of French language learning (e.g., Gardner & Lambert, 1959). However, other researchers found weak correlations between integrative orientation and language achievement (Chihara & Oller, 1978; Lukmani, 1972).

In response to these mixed findings in early studies, Clement and Kruidenier (1983) pointed out that the lack of clear-cut results may due to the following two reasons: (1) vagueness in the definition of integrativeness and instrumentality and (2) the unaccounted influence of the contextual factors on the individual's motivation. To support their theory with empirical data, Clement and Kruidenier (1983) conducted a large-scale survey in Canada, investigating a variety of learning reasons/orientations in different samples (samples differed in ethnicity, the learning milieu, and the target language). They recruited students from various backgrounds, including students who may not be able to contact with members of the target language group. They found that all groups of high school students reported four types of orientations: (1) travel, (2) friendship, (3) knowledge, and (4) the instrumental orientations in Spanish, English, and

French classrooms. A fifth factor, termed sociocultural orientation, only emerged in Spanish classroom (not French or English).

Along the same line, Dornyei (1990) also contended that not all learners have the access to contact with members of the target group. L2 learning in a classroom setting may not necessarily involve some integrative orientation-related components, such as the desire to interact with the target language community or attitudes toward the target language community. In the Hungarian context that Dornyei (1990) studied, 97.8% of the population was ethnic Hungarians and the proportion with Hungarian as their mother tongue was even higher (98.5%). Moreover, more than 91% of the population claimed to speak only Hungarian. Therefore, Dornyei (1990) pointed out that the person-to-person contact with native English speakers was minimal and many Hungarian students just considered English as a regular school subject. Dornyei (1990) proposed that these students would learn English as a bridge language to link them with the rest of the world, facilitating trade and travel and conveying international knowledge and cultural products. Dornyei (1990) hypothesized that, in such contexts, the instrumental orientation may play a prominent role in learning. Individual's L2-related attitudes would be determined by the values the L2 conveys rather than the ethno-cultural attitudes toward the L2 community. To support his proposals, Dornyei's (1990) empirically studied the motivations of 134 learners of English in Hungary and confirmed that instrumentality played a significant role in mastering the target language.

Furthermore, there are other similar arguments about the Gardener's formulation and measurement of L2 motivational orientations. L2 scholars articulated that the early social-educational model only provided a limited view of learners' motivation (e.g.,

Dörnyei, 1990, 1994; Noels et al., 2003; Tremblay & Gardner, 1995), and could not fully explain why students decide to learn L2, how they make efforts, or how they persist in the learning endeavors (e.g., Crookes & Schmidt, 1991; Dörnyei, 2001, Oxford & Shearin, 1994). For example, students may opt to study L2 for other reasons rather than the aforementioned integrative or instrumental orientations. Learners may enjoy the intellectual stimulation in L2 learning, but this reason does not relate well to the socio-educational model (Oxford & Shearin, 1994). Therefore, it is necessary to consider alternative motivational models and add new components to the existing motivation theories (Oxford & Shearin, 1994). Recent L2 research adopted significant constructs and models from mainstream educational/psychological frameworks and shifted from the social-educational orientation to the educational psychological orientation (e.g., Crookes & Schmidt, 1991; Oxford & Shearin, 1994; Tremblay & Gardner, 1995). This new approach is a systematic process that promotes significant theories in mainstream psychology and improves existing L2 motivational research (Cheng & Dörnyei, 2007). In general, the field of L2 has benefited from mainstream psychological frameworks which provide good insight into the internal factors and explain why students opt to choose a particular L2.

A growing number of empirical studies in L2 have started investigating various mainstream motivational constructs in past two decades. Although some constructs were named differently, the components under these constructs were identical or similar to the mainstream motivational factors. Specifically, researchers studied intrinsic motivation-related constructs, such as “integrativeness”, “affective motive”, “language attitudes”, “attitudes toward L2 learning”, “enjoyment” and “interest”; extrinsic motivation-related

constructs, such as “instrumental motivation”; self-concept-related motivation, such as “self efficacy”, “expectancy”, “self confidence”, “linguistic confidence”; goal-related dimensions, such as “goal salience”, “mastery orientation”, “task-oriented goals”, “ego-oriented goals”, and “work avoidance goals” (see a review, Dörnyei & Clement, 2001). In general, these constructs played significant roles in the process and outcomes of L2 acquisition.

A few L2 studies adopted the mainstream motivation models. For example, L2 research referred to goal theory and studied task-oriented goals, ego-oriented goals, and work-avoidance goals in an English-as-second language (ESL) setting (Tercanlioglu, 2004). These studies measured gender differences in these motivational constructs and related these constructs to L2 learning outcomes. The results showed that gender differences were not significant in goal-theory-related constructs. Furthermore, task mastery goals were positively correlated to language achievement (TOEFL test scores).

Some studies tested self determination theory in the French as Second Language setting and investigated three types of extrinsic motivation: external, introjected, and identified regulation, as well as three types of intrinsic motivation: knowledge, mastery, and stimulation (Noels et al., 2003). A late research linked these factors to Chinese language learners’ learning experiences. The results suggested that both intrinsic and extrinsic motivation were positively related to learning and community engagement (Comanaru & Noels, 2009).

A number of L2 motivational research studies describe the main principles of expectancy-value theory, such as self-concept-related dimension (Schmidt et al., 1996), linguistic self-confidence (e.g., Wen, 2013), valence (Tremblay & Gardner, 1995), value

of activity (Willimas & Burden, 1997), task value (Rueda & Chen, 2005), and cultural interests (Dörnyei & Clement, 2001). However, the contemporary expectancy-value theory has not been thoroughly tested by empirical studies.

It is noteworthy that L2 learning is a complex process. Dörnyei (1998, p. 118) pointed out that language is at the same time "a communication coding system and also a channel of social organization embedded in the culture of the community." It is important for L2 researchers to acknowledge the complex nature of L2 learning motivation and emphasize the function of the social factors. Social milieu has been commonly measured in other L2 motivation research. It refers to the social influences stemming from the immediate environment. In the L2 field, most research has been directed at looking into the role of the parents in shaping L2 motivation (e.g., Gardner, 1985; Gardner, Masgoret, & Tremblay, 1999). Spolsky (2000) pointed out that the role of the learners' peer group should also be emphasized. This study adopts Csizér and Dornyei's (2005) operational definition of social milieu and focuses on the perceived influence of significant others, such as parents, family, and friends. By incorporating social milieu into the contemporary expectancy-value framework, this study discovers a pathway that may improve the understanding the CSL learning motivation from the mainstream educational/psychological perspective.

Furthermore, research showed that contextual factors play an important role in L2 motivation. In particular, Dörnyei and Clement (2001, p. 401) noted the following factors that may affect the variation in the components of L2 motivational models/frameworks: "(a) the data gathering instruments and data processing techniques, (b) the actual target language(s) studied, (c) the particular language learning situations examined, (e) various

aspects of the social milieu in which L2 learning took place (including social expectations and ethnolinguistic attitudes), and (f) other geographic and geopolitical factors".

Recent empirical studies testing one of the most influential L2 motivation model---Csizér and Dörnyei's (2005) motivation framework showed mixed results of the factor structure of L2 motivation (e.g., Kormos & Csizér, 2008; Sung, 2013). The findings indicated that contextual variables such as the target language(s), research methodologies, learning contexts, social milieu and other environmental factors influenced the variation of the motivation factor structures within the model. In 2005, Csizér and Dörnyei proposed seven motivational factors (i.e., integrativeness, instrumentality, attitudes toward the L2 speakers/community, milieu, linguistic self-confidence, cultural interests, and ethnolinguistic vitality) in their motivation framework. Csizér and Dörnyei (2005) conducted a large-scale motivational study among the 13 and 14-year-old adolescents who enrolled in L2 classes (52.8% studied Russian, 26.5% studied English, 24% studied German, and 4.4% studied other) in Hungary, and the confirmatory factor analysis (CFA) results supported the framework.

In a later study, Kormos and Csizér (2008) utilized the principal factor analysis (PCA) and empirically tested the abovementioned seven motivational constructs in the Hungarian context with 613 English language learners of three distinct age groups: secondary, university, and adult learners. The results excluded the following three components: ethnolinguistic vitality, instrumentality and linguistic self-confidence from the framework because very few items loaded onto these components. In addition, integrativeness had unexpectedly low reliability for the adult sample.

Sung (2013) applied Csizér and Dörnyei's (2005) framework and studied 134 fourth to ninth graders in the CSL classes in a charter school in the United States. The PCA results showed the following constructs were detected: integrativeness, instrumentality, attitudes toward the L2 speakers/community, and milieu. The other three constructs suggested in the original framework: vitality of L2 community, self-confidence, and cultural interests were not found in the factor analysis. These results show that the items in the Csizér and Dörnyei's (2005) scale are not general enough for all L2 learning contexts. Sung (2013) suggested future research to revise and re-test Csizér and Dörnyei's (2005) items to better fit the CSL learning in the U.S. context.

Therefore, a systematic and comprehensive examination of mainstream motivational factors in a specific context is still a continuing process in L2 motivation research. The current study contributes to the literature by uniquely applying the expectancy-value framework to investigate "situation-specific" CSL motivation at American secondary schools. The present research effort promotes further understandings of why adolescents choose CSL and behave as they do.

An Expectancy-value Approach to L2 Motivation

Expectancy-value theory has been a key theoretical approach in the motivation research. This theory begins with classic achievement motivation theory (e.g., Atkinson & Raynor, 1974), and develops further by a number of psychologists (for a review, see Wigfield, 1994). Although L2 researchers have realized the importance of expectancy-value theory in L2 motivational research, few empirical studies have systematically explored the nature of this motivational model in L2 settings (Dörnyei, 1998).

Expectancy-value Model. I adopted Eccles's (1983) model of expectancy-value theory which provides a comprehensive framework for understanding learners' task-specific expectancy, beliefs, values, and achievement-related behavior. There are currently several other models of expectancy-value theory that propose different constructs and mechanisms involved in the learning process (e.g., Atkinson, 1957; Lewin 1951; Vroom, 1964). Eccle's model was selected as a framework because it demonstrated high reliability and validity in real-world classroom situations; whereas most of the other research took place in experimental environments (Trautwein et al., 2012). As one of the most influential theories in educational psychology, this framework explains individuals' choice, persistence, and performance by assessing their ability/expectancy related beliefs for the learning activity, task values they attach to the activity, as well as their perceived task difficulty (e.g., Eccles & Wigfield, 2002; Wigfield, 1994; Wigfield & Eccles, 1992). A large body of research has indicated these constructs are positively related to achievement-related outcomes (e.g., Eccles, 1985; Trautwein & Lu¨dtke, 2007; Trautwein, et al., 2012).

Ability/expectancy-related Items. Expectancies for success and related constructs have gained prominence in almost all cognitive theories of motivation, such as attribution theory (e.g., Weiner et al., 1971), self-efficacy theory (Bandura, 1986), the self-worth perspective (Covington, 1984), and classic expectancy/value theory (Atkinson, 1957). In Eccles's model, theorists proposed two expectancy-related constructs---expectancies for success and ability beliefs. Expectancies for success refer to an individual's beliefs about his/her competence to perform a specific task in the immediate or longer term future. Ability beliefs are defined as an individual's perception of his or her current competence

at a given activity. Although expectancies for success (focusing on the future) are distinguished conceptually from ability beliefs (focusing on present ability), these constructs are highly related in empirical studies (e.g., Eccles & Wigfield, 1995; Eccles et al., 1993). Therefore, researchers suggested merging expectancies for success and ability beliefs into one factor and labeling it as "Ability/Expectancy-Related Items" (Eccles & Wigfield, 1995).

Task Values. Atkinson (1957) operationally defined task value as the incentive value of anticipated success. Other theorists offered relatively broader definitions of task value. Both Battle (1966) and Crandall (1969) defined task value in terms of the subject attainment value and objective task difficulty. Rotter (1982) characterized task value in terms of the expected reward received from engaging in a particular activity. Individuals may gain rewards directly from the activity itself or indirectly through the activity's instrumental role in achieving other desired outcomes. Building on prior theories, Eccles et al. (1983) developed a modern version of task value construct. They further distinguished task value from task difficulty and defined three components of achievement values: attainment value or importance, intrinsic value, utility value or usefulness of the task (e.g., Eccles et al., 1983, Eccles & Wigfield, 2002; Wigfield & Eccles, 1992). Attainment value is the importance of performing well on a certain task. Intrinsic value is defined as the enjoyment an individual gains from a given task. Utility value refers to the usefulness of the task for fulfilling an individual's future needs. Students place high levels of values to a certain subject may consider learning this subject as important, useful, and enjoyable. The factor structure of Eccles' task value construct was supported by empirical evidence (e.g., Jacobs, Lanza, Osgood, Eccles, & Wigfield,

2002; Trautwein et al., 2012; Watt, 2004).

Perceived Task Difficulty Items. Theorists have different opinions on their operational definitions of task difficulty items. As stated above, some theorists considered objective task difficulty as a part of task value component (Battle, 1966; Crandall, 1969). Other researchers thought subjective expectancy for success was synonymous with task difficulty (Atkinson, 1957). Eccles and Wigfield (1995) argued that a precise definition of task difficulty would need supports from empirical data. They applied these constructs to real classroom settings and utilized exploratory and confirmatory factor analysis to test the dimensionality of these motivational constructs. The results revealed that the construct task difficulty was empirically distinguished from the expectancy-related construct and the task value constructs (Eccles & Wigfield, 1995). In addition, they found a two-factor solution for task difficulty perceptions: one factor tapped into the perceptions of the difficulty of the subject area, and the other factor reflected the amount of effort required to do well in the subject (Eccles & Wigfield, 1995). Therefore, in the contemporary expectancy-value theory, the construct---perceived task difficulty include the task difficulty component and required effort component.

Expectancy-value Constructs in L2 Research. In L2 motivation research, some research attempted to explain learners' motivation from an expectancy-value perspective. The following constructs has been studied: self-concept-related dimension (Ehrman, 1996; Schmidt et al., 1996; Wen, 2011, 2013), valence (Tremblay & Gardner, 1995), value of activity (Willimas & Burden, 1997), and cultural interests (Dörnyei & Clement, 2001). The above studies found that self-concept-related motivation and task-value-related motivation both played an important role in motivational behaviors and L2 achievement.

However, no real expectancy-value model has been studied in a systematic and comprehensive manner in L2 (Dörnyei, 1998).

Over the last two decades, Clement and his colleagues have conducted a series of empirical studies examining the interrelationship between self-confidence and L2 acquisition/acculturation processes (Clement, Dörnyei & Noels, 1994; Noels & Clement, 1996; Noels, Pon & Clement, 1996). Linguistic self-confidence bears many similarities to ability/expectancy related items that emphasize task-specific self efficacy and has been widely recognized by L2 scholars (e.g., Dörnyei, 1998, Wen, 2013). Linguistic self-confidence has been described as "self-perceptions of communicative competence and concomitant low levels of anxiety in using the second language" (Noels et al. 1996, p. 248). In particular, this construct describes an important aspect that influences people's motivation to learn and use this language, contact with members of the L2 community, and indirectly contact with the L2 culture through the media.

On the basis of prior research, Csizér and Dörnyei (2005) developed a comprehensive social-educational framework in L2 contexts which contain significant elements from mainstream motivational frameworks, including expectancy-value theory. This model includes linguistic self-confidence which relates to ability/expectancy-related construct. However, Csizér and Dörnyei (2005) did not differentiate perceived task difficulty from self-confidence. In the measurement, "learning a L2 is a difficult task" has been categorized under the construct self-confidence. Moreover, this model also contains cultural interests and instrumentality which are associated with the task value construct. Specifically, cultural interest reflects students' intrinsic interests on "cultural products associated with a particular L2 and conveyed by the media (e.g., films, videos, TV

programs, pop music, magazines, and books)" (p. 21). Csizér and Dörnyei (2005) did not make a clear distinction between attainment value and utility value. Csizér and Dörnyei (2005) measured instrumentality which tapped to the perceived pragmatic benefits of L2 proficiency and found a two-factor solution in the data obtained from French and Italian classrooms. The two factors are conceptually similar to the attainment value and utility value in Eccles's model. To expand the level of specificity of measurement, this study adopted Eccle's model and measured attainment value and utility value separately.

In line with recent research that recognizes the role of social influences in student achievement motivation and performance (e.g., Fan, 2011). Dörnyei's (2001) model also underscores the role of social agents in L2 language acquisition. This framework includes social milieu that reflects the process of socialization and emphasizes the community influences derived from family and friends. Specifically, it refers to how people around L2 learners view the values of L2 learning. A sample item is "Parents think L2s are important school subjects." Csizér and Dörnyei (2005) suggested that social milieu is an important factor that exerts significant influences on L2 learning. Consistent with a recent study concerning expectancy-value theory (Fan, 2011), this model also stresses several pathways by which family members and friends can influence students' task values and beliefs. For example, peers can communicate with each other about their thoughts on the importance of learning. Parents can exert important influences on learners' attitudes and perceptions by providing important sources of information.

Motivational Research in CSL. There has been a growing interest in studying CSL learners' motivation and achievement in the literature. Some studies applied Gardner's social education framework to investigate CSL learners' motivation. For

example, Yang (2003) investigated motivational orientations, language proficiency, and learner variables among Korean, Japanese, and Chinese language students at seven colleges and universities and found that students were highly influenced by language use, interest, and integrative motivational orientations. In general, East Asian language learners were more motivated by integrative motivation orientation. However, the Chinese language learners were more likely to study the language for instrumental reasons than Korean or Japanese learners in this sample. Yang (2003) suggested students enrolled in the Chinese classes may be attracted by the high expectations of the Chinese economy. Lu and Li (2008) studied 120 college students' integrative and instrumental orientations in the CSL classroom in the Western New York, and found both motivational orientations were important to students' self-confidence, but integrative motivation is more important to students' test scores. Sung and Padilla (1998) recruited K-12 students from public schools and examined their instrumental and integrative motivation in the learning of Asian languages (Japanese, Korean, and Chinese). The results indicated female students had higher instrumental and integrative motivation to learn Asian languages than did male students.

Some CSL studies adopted Csizér and Dornyei's (2005) model. Sung (2013) tested the factor structures of this model in the CSL context, and found four motivational constructs: instrumentality-dominant, attitudes toward the L2 speaker/community, learners' perception of their parents' proficiency in Chinese, and milieu emerged in the PCA analysis. This study also investigated if the motivation levels toward learning CSL differ based on gender, grade level, and starting age of learning an L2, and found motivational constructs did not vary based on these three variable. Wen (2011) also

applied Csizér and Dornyei's (2005) model and incorporated positive learning attitudes and experience, instrumentality, interests in current culture, and social milieu in her study.

In the CSL research, few studies have adopted the contemporary expectancy-value theory to investigate students' motivation to learn CSL. Wen (1997) incorporated expectancy-value theories developed by Lewin (1951) and Vroom (1964) in investigating college students' motivation of CSL learning. The results revealed that intrinsic interest in Chinese language and culture motivate students to start learning the language, and appropriate expectations of learning task and effort motivate students to continue learning Chinese at the intermediate level. However, the framework needs to be updated. The present study expands the prior research by utilizing the contemporary expectancy-value theory (Eccles et at., 1983) to assess adolescents' motivation to learn CSL.

Gender Differences in Expectancy-value Constructs

Gender differences have been recognized in student educational performance and learning (e.g., Fan & Chen, 1997). Myriad studies have focused on investigating whether boys and girls differ in achievement motivation which drives their school performance and learning (e.g., see a review by Meece, Glienke, & Burg, 2006). Much work has been done to examine gender differences in student expectancy-value constructs across various domains, such as language, arts, math, science, and sports. Research reported that gender differences vary depending on the motivational component under examination (see a review by Fan, 2011). That is, the gender gaps among students' beliefs, values, and expectancies vary by which motivational component is examined. For ability-related constructs, data from previous studies suggested that young boys tended to have higher ability beliefs than girls for mathematics and sports, while young girls tended to possess

greater ability beliefs than boys for reading and music (e.g., Eccles, Wigfield, Harold, & Blumenfeld, 1993; Fredricks & Eccles, 2002; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002). With regard to subjective task value, recent studies revealed that girls placed greater value than boys did on reading but non-significant differences on math (e.g., Eccles et al., 1993; Jacobs et al., 2002). In language arts, prior studies suggested that female students held more positive ability-related beliefs (Caprara et al., 2008; Fan, 2011; Pajares & Valiante, 2001), and placed greater value than male students (Eccles et al., 1993, Jacobs et al., 2002).

In L2 acquisition, there is some empirical evidence documenting the role of gender on L2 learners' motivation. For example, Williams, Burden, and Lanvers (2002) found that female schoolchildren aged seven to nine had a higher level of L2 motivation than males towards learning French as L2 in England. Onwuegbuzie, Bailey, and Daley (2001) studied students enrolled in Spanish, French, German, and Japanese courses in the United States and reported that men tended to have lower levels of foreign language achievement. They postulated that university male students might be less motivated in L2 context because they perceive L2 study as a feminine-oriented domain.

Some L2 studies adopted Gardner and Lambert's model and investigated gender differences in integrative and instrumental motivational orientations. Mori and Gobel (2006) found female learners were more integratively motivated in learning English than the male learners in the Japanese college context. Ghazvini and Khajehpour (2011) and Yang (2003) reported similar result in terms of the gender differences in the motivation orientations: integrative motivation and instrumental motivation. Ghazvini and Khajehpour (2011) found that the female high school students in their English-as-second-

language study were more integratively motivated while the male learners were more instrumentally motivated. Yang (2003) examined motivational orientations of learners enrolled in East Asian language courses (Chinese, Japanese, and Korean) in the United States, and found that female students held higher integrative motivational orientations than male students. In particular, female students were inclined to have the desire to communicate with native speakers and become a part the target social or cultural community.

Empirical studies also documented gender gaps in other motivational factors that are associated with mainstream psychological/educational theories. Schmidt et al. (1996) examined gender differences in values in English as a second language classroom, and found that female students were apt to attach more intrinsic values to English learning, whereas men tended to be more extrinsically motivated. Sung and Padilla's (1998) study on elementary and secondary learners of Chinese, Japanese, and Korean also reported female learners having significantly higher "personal interests-related motivation" to learn Asian languages than male learners.

Despite much evidence that indicated female learners' superiority in L2 motivation, a few studies showed conflicting results. Polar (2011) studied middle and high school learners of Turkish language, the data from 56 Kurdish girls and 65 Kurdish boys demonstrated that the male participants scored significantly higher integrated orientation. In a large scale study of Kuwaiti learners' attitudes toward learning English as a second language at college level, Al-Bustan and Al-Bustan (2009) reported female students expressed a negative attitude towards learning English. Interestingly, male students did not report such negative attitudes in the study.

Gender difference in L2 motivation is a complex phenomenon. Researchers contended that gender differences in the L2 areas may be influenced by social, cultural, and other contextual factors (e.g., Polar, 2011). Researchers have studied learners' immediate learning and social environment to explain the variances in gender differences in L2. For example, Kobayashi (2002) argues that Japanese social agreements affect Japanese women's attitudes towards English learning. In Japan, women's social status has been marginalized. Many Japanese women consider English language as a tool to help them depart from a male-dominant society, and thus express positive attitudes towards learning English as a second language. Ryan (2009) conducted a large-scale nationwide study (n=2,397) to examine the motivation of learners of English in Japan. He suggested that female Japanese learners thought English gave them more freedom to express themselves, while Japanese was a language that restricted female speakers from express themselves freely. Moreover, Williams et al., (2002) suggested that secondary students in the Southwestern England considered French as a feminine language, and female students possessed a higher level of motivation towards French learning. In the Kurdish society, Polat (2011) indicated that men have to carry the financial responsibilities in the family. Kurdish boys showed positive attitudes towards L2 learning because an L2 was a prerequisite for work in Kurdish society. In contrast, Kurdish girls' primary responsibilities were to become potential housewives. These girls may not be able to appreciate the value of L2 due to their social roles.

Since gender differences in L2 motivation are subject to the impact of social and cultural factors as implied in the literature, it would be valuable to investigate whether there are any gender differences in motivation towards learning CSL. Not much research

has explored the relation between gender and adolescents' CSL motivation in the United States learning contexts. The findings in this direction may shed lights on future research on investigating gender differences in L2 motivation in the U.S. and the possible social factors that may influence the gender differences in L2 motivation in the U.S. Furthermore, although previous L2 research (e.g., Schmidt et al., 1996) studied gender differences in task value, researchers considered task value as a one-factor construct and failed to further investigate gender differences in each task value component. Moreover, few L2 studies examined gender differences in task difficulty or social milieu perceptions. This study contributes to the literature by further exploring whether boys and girls perceive social milieu, task values, and task difficulty differently in a specific L2 setting.

Relations of Expectancy-value Constructs with Motivational Behaviors

Similar to other achievement motivation theories, expectancy-value theory attempts to explain an individual's achievement performance, persistence, and choice of achievement tasks (Eccles, Wigfield, & Schiefele, 1998; Pintrich & Schunk, 1996). Motivational behaviors such as behavioral engagement and academic choice are two important outcome variables that have been examined in previous studies within the framework of expectancy-value model. Behavioral engagement is defined in terms of student participation in learning and academic tasks, and this construct focuses on behaviors such as effort, persistence, concentration and attention (Birch & Ladd, 1998; Fredricks, Blumenfeld, & Paris, 2004; Fan, 2011). Research studies demonstrated the combination of students' expectancies for success, ability beliefs, and task values predicted student academic engagement (Wigfield & Eccles, 2000). Previous research also suggested that task value significantly influenced school effort and persistence

(Chouinard et al., 2007; Cox & Whaley, 2004). Greene et al. (1999) employed expectancy-value theory to examine the motivational constructs in a high school mathematics class and reported a positive association between a collapsed value factor and mathematics achievement and effort.

Academic choice refers to an individual's intentions to keep taking a subject area and actual decisions to do so (Wigfield, 1994). Eccles and colleagues measured adolescents' competency-related beliefs, expectancies for success, task values of math and English, as well as intentions to take more math or English courses, and obtained students' grades and course enrollment decisions from school records. The results of path analysis and structural equation modeling suggested that students' competence beliefs significantly predicted children's subsequent grades in math and English. Students' subjective task values positively influences both intentions and actual decisions to keep taking a particular subject matter or engaging in certain activities (Chen & Liu, 2009; Durik, Vida, & Eccles, 2006; Meece et al., 1990).

In L2 literature, there is a growing interest to study constructs pertain to behavioral engagement and academic choice. Csizér and Dörnyei (2005) suggested that future research should emphasize the mediating factors that influence the relationship between motivation and language proficiency or L2 achievement. Motivational behaviors such as sustained effort, or "motivational intensity," and the intention to keep learning a L2 are critical factors that relate to learning motivation and language achievement (e.g., Csizér & Dörnyei, 2005; Masgoret & Gardner, 2003; Wen, 2011).

Intended Effort. Several constructs relevant to expectancy-value theory have been found positively associated with intended effort. For example, Tremblay and

Gardner (1995) found that the self efficacy of students enrolled in French language courses significantly predicted motivational behaviors, such as attention and persistence. For the sample of adults studying English as foreign language, Schmidt et al. (1996) found that learners with higher level of expectancy of success tended to appreciate challenging tasks and activities, exert efforts, and use learning strategies. In a meta-analysis of attitudes and motivation in L2 learning, Csizér and Dörnyei (2005) suggested that cultural interest, instrumentality, and milieu served as significant factors predicting students' learning behaviors, such as intended effort. Papi (2010) applied Dornyei (2009)'s L2 motivational self system and studied motivation and motivational behaviors of 1011 Iranian high school English learners. The results demonstrated that the ideal L2 self (the ideal image of a fluent L2 user in the future), the ought-to L2 self (an individual's perceived duties and obligations or responsibilities to learn an L2), and the L2 learning experience (an individual's attitudes toward L2 learning) significantly predicted intended effort.

In the CSL setting, Rueda and Chen (2005) studied 150 college students enrolled in Chinese language classes in the southern California area and found that self-efficacy and task value significantly predicted the time and effort devoted to the task. Wen (2011) examined the relationship between motivation and continuation of future Chinese studies with 317 students who enrolled in credit-bearing Chinese language courses. This study found that positive learning attitudes and experience (the enjoyment of Chinese study in formal learning situations) significantly predicted intended strategic efforts in CSL learning setting. Students who enjoyed learning Chinese language were more likely to exert efforts and engage in the learning process.

Continuation of Studies. There have been some studies focusing on examining the predictors of the intention to continue L2 learning. Gardner (1985) reviewed the literature and concluded that language attitudes were more influential than language aptitude or proficiency level in predicting who would continue the language study and who would drop out. Ramage (1990) highlighted intrinsic values in L2 motivation and reported that intrinsic interest in culture and in learning the language thoroughly predicted the continuation of French and Spanish studies in high schools. Another study recruited a sample of 117 high school students in Australia and asked participants to report their intention to continue to enroll in French- as-a-second-language program in the future (MacIntyre & Blackie, 2012). The results suggested that task value and attitudes toward the learning material were highly correlated with continuation of study. Wen (2013) documented that instrumentality and positive learning experience significantly predicted the continuation of Chinese studies at the elementary and intermediate proficiency levels; self-confidence, however, was the significant predictor of continuation of studies for advanced learners. That is, learners who attached pragmatic value to Chinese learning and enjoyed learning Chinese tended to continue to enroll in Chinese related courses in the future at the elementary and intermediate proficiency levels. Advanced learners who possessed higher levels of self-confidence were more likely to keep taking Chinese related courses.

Chapter III

Methodology

Participants

Participants were 219 English-speaking students (male: 40.6%, 89 of 219, female: 59.4%, 130 of 219) who enrolled in Chinese language courses at four secondary schools in Texas' metropolitan areas during the 2014 spring semester. Their ages ranged from 11 to 19 years (M = 15.68, SD = 1.72). Thirty-two (14.6%) students identified themselves as Asian; 36 (16.4%) students were African American; 129 (58.9%) were Spanish; 8 (3.7%) were White; 10 (4.6%) were mixed race; 6 (3.9%) were other.

Among the 219 participants, thirty-seven (16.9%) students reported their ancestors and/or relatives were Chinese; 182 (83.1%) reported they did not have any Chinese ancestors or relatives. Eighty-one (37%) students spoke English as their first language, 16 (7.3%) students spoke Chinese, 107 (48.9) % students spoke Spanish, 6 (2.7%) students spoke Vietnamese, 5 (2.2%) students spoke other languages, and 4 (1.8%) students did not report. Seventy-nine (36.1%) students reported that they were bilingual in Chinese, and 140 (63.9%) reported that they were not bilingual in Chinese. For mother's native language, 56 (25.6%) students reported English, 22 (10%) Chinese, 114 (52.1%) Spanish, 8 (3.7%) Vietnamese, 8 (3.7%) other languages, and 11 (5.0%) students did not report. For father's native language, 58 (26.5%) students reported English, 22 (10%) Chinese, 112 (51.1%) Spanish, 8 (3.7%) Vietnamese, 8 (3.7%) other languages, and 11 (5.0%) students did not report.

Nineteen (8.7%) of the participants were enrolled in sixth grade, 4 (1.8%), 52 (23.7%), 58 (26.5%), 45 (20.5%), 30 (13.7%) of the students were enrolled in seventh,

ninth, tenth, eleventh, and twelfth grade respectively, 3 (1.4%) students did not indicate their grade level. The number of years they attended Chinese classes at elementary schools ranged from 0 to 6 years (M= 0.32, SD=1.30), the number of years they attended Chinese classes at middle school level ranged from 0 to 4 years (M= 0.33, SD =.70), the number of years they attended Chinese classes at high schools ranged from 0 to 4 years (M= 1.81, SD=1.15), and the number of years they attended Chinese classes at community schools ranged from 0 to 13 years (M= .26, SD =1.53).

Table 1

Descriptive statistics of the participants

Learner Factors	Categories	N	%
Gender	male	89	40.6%
	female	130	59.4%
Ethnicity	Asian	32	14.6%
	African American	36	16.4%
	Hispanic	129	58.9%
	White	8	3.7%
	mixed race	10	4.6%
	other	6	3.9%
Grade level	6^{th} grade	19	8.7%
	7^{th} grade	4	1.8%
	8^{th} grade	52	23.7%
	9^{th} grade	0	0%
	10^{th} grade	58	26.5%
	11^{th} grade	45	20.5%
	12^{th} grade	30	13.7%
First Language	English	81	37%
	Chinese	16	7.3%
	Spanish	107	48.9%
	Vietnamese	6	2.7%
	Other	5	2.2%

Measures

The self-report survey included two major sections. The first section consisted of 41 items regarding learning motivation (34 items) and motivational behaviors (7 items). All items in this section were formatted by Likert five-point agreeability scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Students were presented with items and asked to rate to what extent they agree with each item. The second section contained 13 demographic items concerning age, gender, ethnicity, first language, grade level, the number of years they attended community Chinese schools, as well as the number of years they attended Chinese classes at elementary/secondary/high school level. I placed the demographic questions to the end of the scale because participants may be hesitant to answer the personal questions in the beginning (Burns et al., 2008; Jackson, 2011).

In order to ensure the reliability and validity of this scale, the item development process included of the following steps: 1) generation of an initial pool of items; 2) consultation with experts to check the content validity of the items and to modify the items according to their feedback; and 3) administration of the revised pool of items to CSL language learners to conduct item analysis and to test the construct validity and internal consistency reliability of the scale.

Phase 1: The Initial Pool of Items. In order to ensure appropriate psychometric properties of the instrument, most items in my scale were adopted and adjusted from established motivation scales, including Expectancy-Related Beliefs and Task Values developed by Eccles & Wigfield (1995) and Language Learning Motivation developed by Csizér and Dörnyei's (2005).

Expectancy-value Perceptions. As mentioned previously, Eccles' expectancy-

value scale has been the most widely used scale for achievement motivation. The scale has been reported to have high internal reliability in several studies (see review, Eccles & Wigfield, 2002). However, the items in Expectancy-value scale were initially developed to measure motivation in math classrooms and had never been utilized in L2 settings. To develop a situation-specific scale that can reflect the uniqueness of the L2 learning process, this study also referenced Csizér and Dörnyei's (2005) work as an important source for item development. The Language Learning Motivation (Csizér & Dörnyei, 2005) is one of the most well-known scales for measuring L2 motivation. In this framework, there are three constructs relevant to the aforementioned expectancy-value framework: cultural interests, instrumentality, and social milieu.

Cultural interests refer to the appreciation of cultural products associated with a particular L2 and conveyed by the media (e.g., films, videos, TV programs, pop music, magazines, and books). This construct reflects the intrinsic value that learners may attach to learning tasks in L2 acquisition. Based on this model, I created a construct entitled "intrinsic value-cultural interests" to measure the extent to which students enjoy learning Chinese culture. All of the items reflective of intrinsic value-cultural interests construct for the present scale were borrowed from Csizér and Dörnyei's (2005) scale.

Instrumentality refers to the perceived pragmatic benefits of L2 proficiency. Dörnyei and Clement (2001) considered instrumentality as a one-dimensional construct. However, while testing the internal structure of this scale, the results of factor analysis showed a two-factor solution for instrumentality based on the data obtained from French and Italian language classrooms. The first sub-cluster reflects the importance of these languages, and the second sub-cluster reflects the utility values associated with

proficiency in these languages. This finding is consistent with Eccles' framework which distinguishes attainment value from utility value. I agree with Eccles' definitions and measure utility value and attainment value separately in this study. All items under this construct were adapted from Eccles' scale.

Social milieu refers to the social influences stemming from the immediate environment. The traditional definition of social milieu has concerned how parents or people around learners think it is important to learn an L2. The present study expands this definition and proposes two constructs: attainment value-social milieu and utility value-social milieu which reflect the extent to which people around the students view learning CSL as important and useful. The items under attainment value-social milieu were adopted from Csizér and Dörnyei's (2005) scale. Moreover, I also created three items to measure the utility value-social milieu component.

In summary, this study measures the following constructs: ability/expectancy related items, intrinsic value-linguistic interests, intrinsic value-cultural interests, attainment value, attainment value-social milieu, utility value, utility value-social milieu, task difficulty and required effort. In particular, *ability/expectancy related items* consists of six questions that reflect the degree to which students reported believes in their abilities to perform well in Chinese classes and their abilities to use the Chinese language. Three items have been developed to measure *intrinsic value-linguistic interests* that represent the degree to which students view learning CSL as interesting and enjoyable. Four items under the construct—*intrinsic value-cultural interests* tap into the degree to which students view learning Chinese culture as interesting and enjoyable. Three items under the construct —*attainment value* tap into the degree to which students view

learning CSL as important. Three items under the construct—*attainment value-social milieu* reflect the degree to which people around the students view learning CSL as important. Three items under the construct—*utility value* refers to the degree to which students view learning Chinese as useful. Three items under the construct —*utility value-social milieu* measure the degree to which people around the students view learning Chinese as useful. *Task difficulty* consists of three items that measure the degree to which students view learning CSL as difficult. Four items under *required effort* reflect the amount of effort required to do well in CSL classes.

Table 2

Items and their sources for Expectancy-value Perception

Items	Source
Ability/expectancy-related Perception	
1. Compared to other students, I expect to do better than other students in my Chinese course this year.	Eccles & Wigfield (1995)
2. I think I will do well in my Chinese course this year.	Eccles & Wigfield (1995)
3. I am good at Chinese.	Eccles & Wigfield (1995)
4. I am sure I will be able to learn Chinese well.	Dornyei & Clement (2001)
5. I am one of the best students in my Chinese class.	Eccles & Wigfield (1995)
6. I have been doing well in Chinese this year.	Dornyei & Clement (2001)
Intrinsic Value-Linguistic Interests	
7. I like the Chinese language.	Dornyei & Clement (2001)
8. I do my Chinese schoolwork because I am interested in it.	Eccles & Wigfield (1995)
9. In general, I find working on my Chinese assignments interesting.	Eccles & Wigfield (1995)

Intrinsic Value-Cultural Interests	
10. I like Chinese films.	Dornyei & Clement (2001)
11. I like Chinese TV programs.	Dornyei & Clement (2001)
12. I like Chinese magazines.	Dornyei & Clement (2001)
13. I like Chinese pop music.	Dornyei & Clement (2001)
Attainment Value	
14. For me, being good in the Chinese language is important.	Eccles & Wigfield (1995)
15. Compared to my other activities, it is important for me to be good at the Chinese language.	Eccles & Wigfield (1995)
16. It is important to me to get good grades in Chinese.	Eccles & Wigfield (1995)
17. I think Chinese is an important school subject.	Dornyei & Clement (2001)
Attainment Value-Social Milieu	
18. People around me think it is important to know the Chinese language.	Dornyei & Clement (2001)
19. People around me think it is important to be good at the Chinese language.	Dornyei & Clement (2001)
20. My parents think the Chinese language course is an important school subject.	Dornyei & Clement (2001)
Utility Value	
21. Chinese is useful for travel.	Dornyei & Clement (2001)
22. Chinese is useful for my future career.	Dornyei & Clement (2001)
23. Compared to my other activities, what I learn in my Chinese class is very useful.	Eccles & Wigfield (1995)
Utility Value-Social Milieu	
24. People around me think it is useful to know the Chinese language.	Csizér & Dörnyei (2005)
25. People around me think the Chinese language is useful for my future career.	Csizér & Dörnyei (2005)
26. People around me think the Chinese language is useful for travel.	Csizér & Dörnyei (2005)
Task Difficulty	

27. In general, the Chinese language is hard for me.	Eccles & Wigfield (1995)
28. Compared to most other students in my class, the Chinese language is hard for me.	Eccles & Wigfield (1995)
29. Compared to most other school subjects that I take, my Chinese course is hard for me.	Eccles & Wigfield (1995)
Required Effort	
30. I have to try hard to do well in my Chinese language class.	Eccles & Wigfield (1995)
31. I have to try hard to get a good grade in my Chinese language course.	Eccles & Wigfield (1995)
32. I have to study a lot for Chinese tests to get a good grade.	Eccles & Wigfield (1995)
33. To do well in Chinese, I have to work harder in my Chinese class than in other subjects.	Eccles & Wigfield (1995)

Table 3

Items and their sources for Intended Effort

Items	Source
34. I will think about the words that I have learned in my Chinese class.	Dornyei & Clement (2001); Wen (2011)
35. I will be active in my Chinese class participation.	Dornyei & Clement (2001); Wen (2011)
36. I will try to use the Chinese language outside the classroom.	Dornyei & Clement (2001); Wen (2011)
37. I will <u>not</u> give up on my Chinese course assignments before I complete them.	Dornyei & Clement (2001); Wen (2011)
38. I will make good efforts to improve my Chinese language skills.	Dornyei & Clement (2001); Wen (2011)

Intended Effort. This construct consists of items adopted and modified from Dornyei and Clement (2001) and Wen (2011). Recent empirical research in CSL classroom has confirmed the validity and reliability of these items (e.g., Wen, 2011). Five

items under *intended effort* measures the degree to which students intend to exert efforts in learning Chinese language.

Continuation of Study. This construct included three items adopted and modified from Wen (2011). The items under the construct—*continuation of study* tap into the degree to which students intend to enroll in Chinese or Chinese-related courses in the future. These items have demonstrated adequate validity and reliability in prior research (Wen, 2011).

Table 4

Items and their sources for Continuation of Study

Items	Source
39. After the current Chinese course, I will continue to learn the Chinese language in the next semester.	Wen (2011)
40. I will continue to learn the Chinese language in the future.	Wen (2011)
41. I will take more courses related to Chinese in the future.	Wen (2011)

Phase 2: Consult Experts for Content Validity. An initial pool of 41 items was sent to six experts for content validity review. Two experts are leading researchers in educational research; two experts are prominent researchers in the field of measurement and statistics; one expert is an influential researcher in L2 education; and one expert has published extensively on Chinese language education. I explained the rationale to the experts and invited them to evaluate the appropriateness of all the 41 items. The experts were also requested to add, delete or revise any item in the original pool. One expert suggested adding the following item to measure ability/expectancy-related perceptions:

Compared to most of my other school subjects, I am better at my Chinese course. I took the advice and added this item to the scale. One expert suggested changing the item "*After the current Chinese course, I will continue to learn the Chinese language in the next semester*" into "*After completing the current Chinese course, I will continue to learn the Chinese language in the next semester*". I took the advice and edited the item. One expert had doubts with the item "*To do well in Chinese, I have to work harder in my Chinese class than in other subjects*". Following her advice, I changed it into "*To do well in Chinese, I have to work harder than in other subjects*". One expert pointed out that no item measures learners' intention to enroll in any courses related to the Chinese culture. Following her recommendation, I changed the item *"I will take more courses related to Chinese in the future"* into "*I will take more courses related to the Chinese culture in the future"*. In addition, I invited one English language teacher and one ESL teacher to review the items and ensure the language and readability are appropriate for the participants. The items remained in the following scale received final approvals from all experts and teachers (see Table 5).

Table 5

Items and their sources

Items	Source
Ability/expectancy-related Perception	
1. I expect to do better than other students in my Chinese course this year.	Eccles & Wigfield (1995)
2. Compared to most of my other school subjects, I am better at my Chinese course.	Eccles, Wigfield, Harold & Blumenfeld (1993)
3. I think I will do well in my Chinese course this year.	Eccles & Wigfield (1995)
4. I am good at Chinese.	Eccles & Wigfield (1995)
5. I am sure I will be able to learn Chinese	

well.	Dornyei & Clement (2001)
6. I am one of the best students in my Chinese class.	Eccles & Wigfield (1995)
7. I have been doing well in Chinese this year.	Dornyei & Clement (2001)
Intrinsic Value-Linguistic Interests	
8. I like the Chinese language.	Dornyei & Clement (2001)
9. I do my Chinese schoolwork because I am interested in it.	Eccles & Wigfield (1995)
10. In general, I find working on my Chinese assignments interesting.	Eccles & Wigfield (1995)
Intrinsic Value-Cultural Interests	
11. I like Chinese films.	Dornyei & Clement (2001)
12. I like Chinese TV programs.	Dornyei & Clement (2001)
13. I like Chinese magazines.	Dornyei & Clement (2001)
14. I like Chinese pop music.	Dornyei & Clement (2001)
Attainment Value	
15. For me, being good in the Chinese language is important.	Eccles & Wigfield (1995)
16. Compared to my other activities, it is more important for me to be good at the Chinese language.	Eccles & Wigfield (1995)
17. It is important to me to get good grades in Chinese.	Eccles & Wigfield (1995)
18. I think Chinese is an important school subject.	Dornyei & Clement (2001)
Attainment Value-Social Milieu	
19. People around me think it is important to know the Chinese language.	Dornyei & Clement (2001)
20. People around me think it is important to be good at the Chinese language.	Dornyei & Clement (2001)
21. My parents think the Chinese language course is an important school subject.	Dornyei & Clement (2001)
Utility Value	
22. Chinese is useful for travel.	Dornyei & Clement (2001)
23. Chinese is useful for my future career.	Dornyei & Clement (2001)

24. Compared to my other activities, what I learn in my Chinese class is more useful.	Eccles & Wigfield (1995)
Utility Value-Social Milieu	
25. People around me think it is useful to know the Chinese language.	Csizér & Dörnyei (2005)
26. People around me think the Chinese language is useful for my future career.	Csizér & Dörnyei (2005)
27. People around me think the Chinese language is useful for travel.	Csizér & Dörnyei (2005)
Task Difficulty	
28. In general, the Chinese language is hard for me.	Eccles & Wigfield (1995)
29. Compared to most other students in my class, the Chinese language is harder for me.	Eccles & Wigfield (1995)
30. Compared to most other school subjects that I take, my Chinese course is harder for me.	Eccles & Wigfield (1995)
Required Effort	
31. I have to try hard to do well in my Chinese language class.	Eccles & Wigfield (1995)
32. I have to try hard to get a good grade in my Chinese language course.	Eccles & Wigfield (1995)
33. I have to study a lot for Chinese tests to get a good grade.	Eccles & Wigfield (1995)
34. To do well in Chinese, I have to work harder than in other subjects.	Eccles & Wigfield (1995)
Intended Effort	
35. I will think about the words that I have learned in my Chinese class.	Dornyei & Clement (2001); Wen (2011)
36. I will be active in my Chinese class participation.	Dornyei & Clement (2001); Wen (2011)
37. I will try to use the Chinese language outside the classroom.	Dornyei & Clement (2001); Wen (2011)
38. I will <u>not</u> give up on my Chinese course assignments before I complete them.	Dornyei & Clement (2001); Wen (2011)
39. I will make good efforts to improve my Chinese language skills.	Dornyei & Clement (2001); Wen (2011)
Continuation of Study	
40. After completing the current Chinese	

course, I will continue to learn the Chinese language in the next semester.	Wen (2011)
41. I will continue to learn the Chinese language in the future.	Wen (2011)
42. I will take more courses related to the Chinese culture in the future.	Wen (2011)

After editing the items per the requests of experts, I randomized all items to prevent the ordering effect.

Phase 3: Test Reliability and Validity of the Scale. As a result of Phase 2, 42 items were included in the final attitudinal scale. This 42-item scale together with a background questionnaire was administered to the aforementioned secondary school students. The following sessions explain the details of survey administration as well as the results of the reliability and validity of the 42-item attitudinal scale.

Procedure

I obtained permissions from the Research Department of an urban school district (see Appendix A) and University of Houston (see Appendix B). I also received approvals from four school principals and six Chinese classroom teachers. All classroom teachers agreed to assist with survey administration. An online survey site was set up by the website Survey Gizmo. For students aged less than 18 years, their parents were presented with information that includes an overview of the study, risks and benefits, as well as the contact information of the principal investigator (See Appendix C for the parental permission form and Appendix D for the assent letter). Students aged greater than or equal to 18 years were presented with a consent that includes an overview of the study, risks and benefits, and contact information of the principal investigator (see Appendix E for the consent form).

Once students aged less than 18 years and their parents indicated their willingness to participate in the study, classroom teachers emailed these students or their parents a link to access the assent form and the questionnaire form and asked the students to fill out the questionnaire at a place and time of their choosing. Once students aged great than or equal to 18 years indicated their agreements to participate, classroom teachers emailed them a link to access the consent form and scale and ask them to answer the questionnaire at a place and time of their choosing. If there was no email address on file, students could either choose to create an email account or not to participate. Some students did not have easy access to the computers; classroom teachers offered paper-pencil survey as an alternative.

Students were informed to provide answers to 13 demographic questions and 42 attitude questions. Students had the right to choose to not answer any question that they might not be comfortable with and not be in the study at any time. On average, students spent approximately 15 minutes to complete the questionnaire. Students' participations in this project were kept confidential, and the responses to the items were kept anonymous. After all participants have completed the measures, the data were downloaded to a secure computer, the paper questionnaires were locked in a secure place, and the survey was closed on May 19, 2014.

Data Analyses

The statistical software package SPSS was used for data analysis and interpretation. First, I assessed the quality of the data and dealt with the missing data. Among the 219 participants, four students completed less than 50% of the questionnaire, and their responses were discarded from the future analysis. Among all selected 42-item attitudinal

variables, less than 1% of data points were missing. Therefore, mean imputation was employed to replace the missing data. Second, I conducted a Principal Component Analysis using Varimax rotation in order to identify the latent constructs. The item factor loadings in each matrix were analyzed. I reevaluated the items with low factor loadings and the items with cross-factor loadings. Third, internal consistencies of each construct and the entire scale were analyzed. Descriptive statistics was conducted to examine students' levels of motivation and motivational behaviors. Fourth, I computed the correlations of all studied variables. Fifth, I conducted MANOVA to examine gender differences in motivational constructs on the basis of expectancy-value theory. MANOVA was used to check for the main effects of gender and address the first research question. Sixth, regression statistics was used to examine the relations among students' motivational beliefs, intended effort, and continuation of study variables. This analysis investigated the second and third research questions concerning if motivation could predict intended effort and continuation of study.

Chapter IV

Results

Principal Component Analysis

Principal component analysis (PCA) was conducted for both the CSL Learning Motivation Scale (34 items) and motivational behavior scale (8 items) to examine the psychometric properties of these scales. The total sample size (219 participants) for this PCA study was considered adequate according to Streiner (1994)'s 5-participant-per-variable rule for samples with more than 100 participants.

Initially, the factorability of the 34-item CSL Learning Motivation Scale was examined. Firstly, all 34 items correlated at least .3 with at least one other item, suggesting reasonable factorability. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .92, above the recommended value of .5 (Hinton et al., 2004), and Bartlett's test of sphericity was significant (χ^2 (561) = 5003.71, $p < .05$). Finally, the communalities were all above .3 (see Table 6), supporting that each item shared some common variance with other items. Given these overall indicators, PCA was conducted with all 34 items.

For this PCA analysis, a variety of criteria were employed to determine the number of common factors to retain, including the eigenvalue >1 criterion, the scree plot test, and the conceptual/theoretical interpretability of the factor structures. Varimax rotation with Kaiser Normalization was conducted to increase the interpretability of the factors. Although I proposed a nine-factor CSL Learning Motivation Scale, six factors were identified based on the eigenvalue greater than 1 rule. Interestingly, only one item loaded onto Factor 6, and this single item was "*Chinese is useful for travel*". Compared to

the six-factor solution, I preferred to a five-factor solution for the following reasons: 1. the sixth factor consisted of a single item and only explained 3% of the variance; 2. it is difficult to interpret the sixth factor based on the theories; 3. eigenvalue levelled off to a horizontal slope on the scree plot after the first five factors.

The fixed five-factor PCA analysis was then conducted, and the results were presented in Table 5. All five factors explained the 63% of the variance. Three constructs (*intrinsic value-linguistic interests, intrinsic value-cultural interests, and expectancy/ability beliefs*) emerged as proposed in the original CLS Learning Motivation Model. Seven items loaded onto Factor 2 as suggested by the theory (Wigfield & Eccles, 1995), and they were associated with the students' *expectancy/ability beliefs*. Consistent with prior research, three items loaded onto Factor 3, and they are related to students' *intrinsic value-linguistic interests*. Four items loaded onto Factor 4, and they are related to students' *intrinsic value-cultural interests* as hypothesized in the theory (Csizér & Dornyei, 2005).

Inconsistent with the CSL Learning Motivation framework proposed earlier, some constructs grouped together and loaded onto one single factor. I employed various statistical approaches and found that eliminating items with cross loadings did not improve the PCA results. Therefore, all items were retained in the scale. Specifically, twelve items loaded onto Factor 1, and they are associated with students' reported utility value, attainment value, utility value-social milieu, and attainment value-social milieu. Factor 1 was then named as *utility/attainment value*. A certain number of attainment/utility value related items had cross loadings. The items "Compared to my other activities, it is more important for me to be good at the Chinese language",

"Compared to my other activities, what I learn in my Chinese class is more useful", "For me, being good in the Chinese language is important", and "I think Chinese is an important school subject" had cross loadings on both attainment/utility value and intrinsic value-linguistic interests. After reexamine the content of these items, I decided to keep them on attainment/utility value. The item "It is important to me to get good grades in Chinese" had factor loadings between .45 and .55 on both attainment/utility value and ability/expectancy-related beliefs. This item was conceptually proposed to measure attainment value, and I decided to retain it on attainment/utility value. Moreover, seven items that reflected the task difficulty and required effort perceptions loaded onto Factor 5. Factor 5 was then named as *perceived task difficulty*.

In the original CSL Learning Motivation Model, I proposed that utility value, attainment value, utility value-social milieu, and attainment value-social milieu should distinct from one another. However, all these items loaded on one unified factor "*utility/attainment value*". Prior studies reported conflicting results concerning the factor structures of attainment value and utility value. In literature, some empirical research supported the differentiations among intrinsic value, attainment value and utility value in the math, reading, and sports domain (e.g., Eccles & Wigfield, 1995; Watt, 2004). However, a variety of L2 studies studied the utilitarian benefit of a language and the importance of a language under one unified factor. Empirical data revealed that these two components tended to group together (e.g., Dornyei & Csizér, 2002; Csizér & Dornyei, 2005). There is some evidence regarding the relations between social milieu and attainment/utility value. Csizér and Dornyei (2005) measured social milieu and instrumentality (a component associated with utilitarian benefits and importance) and

found that these two factors were distinct from each other according to the CFA results. However, they also pointed out that social agreement of the language values influenced the perceived utilitarian benefit and importance of a language. Their data analysis demonstrated that social milieu significantly predicted instrumentality (β =.60) (Csizér & Dornyei, 2005). The PCA results of this study found that the participants of this study did not distinguish among attainment value, utility value, attainment value-social milieu and utility value-social milieu. After reevaluating the content and theoretical backgrounds of these items, all attainment/utility value-related items and social milieu items were sorted under one unified factor.

Another interesting finding is task difficulty and required effort items formed one factor ““perceived task difficulty”. Though required effort and task difficulty were considered as theoretically similar constructs, prior research yielded a two-factor solution for these perceptions and separated required effort from task difficulty (Eccles & Wigfield, 1995). In this study, the PCA result showed that all items had primary loadings over .6 on one factor. Therefore, I chose the one-factor solution for required effort and task difficulty items.

In conclusion, all 34 items were kept in the final CSL Learning Motivation Scale (See Table 6), with 13 items reflective of attainment/utility values, seven items reflective of ability/expectancy-related beliefs, three items reflective of intrinsic value-linguistic interests, four items reflective of intrinsic value-cultural interests, and seven items reflective of required effort and task difficulty.

Similarly, the factorability of the 8-item Motivational Behavior Scale was examined by PCA. Firstly, all eight items correlated at least .3 with at least one other

item, suggesting reasonable factorability. Secondly, the Kaiser-Meyer-Olkin measure of sampling adequacy was .92, above the recommended value of .5 (Hinton et al., 2004), and Bartlett's test of sphericity was significant ($\chi 2$ (28) = 1061.06, $p < .05$). Finally, the communalities were all above .3 (see Table 6) and further confirmed that each item shared some common variance with others. On the basis of these indicators, factor analysis was conducted with all eight items.

Table 6

Factor loadings and communalities based on the PCA with varimax rotation for 34 items of the CSL Learning Motivation Scale (N = 219)

	1.Attainment & Utility	2.Expectancy/ability	3.Linguistic Interests	4.Cultural Interests	5.Task Difficulty	Communality
26. People around me think the Chinese language is useful for my future career	**.81**					.79
20. People around me think it is important to know the Chinese language	**.80**					.75
27. People around me think the Chinese language is useful for travel	**.77**					.70
19. People around me think it is important to know the Chinese language	**.74**					.70
22. Chinese is useful for my future career	**.64**					.45
25. People around me think it is useful to know the Chinese language	**.62**					.50
21. My parents think the Chinese language course is an important school subject	**.57**					.59
22. Chinese is useful for travel.	**.43**					.45
17. It is important to me to get good grades in Chinese.	**.45**	.53				.56
16. Compared to my other	**.28**		.69			.45

activities, it is more important for me to be good at the Chinese language.					
24. Compared to my other activities, what I learn in my Chinese class is more useful.	**.36**		.65		.64
15. For me, being good in the Chinese language is important.	**.47**		.52		.70
18. I think Chinese is an important school subject.	**.47**		.50		.67
7. I have been doing well in Chinese this year.		**.81**			.67
3. I think I will do well in my Chinese course this year.		**.75**			.65
6. I am one of the best students in my Chinese class.		**.70**			.55
4. I am good at Chinese.		**.61**			.63
1. I expect to do better than other students in my Chinese course this year.		**.58**			.58
5. I am sure I will be able to learn Chinese well.		**.57**			.64
2. Compared to most of my other school subjects, I am better at my Chinese course.		**.48**			.57
9. I do my Chinese schoolwork because I am interested in it.			**.58**		.61
10. In general, I find working on my Chinese assignments interesting.			**.55**		.58
8. I like the Chinese language.			**.54**		.67
32. I have to try hard to get a good grade in my Chinese language course.				**.82**	.69
31. I have to try hard to do well in my Chinese language class.				**.71**	.60
30. Compared to most other school subjects that I take, my Chinese course is harder for me.				**.70**	.73
33. I have to study a lot for Chinese tests to get a good grade.				**.69**	.54

28. In general, the Chinese language is hard for me.	**.68**		.74
34. To do well in Chinese, I have to work harder than in other subjects.	**.66**		.62
29. Compared to most other students in my class, the Chinese language is harder for me.	**.61**		.73
12. I like Chinese TV programs.		**.77**	.75
14. I like Chinese pop music.		**.70**	.63
13. I like Chinese magazines.		**.66**	.71
11. I like Chinese films.		**.65**	.65

Note. Factor loadings < .2 are suppressed

PCA with a Varimax rotation was also performed to test the factor structures of the eight-item Motivational Behavior Scale. To align with the prior theory, I conducted a fixed two-factor PCA. The results showed the Factor 1 explained the 62.8% of the variance and Factor 2 explained 8.4% of the variance. Three items loaded onto Factor 1, and they are related to students' *intended effort*. Five items loaded onto Factor 2, and they are associated with *continuation of study*. Most items had strong factor loadings (>.60, see Table 7) on the primary factors.

Table 7.

Factor loadings and communalities based on the principle components analysis with varimax rotation for eight items of the Motivational Behavior Scale (N = 219)

	Intended Effort	Continuation of Study	Communality
36. I will be active in my Chinese class participation.	**.86**		.78
38. I will not give up on my Chinese course assignments before I complete them.	**.72**		.66
35. I will think about the words that I have learned in my Chinese class.	**.60**	.50	.60
41. I will continue to learn the Chinese language in the future.		**.86**	.84
40. After completing the current Chinese course, I will continue to learn the Chinese language in the next semester.		**.80**	.71
42. I will take more courses related to the Chinese culture in the future.		**.77**	.71
37. I will try to use the Chinese language outside the classroom.	.32	**.75**	.67
38. I will make good efforts to improve my Chinese language skills.	.49	**.71**	.66

Note. Factor loadings < .2 are suppressed

The item "I will think about the words that I have learned in my Chinese class" loaded on both intended effort (.60) and continuation of study (.50). This item was designed to measure the intended effort and had a higher loading on intended effort. Therefore, I decided to keep the item on the primary factor. Two items "I will try to use the Chinese language outside the classroom" and "I will make good efforts to improve my Chinese language skills" had cross loadings on both intended effort and continuation of study. These two items were proposed to measure intended effort. However, both items had strong loadings (>.70) on continuation of study. After a further examination of

these two items, I decided to include them in continuation of study.

To conclude, the revised 8-item motivational behavior scale contained two factors---intended effort and continuation of study as suggested by the theories. All items were retained in the scale, with three items reflective of intended effort, and five items concerning continuation of study.

Descriptive Analysis

Analyses of the internal consistency yielded satisfactory Cronbach's alpha for all five constructs ($\alpha > .70$). On the basis of the PCA and reliability analysis, I conducted descriptive statistics for all constructs of the CSL Learning Motivation Scale and Motivational Behavior Scale (see Table 8). In general, the means for both the motivation and motivational behavior constructs were greater than the midpoint of the five-point Likert scale. This finding suggested that students enrolled in Chinese courses were generally motivated to learn this language and showed motivational behaviors while learning it.

Table 8

Descriptive statistics of the CSL Learning Motivation Scale and Motivational Behavior Scale

	Gender						
	Male		Female		Total		
Variables	M	SD	M	SD	M	SD	α
Motivation							
Expectancy/ability Beliefs	3.48	.78	3.55	.82	3.52	.80	.87
Intrinsic Value-Linguistic Interests	3.57	.87	3.63	.84	3.60	.85	.80
Intrinsic Value-Cultural Interests	2.95	.83	3.06	.94	3.01	.90	.84
Utility/Attainment Value	3.49	.77	3.50	.74	3.49	.75	.92
Perceived Task Difficulty	3.40	.80	3.27	.90	3.33	.86	.86
Motivational Behavior							
Intended effort in the classroom	3.68	.73	3.81	.79	3.76	.77	.75
Continuation of study	3.45	.92	3.56	.92	3.51	.92	.91

Note. *N*=219; n=89 for male, n=130 for female

Bivariate Analysis

The Pearson correlations among motivation and motivational behaviors were computed to examine the relations and the strength of the relations among these variables (see table 9). It is observed that gender did not show any significant relations with other constructs. Two motivation constructs (utility/attainment value and intrinsic value-linguistic interests) demonstrated the strongest correlation with each other (*r*=.69). This result suggests that students reported high utility/attainment value were inclined to report high levels of linguistic interests.

In general, correlations among task values (intrinsic value-linguistic interests, intrinsic value-cultural interests, attainment/utility value) were high (correlations ranging from .49 to .69, indicating that students who attached one aspect of task value to learning Chinese language tended to attach other values to it. Perceived task difficulty showed a significant positive relation (r=.15) with attainment/utility value, suggesting that students

who thought a learning task was difficult and required effort tended to consider the task as important and useful. Perceived task difficulty was not significantly related to either intrinsic value-linguistic interests or intrinsic value-cultural interests.

Ability/expectancies-related items were significantly related to all three types of task values (correlations ranging from .49 to .67). This finding suggests that students with a high level of ability/expectancies-related beliefs were likely to attach a high level of task values to the learning task. Ability/expectancy-related items were negatively related to perceived task difficulty items (r=-.25), indicating that students with a high level of ability/expectancies-related beliefs were inclined to consider the learning task as less difficulty and required less effort.

Two motivational behavior measures (Intended effort in the classroom and continuation of study) were highly related to each other (*r*=.75), and they both showed a pattern of positive relations with ability/expectancy (correlations ranging from .61 to .62) and task values (correlations ranging from .56 to .80). These results indicate that students who reported higher expectancy and task values for learning Chinese language were likely to report more motivational behaviors. Intended effort in the classroom was positively related to the perceived task difficulty items, which suggests students who thought the learning task was difficult or required more effort tended to exert more effort in the classroom. However, another outcome variable---continuation of study did not show any significant relations with perceived task difficulty.

Table 9

Intercorrelations among variables

Variable	1	2	3	4	5	6	7	8
1. Expectancy/ability Beliefs	_							
2. Intrinsic Value-Linguistic Interests	.67**	_						
3. Intrinsic Value-Cultural Interests	.49**	.59**	_					
4. Utility/Attainment Value	.52**	.69**	.65**	_				
5. Perceived Task Difficulty	-.25**	.01	-.07	.15*	_			
6. Intended effort	.61**	.73**	.56**	.69**	.14*	_		
7. Continuation of study	.62**	.78**	.62**	.80**	.07	.75**	_	
8. Gender	.04	.04	.06	.01	-.07	.09	.05	_

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

MANOVA

A 5 (motivational variables) by 2 (gender) MANOVA was conducted to examine the gender differences in motivation. The results showed that boys and girls reported similar levels of motivation ($\lambda = .99$, $F(5, 213) = 1.57$, $p > 0.05$). Therefore, no gender differences were detected in students' motivation in the Chinese language classrooms at secondary schools. Specifically, students in different gender groups tended to report similar levels of ability/expectancy-related beliefs, intrinsic value, attainment/utility value, and perceived task difficulty.

Regression Analysis

The regression relation between motivation and motivational behavior constructs were computed for the entire student group. Collinearity analyses were employed to identify multicollinearity for all the regression analyses conducted below. Results showed that all tolerance values were greater than .20 and VIF values were below 4, suggesting multicollinearity was not an issue.

Results from regression analysis were presented in Table 8 and discussed below. Expectancy/ability beliefs (β =.25, p <0.05), intrinsic value-linguistic interests (β =.29, p <0.05), utility/attainment value (β =.25, p <0.05), and perceived task difficulty (β =.16, p <0.05) were significant predictors of intended effort in the Classroom. The five predictor model was able to account for 64% of the variance in intended effort, F (6, 218) = 65.03, p < .001, R^2 = .64. On average, students who expected to do well in Chinese language learning, attached a high level of values to the task, and perceive the task as difficult tended to exert more efforts in the classroom.

Expectancy/ability beliefs (β =.15, p <0.05), intrinsic value-linguistic interests (β =.34, p <0.05), utility/attainment value (β =.54, p <0.05) positively predicted continuation of study. The five predictor model was able to account for 74% of the variance in continuation of study, F (6, 218) = 105.91, p < .001, R^2 = .74. On average, students thought they could achieve high performance and attached a high level of values to the Chinese language learning were more likely to continue to study the Chinese language and culture. Interestingly, intrinsic value-cultural interests were not significantly related to any outcome variables. That is, students' interest in the Chinese culture was not a significant predictor of any motivational behaviors.

Table 10

Summary of hierarchical regression analyses: predicting motivational behaviors

Variable	Intended Effort in the Classroom			Continuation of study		
	B	SE B	B	B	SE B	β
Gender	.11	.06	.07	.06	.06	.03
Expectancy/ability	.25	.06	.26**	.15	.06	.14**
Intrinsic Value-Linguistic Interests	.29	.06	.32**	.34	.06	.34**
Intrinsic Value-Utility/Attainment	.08	.05	.09	.07	.05	.07
	.25	.07	.25**	.54	.07	.44**
Perceived Task Difficulty	.16	.04	.18**	.04	.04	.04

Note. $N = 219$, * $p < .05$, ** $p < .01$.

Chapter V

Discussion and Conclusion

Overall, this study expands motivational research in L2 by employing mainstream expectancy-value theory to measure expectancy/ability beliefs, perceived task values and task difficulty in a specific CSL setting. Although L2 scholars emphasized the necessity of adopting a more diverse approach to measure different aspects of motivation (see a review, Masgoret & Gardner, 2003), very little attention has been given to assessing constructs related to the contemporary expectancy-value framework in a CSL context. This study not only recognizes the multifaceted nature of L2 students' motivation, but also offers some important insights into how to measure motivation constructs from the mainstream expectancy-value perspective and how these motivational constructs are related to motivational behaviors in a specific CSL context. The current study contributes to the literature for the following reasons.

First, on the basis of the expectancy-value theory, I developed a new five-factor CSL Learning Motivation Scale. This scale demonstrated satisfactory internal consistency (α=.92). In addition, the reliabilities of its five factors (i.e., ability/expectancy-related beliefs, intrinsic value-linguistic interests, intrinsic value-cultural interests, attainment/utility value, and perceived task difficulty) were .87, .80, .84, .92, and .86, respectively. Given the lack of a relevant motivation scale to study expectancy-value perceptions in CSL settings, this scale fills the literature gap and enhances the understanding of CSL motivation. Compared to the existing CSL motivation scale, this scale identifies the sub-dimensions of the task value component, uniquely measures perceived task difficulty, and expands the level of specificity in

measurement. It helps explain the extent to which adolescents think they can do well on the learning activities, expect success in the future, consider the learning task as interesting, important, and useful, and view the learning task as difficult. This scale provides an alternative for future scholars to measure adolescents' expectancy-value-related motivation in CSL classrooms or other L2 learning contexts.

Second, I investigated the relationship between motivation and motivational behaviors in the CSL classroom. Recently, there has been a growing interest to investigate the relations between motivation and motivational behaviors in L2 (e.g., Csizér & Dornyei, 2005; Wen, 2011, 2013). My study provides the first systematic examination of the effects of contemporary expectancy-value constructs on adolescents' motivational behaviors in CSL settings. I found that expectancy/ability beliefs and task values significantly predicted students' intended efforts and continuation of study. Task difficulty perceptions also predicted intended effort. The results lent support to prior studies that underscore the importance of motivation in motivational behaviors (e.g., Csizér & Dornyei, 2005; Wen, 2011, 2013).

Third, I also examined gender differences in motivation based on the new expectancy-value motivation scale and provided new empirical data for CSL researchers. The exploration of gender differences in language motivation and L2 motivation has a long history (e.g., Clark & Trafford, 1995; Dornyei & Clement, 2001; Ludwig, 1983), but the amount of gender research concerning CSL students at secondary schools has been limited. This study showed that boys and girls who enrolled in the Chinese language classes had similar levels of beliefs in their ability to learn the language well, attached similar value to the learning task, and held similar task difficulty perceptions. Together,

these findings suggest that adolescents' gender difference in motivation is not significant in CSL settings.

Fourth, this study uniquely targeted the population of adolescents enrolled in CSL courses. Although Chinese as a second language has obtained increasing popularity, little research has empirically explored why adolescents choose to learn the Chinese language and how they persist and exert effort while learning in the CSL classrooms. The majority of the CSL research focused on college students' learning motivation. It remains unclear how adolescents believe in themselves to perform well in the CSL learning tasks, if they value the tasks and consider the tasks as difficulty, as well as to what extent they exert efforts and persist on CSL learning. This study systematically investigated adolescents' motivation and relates motivation constructs to motivational behaviors in a specific CSL setting. The results explained how motivation influenced secondary school students' continuation of study and intended effort.

This research provided important empirical data for policy makers, researchers, and practitioners to improve the CSL learning and teaching. In the following section, I discussed the results of each research goal proposed earlier, the theoretical and practical implications of these findings, as well as the limitations of this study.

CSL Learning Motivation Scale

An important research goal is to develop a novel CSL Learning Motivation Scale to assess expectancy/ability beliefs, task values, and perceived task difficulty for adolescents who enrolled in the middle and high school classrooms. I employed PCA to explore the factor structures of participants' motivation to learn Chinese as an L2. As predicted, adolescents' expectancy/ability perceptions, task value perceptions, and task

difficulty perceptions are clearly distinct from each other. The final scale contained five constructs: attainment/utility values, expectancy/ability-related beliefs, intrinsic value-linguistic interests, intrinsic value-cultural interests, and perceived task difficulty. This finding was only partially supported by prior research (e.g., Csizér & Dornyei, 2005; Eccles & Wigfield, 1995; Watt, 2004).The PCA results showed that attainment value was interwoven with utility value; social milieu did not emerge as an independent factor. One explanation is that the discrepancies are due to differences in the target language, research methodologies, learning contexts. This result suggested that contextual factors may play important roles in the variances of motivational factors in L2 settings and lent support to prior research (e.g., Sung, 2013).

To conclude, this scale was intended to build on the mainstream expectancy-theory and previous conceptualizations of L2 motivation to add to the understanding of motivation in both L2 and CSL settings. This scale could also be used to assess why adolescents choose to learn a particular L2 in other contexts. The following discussions were presented on a construct-by-construct basis.

Expectancy/ability-related Beliefs. The items in this scale measure a student's beliefs about his/her competence to perform a specific task. Specifically, the items ask the participants if they are good in Chinese and if they expect to do better than other students. All items displayed high internal consistency reliability (α=.87). The participants' responses indicate that they generally agreed with the items (M=3.48, SD=.78) and believed in their competence in performing well in Chinese. Consistent with the prior research findings (e.g., Eccles et al., 1993), the ability/expectancy construct and subjective values formed clearly distinct factors in PCA results. That is, in the domain of

CSL, students have distinct beliefs about what they are good at and what they value. In prior studies, researchers stated that ability beliefs are conceptually different from expectancies for success; suggested that ability beliefs focus on the present ability whereas expectancies focus on the future (e.g., Eccles & Wigfield, 1995). However, these constructs are empirically high related and tended to form a factor in many studies (see a review, Wigfield & Eccles, 2000). This study further confirmed that in the CSL context, students' ability beliefs are not differentiated from expectancies for success.

Attainment/utility Value. The items in this scale measure how a student and people around him/her view the Chinese language. In particular, the items ask the respondents to what extent they think, or the people around them think it is important and useful to learn the Chinese language. The data demonstrated good internal consistency reliability (α=.80). The adolescent respondents generally agreed with the items (M=3.49, SD=.75). Thus, the students and people around them tended to believe that the Chinese language were important and useful. In the expectancy-value theory, Eccles et al. (1983) identified three different aspects of subjective values---intrinsic value, utility value and attainment value. Research results showed that the three task values factors were distinguished clearly in the mathematics domain (e.g., Eccles et al., 1983, Eccles & Wigfield, 1995; Watt, 2004). However, in L2 settings, students' subjective values are less differentiated. A variety of studies supported that the utilitarian benefit of a language and the importance of a language formed one unified factor (e.g., Dornyei & Csizér, 2002). This study confirmed that utility value and attainment value showed a one-factor solution in L2 settings.

There are two factors that measure social milieu elements---attainment value-

social milieu and utility value-social milieu. I created these two constructs to investigate how people around the students view the utilitarian benefit and the importance of the Chinese language. L2 research tested the factor structure of the 8th graders' motivation in Russian, English, German classrooms in Hungary and indicated that students separated attainment/utility value perceptions from social milieu constructs (Csizér & Dornyei, 2005). Nevertheless, my study recruited 6-12th graders enrolled in the Chinese language class in American secondary schools, and the results demonstrated fewer differentiations between the perceptions of the attainment/utility values and social milieu. One possibility is that the demographic profile of CSL learners in this study is very different from Russian, English and German learners in Hungary. Moreover, a decade has passed since Csizér and Dornyei conducted their studies. During these years, social media have developed fast, and students' own perceptions might be highly influenced by social milieu. Thus, attainment/utility value could not distinct itself from the social milieu constructs.

Intrinsic Value-Linguistic Interests. The items in this scale measure an individual's interests in the Chinese language. In particular, the items in the scale ask the participants how they like the Chinese language and enjoy the learning process. All items showed satisfactory internal consistency (α=.84). The respondents generally agreed with the items (M=3.57, SD=.75). Thus, students like the Chinese language and enjoy learning it. Aligned with the prior study (e.g., Csizér & Dornyei, 2005), students distinguished intrinsic value from utility/attainment value. That is, students formed separate perceptions concerning how interesting the task is and how important or useful the task is.

Intrinsic Value-Cultural Interests. The items in this scale measure an

individual's interests in the Chinese culture. Specifically, the items in the scale ask the respondents how they like the Chinese cultural products, such as films, TV programs, magazines and music. This construct demonstrated high reliability (α=.92). The respondents generally expressed a neutral attitude toward the Chinese culture (M=2.95, SD=.83). It is possible that students who participated in this study might not have easy access to these cultural products (only 14.6% respondents identified themselves as Asian; 83.1% respondents reported they did have any Chinese ancestors or relatives). Through exposure to a range of Chinese cultural products and artifacts, students may become more interested in the Chinese culture. Moreover, the factor analysis result is consistent with prior studies (e.g., Csizér & Dornyei, 2005) which support that students are able to distinguish cultural interests from linguistic interests and task values.

Perceived Task Difficulty. The items in this scale measure the degree to which a student views learning CSL as difficult and to what extent a student needs to make efforts to do well in Chinese. In particular, the items in the scale ask the respondents if the Chinese language class is hard and whether they have to study a lot to perform well. All items displayed good internal consistency (α=.86). The respondents generally agreed with the items (M=3.40, SD=.80), suggesting that students consider CSL as a hard subject and think they need to exert efforts to do well in Chinese. Although there are two components---task difficulty and required effort under this construct. The PCA result supported a one-factor solution for these components. That is, participants formed similar perceptions in terms of the task difficulty and required effort items. This finding is not consistent with prior research conducted in the math domain (Eccles & Wigfield, 1995). One explanation is that task difficulty and required effort are conceptually similar to each

other in CSL setting. A student who considers Chinese as a difficult subject is likely to think he/she needs to exert efforts to perform well. In addition, the differences between participants and academic subjects may also influence the factor structures of these constructs.

Gender Difference

This study uniquely explored the gender-based variation in expectancy-value constructs among adolescents who enrolled in CSL classes. In general, my findings do not support previous motivation research in language arts stating that female students held more positive ability-related beliefs (e.g., Caprara et al., 2008; Fan, 2011; Pajares & Valiante, 2001) and placed greater value than male students (e.g., Eccles et al., 1993, Jacobs et al., 2002).

My findings are not consistent with most L2 studies. Gender gaps in L2 research revealed conflicting findings. Some studies suggested that female students held higher integrative motivation (e.g., Mori & Gobel, 2006; Yang, 2003) and attached more intrinsic values to L2 (Schmidt et al., 1996); whereas male students were apt to be more extrinsically motivated (Schmidt et al., 1996) and more instrumentally motivated (e.g., Ghazvini & Khajehpour, 2011). Some studies revealed that male participants held significantly higher integrated orientation while learning Turkish language; female students expressed a negative attitude towards English language learning (Al-Bustan & Al-Bustan, 2009). The present research is not aligned with the above L2 studies.

However, my result is in line with a recent study of fourth to ninth students' gender differences in CSL learning motivation. Sung (2013) studied instrumentality, attitudes toward theL2 speaker, learner's perceptions of their parents' proficiency in

Chinese, and milieu. The MANOVA test indicated that gender did not show any significant influence on the four L2 motivational constructs. In my study, I also found similar levels of motivation and motivational behaviors between boys and girls. In particular, boys and girls reported similar levels of expectancies for success, task values and task difficulty perceptions. They also reported similar levels of intended effort and continuation of study. Although no significance has been detected, the descriptive statistics showed that girls seemed to report higher scores than boys on many constructs, including expectancy/ability beliefs, intrinsic value-linguistic value, intrinsic value-cultural interests, and utility/attainment value.

As stated above, my study recruited students from different demographic backgrounds and measured motivation based on a new scale in a particular CLS learning context. Hence, the discrepancies in participants, measurements and academic contexts may help explain why gender differences are less pronounced in my study than in other L2 settings.

Relations of Motivation and Motivational Behavior Constructs

One essential goal of the present research is to examine the relations between motivation and motivational behaviors in the Chinese language classrooms. The results of this exploration provide empirical evidence for the growing interests on how motivation positively affects motivational behaviors in L2 classrooms (e.g., Hirata, 2011; Rueda & Chen, 2005; Wen 2011). In general, this study supports that a student who believed in his/her competency, expected future success, attached task values to the learning tasks tended to exert more efforts while learning Chinese and continue to enroll in courses related to the Chinese language and culture. This empirical study has confirmed a number

of assumptions and theories regarding L2 motivation and motivational behaviors.

Intended Effort. The results concerning the relations between motivation and intended effort are in line with previous L2 studies in multiple contexts. Csizér and Dörnyei (2005) suggested that instrumentality and social milieu significantly predicted students' learning behaviors, such as intended effort in the Hungarian context. Prior research also reported that expectancy for success were highly related to students' learning effort and strategies in English classrooms in Egypt (Schmidt et al., 1996); self efficacy and valence (desire to learn French and attitudes towards French learning) significantly predicted effort, persistence, and attention in the Canadian context (Tremblay & Gardner, 1995). Moreover, Papi (2010) recruited Iranian high school students and found that the ideal L2 self (the ideal image of a fluent L2 user in the future), the ought-to L2 self (an individual's perceived duties and obligations or responsibilities to learn an L2), and the L2 learning experience (attitudes towards L2 learning) are significant predictors of intended effort in the English classrooms.

In the CSL setting, Wen (2011) found that positive learning attitudes and experience which refer to the enjoyment of Chinese study significantly predicted intended effort in formal higher education learning situations. Rueda and Chen (2005) found that self-efficacy and task value significantly predicted learning effort at college level. My study extends the prior research to secondary school settings and similar results. In particular, this research supports that students who are confident in their ability and expect to do well in Chinese, enjoy learning Chinese language are more likely to exert efforts and engage in the learning process. However, contrary to previous research (Csizér & Dörnyei, 2005), cultural interests did not show any significant relation with

intended effort. One explanation is that some adolescents expressed interests in Chinese cultural products, but they might not opt to exert efforts and engage in learning in formal academic Chinese classroom settings.

Moreover, my study distinctively investigated the relations between perceived task difficulty and intended effort. The results suggested that perceived task difficulty was a significant predictor of intended effort. That is, an individual who thinks Chinese is difficult is inclined to choose to make good effort and persist in learning.

Continuation of Studies. In line with prior L2 theory (e.g., Gardner, 1985) and empirical research (e.g., MacIntyre & Blackie, 2012; Wen, 2013), the present findings suggest that motivation in general is a significant predictor of students' intention to continue to learn the Chinese language and culture. Specifically, the data revealed that expectancy/ability beliefs, intrinsic value-linguistic interests, and utility/attainment value significantly predicted the continuation of Chinese studies. This result is aligned with Ramage's (1990) studies in the high school French and Spanish classrooms that underscored the role of intrinsic value in students' continuation of study. My finding is also consistent with prior L2 study which suggested a significant correlation between the task value of the learning material and continuation of study in French- as-a-second-language program in the future (MacIntyre & Blackie, 2012). In CSL, Wen (2013) studied the relations between self-confidence, instrumentality and positive learning experience. She found that self-confidence positively predicted continuation of study at the advanced level; whereas instrumentality (focused on the pragmatic value) and positive learning experience significantly predicted the continuation of Chinese studies at the elementary and intermediate proficiency levels. Building on prior research, my study

not only measured the expectancy/ability beliefs, but also measured the sub-dimensions of task values and further confirmed the importance of each task value in continuation of study. In particular, my findings indicated that learners who believed in their abilities, expected success in the future, enjoyed learning the Chinese language, and found learning Chinese useful and important tended to continue to enroll in Chinese related courses in the future.

Consistent with the findings regarding the relations between cultural interests and intended effort, cultural interests did not show any significant influence on continuation of study either. One possibility is that 83.1% participants in this study reported no heritage or cultural backgrounds. These learners do not have access to adequate cultural products, show neutral attitudes towards the Chinese culture, and thus, intrinsic interest in Chinese culture demonstrated less influence on their language learning. Moreover, although perceived task difficulty significantly predicted intended effort, but this factor played no significant role in continuation of study. That is, adolescents who think the task is difficult are tended to exert good efforts in learning but may not be inclined to continue to learn Chinese in the future.

Implications

The present study reveals important implications in the context of teaching adolescents CSL in American classrooms. First, the CSL Learning Motivation Scale developed in this study helps measure CSL learners' motivation more precisely and thus assist teachers to identify motivation sources. Second, compared to other motivational constructs, I found that students in this study reported a lower level of intrinsic interests in the Chinese culture. Such differences could be explained by the lack of opportunities

to access to the cultural products. From the pedagogical perspective, instructors should design level-appropriate activities to immerse these students into a wide exposure to the Chinese culture. Third, my findings suggest that motivation plays an important role in motivational behaviors. Drawing on these research findings, other L2 motivation studies, and my own teaching experience, I presented the following strategies that would help motivate CSL learners in academic settings.

Enhance Learners' expectancy/ability-related Belief. An important component of L2 motivation is expectancy/ability-related belief. Students who believe in their abilities and expect success in the future tended to demonstrated more motivational behaviors. There are various strategies that educators can employ to help increase such belief in the classroom. According to prior research (e.g., Bernaus, Wilson, & Gardner, 2009; Dornyei, 1994), the following strategies were proposed to motivate L2 learners by boosting their self efficacy and expectancy for success:

1) Enhance students' confidence in their abilities by providing praise, encouragement, and reinforcement, and appropriate training; make sure that students regularly experience success and a sense of accomplishment; Give role models and positive examples to help reduce students' uncertainties about their competence and self efficacy
2) Promote expectancy for success by helping students develop specific and realistic expectations of what they can achieve in a given time period; encourage students to focus on what they can do in Chinese rather than what they cannot do, encourage students view that mistakes are a part of learning curve and teach them strategies to manage obstacles in learning.

3) While designing the learning task, familiarize students with the task type and context; provide sufficient support to students for coping with the task content; Guide students through the procedures of the tasks and provide detailed information that the task requires; offer students ongoing assistance as needed.
4) Promote student satisfaction by allowing them to perform and display their products after accomplishing a task; encourage students to share their positive learning experiences and to be proud of what they have attained; celebrate success in a timely manner.
5) Design age and level-appropriate activities; match task difficulty with students' abilities so that students can expect success when they put in reasonable effort.

Enhance Learners' Perceived Task Values. My research and prior studies (e.g., Wen, 2011) show that task value components play important roles in motivational behaviors in Chinese learning. Students exert effort and continue to enroll in CSL-related classes when they think learning Chinese is interesting, important and useful. From the pedagogical perspective, there are various strategies that could help students attach values to the learning tasks (e.g., Bernaus, Wilson, & Gardner, 2009; Dornyei, 1994):

1) Study the strength and weakness of various textbook, supplementary materials, and other learning materials for the Chinese course in terms of usefulness, importance, and attractiveness; Use interesting authentic learning materials to increase the values of the course content
2) Develop learners' linguistic and cultural interests by sharing motivating Chinese learning experiences in class, showing attention-grabbing cultural products, and inviting interesting Chinese-speaking guests

3) Develop learners' attainment/utility motivation by discussing the roles of China in the world marketplace and the potential usefulness and importance of the Chinese language and culture for themselves, their family, and their community
4) Share teacher's personal interest in L2 and positive L2 learning experience with students; share how L2 learning produces satisfaction and enriches one's life; enhance student interest in Chinese learning by showing how others value Chinese learning
5) Promote students' awareness of the task values of Chinese language by organizing school trips or exchange programs to China or the Chinese community; find pen pals for students to facility language exchange.
6) Design and select wide-ranging and thought-provoking learning tasks to increase students' interest and engagement in learning; adapt tasks to the students' characteristics; make sure that the learning activity is new or different; carefully observe each student's interests in the classroom and incorporate their interests into various tasks; design personalize tasks and encourage student to engage in meaningful conversations, such as sharing personal information and making peer interaction.
7) Introduce and present tasks as valuable learning opportunities rather than imposed demands that may cause resistance; project intensity and enthusiasm; raise students' interests in the task by connecting the task with interesting contexts that may attract attention; point out challenging and interesting aspects of the language learning tasks; state the purpose and utility of the task.

8) Provide motivating feedback by making comments personal and informational; point out the value of the accomplishment; and not overact to errors.

Limitations

Although this study distinctively examined motivation from the expectancy-value perspective and provided valuable suggestions for CLS teaching and learning, a few limitations should be noted. First, motivation is indeed a multifaceted factor (Dornyei, 1998) and the current CSL Learning Motivation Scale cannot assess the total complexity of L2 motivation. For example, amotivation, extrinsic motivation, intrinsic motivation, mastery goal orientation, and performance goal orientation are other important motivational factors that may influence CSL teaching and learning. Therefore, more studies are needed to utilize other mainstream motivational models (e.g., Self Determination Theory or Goal Theory) and expand the current CSL motivation research.

Second, most participants in this study belonged to ethnic minority groups and may not be representative enough. In particular, this study recruited students from an urban school district in Southwestern Texas. The sample consisted of 58.9% Spanish, 16.4% African American, 14.6% Asian, 4.6% mixed race, and 3.7% White. It is entirely possible that studies that recruit different participants with other demographic backgrounds may yield somewhat distinct results. Future research could recruit a larger and more diverse sample to explore motivation, motivational behaviors, and their relationships.

Third, future research should also consider other sources that would influence motivational behaviors. Literature showed that macro-context-related dimension (societal and sociocultural factors) and educational context-related dimension (the characteristics

of classroom and school context) may also influence learners' academic behaviors (Dornyei & Clement, 2001). Motivational beliefs alone cannot explain all the variances of motivational behaviors.

Fourth, inconsistent with my hypotheses, the PCA results showed that attainment value, utility value, attainment value-social milieu, and utility value-social milieu merged together and formed one unified factor. It is still unclear why these factors grouped together. I suspect that the fast developing social media reinforce the influences of social milieu on students' perceived task values, and it is difficult for adolescents to differentiate their own attainment/utility value from others' perceptions. More research is needed to explore this issue. Future study may separate the measurement of students' perceived attainment/utility value from social milieu constructs. In addition, future research can add interview data to improve the writing of these items with qualitative details.

Despite these limitations, the present study expands the previous work on motivation and motivational behaviors in CSL settings. It provides empirical evidence to support the positive relationship between expectancy-value motivational constructs and motivational behaviors. As such, it also encourages L2 researchers to continue to explore and extend the studies in this area. More studies are needed to expand CSL motivation research and investigate the role of motivation in other aspects of CSL learning.

Reference

2007 AP Chinese Language and Culture Released Exam: Multiple-Choice Questions. (2014). Retrieved April 11, 2014, from http://apcentral.collegeboard.com/apc/public/courses/teachers_corner/205159.html.

Al-Bustan, S. A., & Al-Bustan, L. (2009). Investigating students attitudes and preferences towards learning English at Kuwait university. *College Student Journal, 43*(2), 454-463.

Au, S. Y. (1988). A critical appraisal of Gardner's social psychological theory of second-language learning. *Language Learning, 38,* 75-100.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychology. *Psychological Review*, *84*(2), 191-215.

Battle, E. (1965). Motivational determinants of academic task persistence. *Journal of Personality and Social Psychology*, *2*, 209-218.

Battle, E. (1966). Motivational determinants of academic competence. *Journal of Personality and Social Psychology, 4*(6), 634-642.

Bernaus, M., Wilson, A., Gardner, R.C. (2009). Teachers' motivation, classroom strategy use, students' motivation and second language achievement. *Porta Linguarum, 12,* 25-36.

Brown, H.D. (2000). *Principles of language learning and teaching (4th ed*.). Englewood Cliffs NJ: Prentice-Hall.

Caprara, G., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G., Barbaranelli, C., & Bandura, A. (2008). Longitudinal analysis of the role of perceived self-efficacy for

self-regulated learning in academic continuance and achievement. *Journal of Educational Psychology*, *100*(3), 525-534.

Chen, A., & Liu, X. (2009). Task Values, Cost, and Choice Decisions in College Physical Education. *Journal of Teaching in Physical Education*, *28*(2), 192-213.

Csizér, K., & Dörnyei, Z. (2005). Language learners' motivational profiles and their motivated learning behaviour. *Language Learning*, 55(4), 613-659.

Cheng, H.-F., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *Innovation in Language Learning and Teaching, 1*(1), 153-174

Chihara, I., & Oller, J. W. (1978). Attitudes and attained proficiency in EFL: A sociolinguistic study of adult Japanese speakers. *Language Learning*, 28, 55–68.

Cho, y. (2013). L2 Learning Motivation and Its Relationship to Proficiency: A Causal Analysis of University Students' EIL Discourses. *English Teaching*, *68*(1), 37-68.

Clark, A., & Trafford, J. (1995). Boys into modern languages: An investigation of the discrepancy in attitudes and performance between boys and girls in modern languages. *Gender and Education*, 7, 315-325.

Clément, R., & Kruidenier, B. G. (1983). Orientations in second language acquisition: the effects of ethnicity, milieu, and target language on their emergence. *Language Learning*, *33*273-291.

Clément, R., Gardner, R. C., & Smythe, P. C. (1977). Motivational variables in second language acquisition: A study of francophones learning English. *Canadian Journal of Behavioural Science*, 9, 123-133.

Clément, R., Gardner, R. C., & Smythe, P. C. (1980). Social and individual factors in second language acquisition. *Canadian Journal of Behavioural Science*, 12, 293-302.

Comanaru, R., & Noels, K. A. (2009). Self-Determination, Motivation, and the Learning of Chinese as a Heritage Language. *Canadian Modern Language Review*, *66*(1), 131-158.

Crookes, G. and Schmidt, R.W. (1991) Motivation: Reopening the research agenda. *Language Learning,* 41, 469_512.

Dillon, S. (2010, January 20). Foreign languages fade in class--except Chinese. *New York Times*. Retrieved April 10, 2014, from http://www.nytimes.com/2010/01/21/education/21chinese.html?_r=1.

Dörnyei, Z. (1990). Conceptualizing motivation in foreign-language learning. *Language Learning,* 40, 45-78.

Dörnyei, Z. (1994a). Motivation and motivating in the foreign language classroom. *Modern Language Journal*, 78, 273-284.

Dörnyei, Z. (1994b). Understanding L2 motivation: On with the challenge. *Modern Language Journal*, 78, 515–523.

Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching, 31,* 117-135.

Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge, England: Cambridge UP.

Dörnyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Dörnyei, Z. (2009). *The L2 motivational self system. In: Do¨rnyei, Z., Ushioda, E. (Eds.), Motivation, Language Identity and the L2 Self.* Multilingual Matters, Clevedon, pp. 9-42.

Dörnyei, Z., & Clément, R. (2001). Motivational characteristics of learning different target languages: Results of a nationwide survey. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 399-432). Honolulu, HI: University of Hawaii Press.

Dörnyei, Z., & Csizér, K. (2002). Some dynamics of language attitudes and motivation: Results of a longitudinal nationwide survey. *Applied Linguistics, 23,* 421-462.

Dörnyei, Z., Csizér, K., & Németh, N. (2006). *Motivation, language attitudes and globalisation: A Hungarian perspective.* Clevedon, England: Multilingual Matters.

Durik, A. M., Vida, M., & Eccles, J. S. (2006). Task values and ability beliefs as predictors of high school literacy choices: A developmental analysis. *Journal of Educational Psychology, 98(2),* 382-393.

Eccles (Parsons), J. S. (1984). Sex differences in mathematics participation. In M. W. Steinkamp & M. L. Maehr (Eds.), *Advances in motivation and achievement*. Vol. 2: Women in science (pp. 93 – 137). Greenwich, CT: JAI.

Eccles, J. S. (1985). A model of student enrolment decisions. *Educational Studies in Mathematics*, *16,* 311 – 314.

Eccles, J.S., Adler, T.F., Futterman, R., Goff, S.B., Kaczala, C.M., Meece, J.L., & Midgley, C. (1983). Expectancies, values, and academic behaviors. In J.T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75–146). San Francisco, CA: W.H. Freeman.

Eccles, J. S., Adler, T. F., & Meece, J. L. (1984). Sex differences in achievement: A test of alternate theories. *Journal of Personality and Social Psychology*, 46, 26 – 43.

Eccles, J., & Wigfield, A. (1993). Age and gender differences in children's self- and task perceptions during elementary school. *Child Development*, *64*(3), 830-847.

Eccles, J.S., & Wigfield, A. (1995). In the mind of the actor: The structure of adolescents' achievement task values and expectancy-related beliefs. *Personality & Social Psychology Bulletin*, 21, 215–225.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109 –132.

Eccles (Parsons), J., Adler, T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., et al. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motivation* (pp. 75 – 146). San Francisco: Freeman.

Falk, J. (1978). *Linguistics and language: A survey of basic concepts and implications (2nd ed.)*. John Wiley and Sons.

Fan, W. (2011). Social influences, school motivation and gender differences: An application of the expectancy-value theory. *Educational Psychology*, *31*(2), 157-175.

Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). London, UK: Sage.

Fredricks, J. A., & Eccles, J. S. (2002). Children's competence and value beliefs from childhood through adolescence: Growth trajectories in two male-sex-typed domains. *Developmental Psychology*, 38, 519 – 533.

Gardner, R. C. (1979). Social-psychological aspects of second language acquisition. In Giles, H. & St. Clair, R. (Eds.). *Language and social psychology* (pp. 193-220). Oxford: Blackwell.

Gardner. R. C. (1985). *Social psychology and second language learning*. London: Edward Arnold.

Gardner, R. C. (1988). The socio-educational model of second-language learning: assumptions, findings, and issues. *Language Learning*, 38, 101-126.

Gardner, R. C. (1985). *Social psychology and second language learning: the role of attitudes and motivation*. London: Edward Arnold.

Gardner, R. C., & Lambert, R. C. (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, MA: Newbury.

Gardner, R. C. and MacIntyre, P. D. (1993). A student's contributions to second-language learning. Part II: Affective variables. *Language Teaching,* 26, 1-11.

Gardner, R. C., Masgoret, A. M., & Tennant, J. J. (2004). Integrative Motivation: Changes during a Year-Long Intermediate-Level Language Course. *Language Learning*, *54*(1), 1-34.

Gardner, R. C., Tremblay, P. F., and Masgoret, A. M. (1997). Towards a full model of second language learning: An empirical investigation. *The Modern Language Journal, 81,* 344-362.

Ghazvini, S. D., & Khajehpour, M. (2011). Attitudes and motivation in learning English as a second language in high school students. *Procedia Social and Behavioral Sciences, 15*, 1209-1213.

Hinton, P. R., Brownlow, C., McMurray, I., & Cozens, B. (2004). *SPSS Explained*. Hove: Routledge.

Hirata, A. (2011). An Exploratory Study of Motivation and Self-Regulated Learning in Second Language Acquisition: Kanji Learning as a Task Focused Approach. *Japanese Language & Literature, 45*(2), 364-365.

Hsing-Fu, C., & Dörnyei, Z. (2007). The Use of Motivational Strategies in Language Instruction: The Case of EFL Teaching in Taiwan. *Innovation in Language Learning & Teaching*, *1*(1), 153-174.

Hudson, G. (2000). *Essential introductory linguistics*. Blackwell Publishers.

Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in children's self-competence and values: Gender and domain differences across grades one through twelve. *Child Development*, 73, 509 – 527.

Jafari, S. (2013). Motivated Learners and Their Success in Learning a Second Language. *Theory & Practice In Language Studies*, *3*(10), 1913-1918.

Kobayashi, Y. (2002). The role of gender in foreign language learning attitudes: Japanese female students' attitudes towards English learning. *Gender and Education. 14*(2), 181-197.

Kormos, J., & Csizér, K. (2008). Age-Related Differences in the Motivation of Learning English as a Foreign Language: Attitudes, Selves, and Motivated Learning Behavior. *Language Learning*, *58*(2), 327-355.

Ludwig, J. (1983). Attitudes and expectations: A profile of female and male students of college French, German and Spanish. *Modern Language Journal, 67,* 216-227.

Lukmani, M. (1972). Motivation to learn a second language and second language proficiency. *Language Learning*, 7, 261–273.

MacIntyre, P. D., & Blackie, R. A. (2012). Action Control, Motivated Strategies, and Integrative Motivation as Predictors of Language Learning Affect and the Intention to Continue Learning French. *System: An International Journal Of Educational Technology And Applied Linguistics*, *40*(4), 533-543.

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*167-210.

Meece, J. L., Eccles (Parsons), J. S., Kaczala, C., Goff, S. B., & Futterman, R. (1982). Sex differences in math achievement: Toward a model of academic choice. *Psychological Bulletin*, 91, 324 – 348.

Meece, J. L.,Wigfield, A., & Eccles, J. S. (1990). Predictors of math anxiety and its consequences for young adolescents' course enrollment intentions and performances in mathematics. *Journal of Educational Psychology*, 82, 60 – 70.

Meece, J.L., Glienke, B, B., & Burg, S. (2006). Gender and motivation. *Journal of School Psychology, 44,* 351-373.

Mori, S., & Gobel, P. (2006). Motivation and gender in the Japanese EFL classroom. *System, 34,* 194-210.

Nardi, P. M. (2003). *Doing survey research: A guide to quantitative methods*. Boston, MA: Allyn and Bacon.

Nicholls, J. G. (1978). The development of the concepts of effort and ability, perception of own attainment, and the understanding that difficult tasks require more ability. *Child Development*, 53, 310 – 321.

Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2003). Why are you learning a second language? motivational orientations and self-determination theory, *Best of Language Learning (Supplément S-1): Attitudes, Orientations, and Motivation in Language Learning*, 53, 53-64.

Nunn, M. (2008). Motivation and Belief Associated with Japanese Language Proficiency in Sociocultural Perspective. *Japanese Language & Literature*, 42(2), 471-494.

Onwuegbuzie, A. J., Bailey, P., & Daley, C. E. (2001). Cognitive, affective, personality and demographic predictors of foreign language achievement. *The Journal of Educational Research*, *94*, 3–15.

Oxford, R.L. & Shearin, J. (1994). Language learning motivation: expanding the theoretical framework. *Modern Language Journal,* 78, 12-28.

Pajares, F., & Valiante, G. (2001). Gender differences in writing motivation and achievement of middle school students: A function of gender orientation? *Contemporary Educational Psychology*, *26*(3), 366-381.

Papi, M. (2010). The L2 motivational self system, L2 anxiety, and motivated behavior: A structural equation modeling approach. *System*, *38*(3), 467-479.

Polat, N. (2011). Gender and age differences in motivation and L2 accent attainment: An investigation of young Kurdish learners of Turkish. *Language Learning Journal, 39*, 19-41.

Ramage, K. (1990). Motivational Factors and Persistence in Foreign Language Study. *Language Learning*, *40*(2), 189-219.

Ryan, S. (2009). Ambivalence and commitment, liberation and challenge: Investigating the attitudes of young Japanese people towards the learning of English. *Journal of Multilingual and Multicultural Development, 30*(5), 405-420.

Rueda, R., & Chen, C. B. (2005). Assessing Motivational Factors in Foreign Language Learning: Cultural Variation in Key Constructs. *Educational Assessment*, *10*(3), 209-229.

Schmidt, R., Boraie, D., & Kassagby, O. (1996). Foreign language motivation: International structure and external connections. In R.L. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 9–20). Manoa: University of Hawaii Press.

Spolsky, B. (2000). Language Motivation Revisited. *Applied Linguistics*, *21*(2), 157-169.

Streiner, D. L. (1994). Figuring out factors: The use and misuse of factor analysis. *Canadian Journal of Psychiatry*, 39, 135-140.

Sung, H., & Padilla, A. M. (1998). Student motivation, parental attitudes, and involvement in the learning of Asian languages in elementary and secondary schools. *Modern Language Journal*, *82*(2), 205-216.

Sung, K. (2013). L2 motivation in foreign language learning. *Journal of Language & Linguistics Studies*, *9*(2), 19-30.

Tercanlioglu, L. (2004). Achievement Goal Theory: A Perspective on Foreign-Language-Learners' Motivation. *TESL Canada Journal*, *21*(2), 34-49.

Trautwein, U., Marsh, H. W., Nagengast, B., Lüdtke, O., Nagy, G., & Jonkmann, K. (2012). Probing for the multiplicative term in modern expectancy–value theory: A latent interaction modeling study. *Journal of Educational Psychology*, *104*(3), 763-777.

Trautwein, U., & Lu¨dtke, O. (2007). Students' self-reported effort and time on homework in six school subjects: Between-student differences and within-student variation. *Journal of Educational Psychology*, 99, 432–444.

Tremblay, P. F., & Garner, R. C. (1995). Expanding the Motivation Construct in Language Learning. *Modern Language Journal*, *79*(4), 505-518.

Ushioda, E., & Dörnyei, Z. (2012). Motivation. In S. Gass & A. Mackey (Eds.), *The Routledge handbook of second language acquisition* (pp. 396-409). New York: Routledge.

Watt, H. G. (2004). Development of Adolescents' Self-Perceptions, Values, and Task Perceptions According to Gender and Domain in 7th- through 11th-Grade Australian Students. *Child Development*, 75(5), 1556-1574.

Weems, G. H., Onwuegbuzie, A. J., Schreiber, J. B., & Eggers, S. J. (2003). Characteristics of respondents who respond differently to positively and negatively worded items on rating scales. *Assessment and Evaluation in Higher Education, 28*, 587-607.

Wen, X. (1997). Motivation and language learning with students of Chinese. *Foreign Language Annals, 30,* 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.

Wen, X. (2013). A Study of Chinese Language Learning Attitudes and Motivation. *Chinese Teaching in the World, 4,* 73-85.

Wesely, P. M. (2009). The Language Learning Motivation of Early Adolescent French Immersion Graduates. *Foreign Language Annals*, *42*(2), 270-286.

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental perspective. *Educational Psychology Review*, *6*(1), 49.

Wigfield, A., & Eccles, J. (1992). The development of achievement task values: A theoretical analysis. *Developmental Review*, 12, 265 – 310.

Wigfield, A., & Eccles, J. S. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology, 25,* 68–81.

Williams, M & Burden, R. (1997). *Psychology for language teachers.* Cambridge: Cambridge University Press.

Williams, M., Burden, R., & Lanvers, U. (2002). 'French is the language of love and stuff': Student perceptions of issues related to motivation in learning a foreign language. *British Research Journal, 28*(4), 503-508.

Yang, J. (2003). Motivational orientations and selected learner variables of East Asian language learners in the United States. *Foreign Language Annals, 36*, 44-55.

Yu, B., & Downing, K. (2012). Determinants of International Students' Adaptation: Examining Effects of Integrative Motivation, Instrumental Motivation and Second Language Proficiency. *Educational Studies*, *38*(4), 457-471.

Zhou Jie (2014, June, 19). More foreigners taking HSK Chinese language exam. *CCTV.* Retrieved October 3, 2014, from http://english.cntv.cn/2014/06/19/VIDE1403109838925803.shtml

Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology*, *82*(1), 51-59.

Appendix A

School District IRB Approval

[redacted]
Assistant Superintendent
Research and Accountability Department
Tel [redacted] • Fax [redacted]

October 2, 2013

Qianqian Wang
8330 Triola Lane
Houston, Texas 77036-6396

Dear Ms. Wang:

The [redacted]) is pleased to approve the project titled "Chinese Language Learners' Motivation, Intended Effort, and Continuation of Study." The purpose of this research study is to expand prior second language research by investigating both motivation and motivational behaviors in Chinese language classrooms. The study is being implemented as partial fulfillment of doctoral degree requirements in Educational Psychology at the University of Houston. The projected date of study completion is December 2013.

Approval to conduct the study in HISD is contingent on your meeting the following conditions:

- The study is limited to [redacted]. It is at the principal's discretion to participate in the study.
- The principal of the participating schools will receive a copy of the proposal.
- Participation requires active signed consent of the parent/guardian of the student participants, which will be available to [redacted] administration. In addition, written assent is required of student participants.
- Students will be asked to complete an online 15 minute questionnaire.
- The researcher is responsible for data collection.
- This project does not interfere with the District's instructional/testing program.
- The researcher must follow the guidelines of [redacted] and the University of Houston regarding the protection of human subjects and confidentiality of data.
- While the Institutional Review Board (IRB) of the university/organization is responsible for oversight of the study, the HISD Department of Research and Accountability will also monitor the study to ensure compliance to ethical conduct guidelines established by the Department of Health and Human Services, Office for Human Research Protection (OHRP) as well as the disclosure of student records outlined in Family Educational Rights and Privacy Act (FERPA).
- Data will only be reported in statistical summaries that preclude the identification of the district or any principal/school participating in the study.
- In order to eliminate potential risks to study participants, the reporting of proposed changes in research activities must be promptly submitted to the [redacted] Department of Research and Accountability for approval prior to implementing changes. Non-compliance to this guideline could affect the approval of future research studies in [redacted].
- No reports will be presented with specific student identifiers.
- The researcher is required to provide a written status report on all research activities to the Department of Research and Accountability biennially, through the completion of the project.
- The final report must be submitted to the [redacted] Department of Research and Accountability within 30 days of completion.

Any other changes or modifications to the current proposal must be submitted to the Department of Research and Accountability for approval. Should you need additional information or have any questions concerning the process, please call [redacted].

Sincerely.

[redacted]

CS [redacted]
cc: [redacted]

From: [redacted]
Sent: Wednesday, December 18, 2013 9:51 AM
To: Wang, Qianqian
Subject: RE: IRB

Good morning, Ms. Wang

Thank you for the update. Please note that your project date of completion has been extended to May 2014.

Best wishes with your research,

[redacted]
Research Specialist
Research and Accountability

From: Wang, Qianqian
Sent: Tuesday, December 10, 2013 11:37 AM
To: [redacted]
Subject: IRB

Dear Ms. [redacted]

Thanks for approving my IRB. However, my study has to go thorough anther IRB at University of Houston.

Do you mind to help me extend my IRB? I may need another two to three months to complete the data collection process.

Thanks very much.

Appendix B

University of Houston IRB Approval

UNIVERSITY of HOUSTON

DIVISION OF RESEARCH

April 4, 2014

Qianqian Wang
c/o Dr. Weihua Fan
Educational Psychology

Dear Qianqian Wang,

The University of Houston Committee for the Protection of Human Subjects (1) reviewed your research proposal entitled "Chinese language learners' motivation, intended effort, and continuation of study." on January 17, 2014, according to federal regulations and institutional policies and procedures.

At that time, your project was granted approval contingent upon your agreement to modify your protocol as stipulated by the Committee. The changes you have made adequately fulfill the requested contingencies, and your project is now **APPROVED**.

- **Approval Date: April 4, 2014**
- **Expiration Date: April 3, 2015**

As required by federal regulations governing research in human subjects, research procedures (including recruitment, informed consent, intervention, data collection or data analysis) may not be conducted after the expiration date.

To ensure that no lapse in approval or ongoing research occurs, please ensure that your protocol is resubmitted in RAMP for renewal by the **deadline for the March 2015** CPHS meeting. Deadlines for submission are located on the CPHS website.

During the course of the research, the following must also be submitted to the CPHS:

- Any proposed changes to the approved protocol, prior to initiation; AND
- Any unanticipated events (including adverse events, injuries, or outcomes) involving possible risk to subjects or others, within 10 working days.

If you have any questions, please contact Alicia Vargas at (713) 743-9215.

Sincerely yours,

Daniel O'Connor

Dr. Daniel O'Connor, Chair
Committee for the Protection of Human Subjects (1)

PLEASE NOTE: All subjects must receive a copy of the informed consent document, if one is approved for use. All research data, including signed consent documents, must be retained according to the University of Houston Data Retention Policy (found on the CPHS website) as well as requirements of the FDA and external sponsor(s), if applicable. Faculty sponsors are responsible for retaining data for student projects on the UH campus for the required period of record retention.

Protocol Number: 14190-01 Full Review__X__ Expedited Review____

316 E. Cullen Building Houston, TX 77204-2015 (713) 743-9204 Fax: (713) 743-9577
COMMITTEES FOR THE PROTECTION OF HUMAN SUBJECTS

Copeland, Samoya

From: Copeland, Samoya
Sent: Monday, May 05, 2014 10:25 AM
To: 'wqqcindy1985@gmail.com'
Cc: Fan, Weihua
Subject: CPHS 14190-01 Chinese language learners' motivation, intended effort, and continuation of study.

Dear Qianqian Wang,

Your application to revise the following has been approved. The renewal date remains **April 3, 2015.** You may begin to implement this amendment.

- For students without access to computers, they can proceed with a paper-pencil survey. After they completing the surveys, they can return them to the teachers. The classroom teachers will collect all surveys and turn them in to the researcher.

Please remember that no change in this research protocol can be initiated without prior review by the CPHS. You are obligated to report any unanticipated problems involving risks to participants, complications, and/or any adverse events to the Committee for the Protection of Human Subjects (CPHS) immediately.

We ask that you notify the CPHS when your study is completed or terminated. Please contact us if you have any questions.

Thank you,

Samoya Copeland, Program Coordinator
Office of Research Policies, Compliance and Committees
Division of Research
University of Houston
A Carnegie-designated Tier One public research university
713-743-9534
scopelan@central.uh.edu

Appendix C

University of Houston Parental Permission

PROJECT TITLE: Chinese language learners' motivation, intended effort, and continuation of study.

Your child is being invited to participate in a research project conducted by Qianqian Wang from the Department of Educational Psychology at the University of Houston. This project is part of dissertation, and is being conducted under the supervision of Dr. Weihua Fan.

NON-PARTICIPATION STATEMENT

Your child's participation is voluntary and you or your child may refuse to participate or withdraw at any time without penalty or loss of benefits to which your child is otherwise entitled. Your child may also refuse to answer any question.

PURPOSE OF THE STUDY

In our research, we want to learn about the learning attitudes and behaviors of 6th through 12th grade students. The survey gathers information on demographic backgrounds, motivation to learn Chinese, intention to make efforts in learning and continuation of Chinese study.

PROCEDURES

A total of __1500___ subjects at _5__locations will be asked to participate in this project. Your child (student) will be one of approximately _300____ subjects asked to participate at this location.

Students will be asked to fill out a questionnaire online which takes about 15 minutes to complete. Your child's teacher will email you or your child a link to access the survey. If there is no email address on file, your child may either choose to create an email account or not to participate in the survey.

CONFIDENTIALITY

Every effort will be made to maintain the confidentiality of you child's participation in this project. Confidentiality will be maintained within legal limits. You child's participation in this project will be confidential and the responses to the survey will be anonymous.

RISKS/DISCOMFORTS

There are no known risks.

BENEFITS

While your child will not directly benefit from participation, his/her participation may help investigators better understand learners' motivation and motivational behaviors.

ALTERNATIVES

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

PUBLICATION STATEMENT

The results of this study may be published in professional and/or scientific journals. It may also be used for educational purposes or for professional presentations. However, no individual subject will be identified.

SUBJECT RIGHTS

1. I understand that parental consent is required of all persons under the age of 18 participating in this project. I understand that my child will also be asked to agree to participate.

2. All procedures have been explained to me and I have been provided an opportunity to ask any questions I might have regarding my child's participation.

3. Any risks and/or discomforts have been explained to me.

4. Any benefits have been explained to me.

5. I understand that, if I have any questions, I may contact Qianqian Wang at qwang22@uh.edu. I may also contact Dr. Weihua Fan, faculty sponsor, at 713-743-9824.

6. I have been told that my child or I may refuse to participate or to stop his/her participation in this project at any time before or during the project. My child may also refuse to answer any question.

7. ANY QUESTIONS REGARDING MY CHILD'S RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (713-743-9204).

8. All information that is obtained in connection with this project and that can be identified with my child will remain confidential as far as possible within legal limits. Information gained from this study that can be identified with my child may be released to no one other than the principal investigator and Dr. Weihua Fan. The

results may be published in scientific journals, professional publications, or educational presentations without identifying my child by name.

NAME OF CHILD: _____

I agree to allow my child to participate in this research project:

YES_____ NO_____

Signature of
Parent/Guardian:_____

Appendix D

University of Houston Assent to Participate in a Research Study

PROJECT TITLE: Chinese language learners' motivation, intended effort, and continuation of study.

You are invited to participate in a research study conducted by Qianqian Wang, a PhD student at the University of Houston.

You can say no if you do not want to participate in this study. Adults cannot make you participate in this study if you do not want to. If you agree to participate in the study now, but change your mind about it later, you can stop being in the study, and no one will be mad at you.

WHAT IS RESEARCH?

Research is a way to learn information about something. Researchers study different subjects the way you study English or math as a subject in school.

There are many reasons people choose to be in a research study. Sometimes people want to help researchers learn about ways to help people or make programs better.

You should understand why you would say yes to be a research participant. Take the time you need to decide if you want to be in this study. You can ask Qianqian Wang and your class teacher any question you have about the study.

WHY ARE WE DOING THIS RESEARCH?

In our research, we want to learn about the learning attitudes and behaviors of 6th through 12th grade students. The survey gathers information on demographic backgrounds, motivation to learn Chinese, intention to make efforts in learning and continuation of Chinese study.

WHAT WILL HAPPEN DURING THE STUDY

You will be asked to fill out a questionnaire online at a place and time of your choosing. This questionnaire takes about 15 minutes to complete. Your teacher will email you or your parent a link to access the survey. If there is no email address on file, you may either choose to create an email account or not to participate in the survey.

COULD GOOD THINGS HAPPEN TO ME FROM BEING IN THIS STUDY?

What we learn in this research will not help you now. When we finish the research we hope we know more about students' motivation and motivational behaviors. This may help other students with Chinese language learning later on.

COULD BAD THINGS HAPPEN TO ME FROM BEING IN THIS STUDY?

There are no known risks.

DO I HAVE OTHER CHOICES?

You can choose not to participate in this study, and you can decide you no longer want to be in the study at any time. You may choose to not answer any question that you are not comfortable with. If you choose not to participate at any time, you will not be penalized.

WHAT IF I HAVE QUESTIONS?

If you have any questions or worries about the research, you can ask Qianqian Wang at qwang22@uh.edu before, during, or after your completion of the survey. If you wish to talk to someone else or have questions about your rights as a participant, call the University of Houston Committee for the Protection of Human Subjects at (713) 743-9204.

Appendix E

University of Houston Consent to Participate in Research

PROJECT TITLE: Chinese Language Learners' Motivation, Intended Effort, and Continuation of Study

You are being invited to participate in a research project conducted by Qianqian Wang from the Department of Educational Psychology at the University of Houston. The project is being conducted under the supervision of Weihua Fan.

NON-PARTICIPATION STATEMENT
Your participation is voluntary and you may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any question. If you are a student, a decision to participate or not or to withdraw your participation will have no effect on your standing.

PURPOSE OF THE STUDY
The purpose of this survey is to better understand Chinese language learners' motivation and motivational behaviors. The duration of the entire study is 1 year.

PROCEDURES
A total of __1500___ subjects at __5___locations will be asked to participate in this project. You will be one of approximately __300__ subjects asked to participate at this location.
The project invites you to complete a questionnaire containing statements regarding your motivation and motivational behaviors in Chinese language learning. It should take 15 minutes to complete.

CONFIDENTIALITY
Your participation in this project is anonymous. Please do not write your name on any of the research materials to be returned to the principal investigator.

RISKS/DISCOMFORTS
There are no foreseeable risks.

BENEFITS
While you will not directly benefit from participation, your participation may help investigators better understand Chinese language learners' motivation and self-regulated learning.

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

PUBLICATION STATEMENT
The results of this study may be published in professional and/or scientific journals. It may also be used for educational purposes or for professional presentations. However, no individual subject will be identified.

If you have any questions, you may contact Qianqian Wang at 713-743-5002. You may also contact Weihua Fan, faculty sponsor, at 713-743-9824.

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (713-743-9204).