

Chinese Language Learning Motivation: A Comparative Study of Heritage and Non-heritage Learners

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Abstract

This study investigates attitudes and motivation that influence heritage and non-heritage students' learning of Chinese as a second language, examining the similarities and differences among three subgroups: bilingual, heritage motivated, and non-heritage learners. The study uses the socio-educational model by Gardner (1985), the internal structure model (Csizér & Dörnyei, 2005), and the attribution theory (Weiner, 1985) for the investigation. Participants were 317 students enrolled in Chinese courses at three state universities in the U.S. The results demonstrated that *positive learning attitudes and experience* was the factor most predictive of motivational magnitude (intended learning efforts in the present) and direction (intended continuation of study in future). *Instrumentality*, rated very highly across the three subgroups, appeared as the second significant predictor for intended continuation of study in future) with both groups of heritage learners. Although the bilinguals and heritage motivated learners did not differ significantly in most motivational factors, significant differences were observed between the heritage and non-heritage learners on most other factors. Heritage learners, especially Chinese bilinguals, seemed to be more likely to attribute their success in the course to uncontrollable and/or external factors and failure to internal factors.

Heritage learners may desire to learn their heritage language (HL) instead of other foreign languages due to socio-cultural influences. Studies of Chinese heritage learners (Chao, 1997; He, 2008) have demonstrated that learners may study Chinese to search for their ethnic identities and recover the roots of neglected cultural heritage. Research (Fishman, 2001; Valdés, 2001; Li & Duff, 2008; Wiley, 2001) also has shown that heritage and non-heritage learners may differ not only in linguistic and cultural backgrounds but also in socio-psychological and affective dimensions. Considerable work has been done comparing the linguistic similarities and differences between HL and non-HL learners of the same language (see Comanaru and Noels, 2009, for a comprehensive account), but much less has examined learners' motivational and affective factors in their second language (L2) learning. The present study investigates attitudes and motivation of heritage and non-heritage learners in learning Chinese as a L2 at the university level in the U.S.

Motivation in Language Learning: Theoretical Framework

In looking at motivation for learning a second language, Gardner and his associates (Gardner & Lambert, 1972; Gardner, 1985) proposed two motivational orientations that indicate students' main reasons for learning a language. The first orientation is integrative, i.e., "the student wishes to learn more about the other cultural community because he is interested in it in an open-minded way to the point of eventually being accepted as a member of that other group" (Gardner &

Lambert, 1972, p. 3). Integrative orientation includes an emotional identification with the target cultural group, positive attitudes toward the language community, and interest and desire for social interactions with the language community, all of which reflect a positive outlook on the L2 and its culture (Gardner, 2001; Csizér & Dörnyei, 2005). The second orientation is instrumental, i.e., the student hopes to derive special benefits, such as career opportunities, from knowing the language. Instrumentality involves pragmatic reasons and utilitarian values, as well as a learner's perceptions of the benefits of the language, such as getting a better job, traveling, making friends, and understanding foreign media (Gardner, 2001; Csizér & Dörnyei, 2005). In the context of Chinese HL learning, both orientations have been reported as significant predictors for language proficiency (Lu & Li, 2008; Yang, 2003).

Dörnyei and his associates (Dörnyei, 1994, 2003; Dörnyei & Ottó, 1998) extended Gardner's theoretical framework in the social, personal, and educational dimensions that reflect the L2 learning process at three motivational levels: 1) the language level (e.g., attitudes toward the target language such as the culture it conveys and the community in which it is spoken and the potential usefulness of language proficiency); 2) the learner level (affective and cognitive factors for personality traits such as self-confidence and the need for achievement); and 3) the learning situation level (components formed from intrinsic and extrinsic motivational dimensions that are related to specific course, teacher, and peer group situations). Csizér & Dörnyei (2005) have developed a theoretical model to explain the internal structure of seven motivational dimensions (*integrativeness, instrumentality, attitudes toward L2 speakers, vitality of the L2 community, milieu, cultural interest, and self-confidence*) that influence learners' choice for future L2 studies and intended efforts directed towards learning.

In a meta-analysis of attitudes and motivation in L2 learning, Masgoret and Gardner (2003) concluded that sustained effort, or "motivational intensity," is critical in L2 achievement. Studies have shown that learning behaviors such as efforts and strategies are mediated through motivational factors and contribute to students' language attainment (e.g., Csizér & Dörnyei, 2005; Dörnyei & Ottó, 1998; Wen, 1997, 1999). After reviewing the role of L2 learning motivation in language learning processes, Csizér and Dörnyei (2005) argued that research may run the risk of ignoring these mediating effects if the only factors examined are the impact of motivation on language proficiency or L2 achievement. They conceptualized two measures: the motivational magnitude, "the amount of effort the students intended to exert on learning a given language" (p. 20), and the motivational direction, the students' choice to pursue future L2 studies. These two measures are applicable to the present study since the language a learner chooses to study may be related to their heritage background, which may subsequently influence their sustained efforts and strategies in learning.

Motivation for Learning Heritage Languages

The theoretical models developed by Dörnyei (1994) and Csizér and Dörnyei (2005) provide a framework for research on HL learning motivation. For example, the three motivational levels discussed above and the socio-cultural dimension at the learning environment level (known as “milieu” in the studies by Dörnyei and his associates) suggest that HL learners may receive support and encouragement from their family members, relatives, and friends. This type of support has been identified as a motivational source in the Chinese HL learning context (He & Xiao, 2008; Peyton, Ranard, & McGinnis, 2001). Another factor in the socio-cultural dimension and at the learner level is “cultural interest,” which HL learners are likely to gain through exposure to the target community and culture through films, TV programs, and pop music. As Clément and Kruidenier’s (1983) study suggests, familiarizing learners with the L2 community and the culture helps them shape their attitudes toward L2 learning. At the learning situation level, positive learning attitudes are derived from self-confidence and promote constructive interaction with learning experience from the classroom.

Heritage learners’ attributions may also be related to their motivation to study their HL. Attributions refer to the explanations that individuals give for the success or failure of their performance. Moreover, studies (Crystal, 2000; Crystal, Parrott, Okazaki, & Watanabe, 2001; Choi, Nisbett, & Norenzayan, 1999; Nisbett, 2003) have shown that attribution processes and personal perception vary across cultures. The research findings, however, present a conflicting picture of the relationship between the variables of cultural background and individual perceptions. Nisbett and his colleagues found that Americans are likely to make dispositional or internal attributions¹ to the individual oneself while East Asians tend to make situational or external attributions. Other scholars (Crystal, 2000; Crystal, Parrott, Okazaki, & Watanabe, 2001) argue that Americans make external attribution as a self-enhancement mechanism and East Asians, as collectivists, make internal attributions to protect the group. Fry and Ghosh (1980) found that Caucasian children took personal credit for success, and were more likely than Asian children to attribute failure to external causes. Asian children, on the other hand, frequently attribute success to external causes such as help from parents and teachers, and failure to internal causes such as lack of effort.

The relationship between attribution and socio-cultural background in the HL learning context needs to be investigated. The present study adopts the attribution theory (Weiner, 1985) to examine how heritage and non-heritage learners perceive attributions for success or failure in their Chinese courses. Weiner (1985) placed attributions along three dimensions: locus of causality, i.e., the perception of a cause as internal or external to the learner; stability, the potential changeability of a cause over a period of time; and controllability, the extent to which an event is under the control of the learner. In acquiring a L2, a learner may regard the main causes of their successes or failures as internal or external, stable or changeable, and under one’s own or another’s control. Weiner argued that learners’ attributions of their performance may affect their adjustments of efforts, strategies, and decisions on whether to continue learning.

The design for this study is based on Gardner’s framework of integrative and instrumental motivational orientations, Dörnyei and his associates’ model of the internal structure of L2

learning motivation in the socio-cultural, personal, and educational dimensions, and Weiner's attribution theory. The present study examines both integrative and instrumental orientations, socio-cultural factors (milieu and cultural interest), and learning attitudes and experience in specific educational situations, as well as behaviors that reflect motivational magnitude and direction (learning efforts and choice of future studies respectively). Incorporating the attribution theory into the study design is intended to present a broad and detailed picture of motivational factors across CSL learners from varying socio-cultural backgrounds.

Heritage Language Learners

Research (Comanaru & Noels, 2009; Li & Duff, 2008; Lu & Li, 2008; Valdés, 2001) has demonstrated that HL learners differ significantly from traditional foreign language learners in their language skills, understanding of the culture, and background knowledge. Even within the group of HL learners, there exist differences in learners' cultural experiences, socio-psychological contexts, and amount of schooling in their home country, which account for variations in their language skills (He & Xiao, 2008; Peyton, Ranard & McGinnis, 2001). In a study on variation in language skills among Japanese heritage learners, Kondo-Brown (2005) arranged heritage learners into three groups: the descent, grandparent, and parent groups. The descent group was born in the U.S., were of Japanese descent and had parents/grandparents who did not speak Japanese; the grandparent group was born in the U.S. and while their parents did not speak Japanese at least one grandparent did; and the parent group was born in the U.S. or Japan and had at least one parent who was a native speaker of Japanese. Kondo-Brown discovered that although the descent and grandparent groups did not differ significantly from the foreign language group in language acquisition, the parent group was substantially different from other groups in grammatical knowledge, listening and reading skills, as well as in affective factors such as self-rating of a number of can-do tasks and self-assessed use/choice of Japanese.

The present study focuses on Chinese heritage learners in the U.S. The U. S. Censuses of 1990 and 2000 show that the population of U.S. residents born in China rose from 0.53 million in 1990 to 1.52 million in 2000, a 187% increase over the 10-year period (U.S. Census Bureau, 1991 and 2001). The U.S. Census Bureau's American Community Survey (U.S. Census Bureau, 2004, 2008) indicates that the number of persons who speak Chinese at home (incorporating all dialects of Chinese) increased from 2.19 million in 2003 to 2.47 million in 2007. As of the 2000 Census, Chinese-Americans composed the largest subgroup (23.7%) of the Asian-American population in the U.S. (U.S. Census Bureau, 2001). In a review of Chinese language education in the U.S., Yao (2005) concluded that there were more than 220,000 learners of Chinese in the U.S., approximately two thirds of whom were heritage learners from Chinese heritage schools.

The present study classifies heritage learners into two groups. **The first group consists of Chinese bilingual learners (CBLs) with Chinese as one of their languages and parents who are native speakers of Chinese.** This group is identified by Valdés' (2001) definition, i.e., a language student "who is raised in a home where a non-English language is spoken, who speaks or at least understands the language" (p.2). The second group, Chinese heritage-connected learners (CHCLs), is identified as learners of a language "with a particular family relevance" (Fishman, 2001; p. 169), or as Van Deusen-Scholl (2003) proposed, "learners with a heritage motivation."

In this study, CHCLs either have one parent who is a native Chinese speaker or are from a Chinese ancestry related family. CHCLs may have limited Chinese language exposure at home but are learners with a heritage connection.

Research on Chinese HL Learning Motivation

Although there exists a well-developed body of research on language learning motivation, studies specific to Chinese are limited. Chow (2001) examined the learning processes of Chinese-Canadian adolescents in a Chinese community school. The author concluded that although these schools may not be highly successful at teaching writing and reading skills, they raised their students' awareness of Chinese culture and provided an environment for students to have positive cultural learning experiences. Experiences from Chinese heritage schools were positively related to their ethnic pride, sense of cultural belonging, exposure to Chinese media, and self-assessed proficiency.

Comanaru and Noels (2009) compared the motivational profiles of heritage and non-heritage Chinese learners, to examine whether intrinsic and self-determined extrinsic orientations predicted motivated engagement in the learning process and in the language community. They found that the more their subjects felt that learning Chinese was personally meaningful and fun, the more they engaged in the learning process. Few differences were observed among heritage learners who spoke Chinese versus English as their first language, suggesting that subgroups of heritage language learners may be more alike than different regardless of their Chinese language background.

Lu and Li (2008) conducted a comparative analysis of the effect of multiple motivational factors (integrative, instrumental, situational, and learner traits) on heritage and non-heritage learners of Chinese at the college level. In examining the relationship between motivation and language achievement in mixed classrooms, they found that both integrative and instrumental motivations were important to students' self-confidence in their test scores. Furthermore, heritage learners were more influenced by instrumental motivation than non-heritage learners. Lu and Li's results were not consistent with Yang's (2003) study, which investigated the relationship between motivational orientations and learner variables of East Asian language learners. Yang discovered that integrative motivation was more important than instrumental motivation across ethnic backgrounds (Korean, Chinese, and Japanese) and the target languages respectively. Among all learner variables (e.g., the language of study, gender, language requirement, and proficiency level), heritage status was the most significant variable in relation to motivation; e.g., heritage background significantly correlated to heritage-related motivation such as parental encouragement or involvement, friends using the language ($p < .001$), and school-related motivation ($p < .001$).

The inconsistent findings on motivational orientations may be caused by conditions such as a particular language learning situation, the sample size, and the geographic locations of the sampling. Lu and Li's (2008) sample consisted of 120 students from western New York, whereas Yang's (2003) sample consisted of 341 students from the Midwest of the United States. In order

to obtain comprehensive measures across a range of Chinese learning situations, the present study recruited samples from the East, West, and Midwest of the U.S.

In summary, the previous research on CSL learning motivation has revealed five findings. First, both integrative and instrumental motivations are significant to learner variables. Second, the more learners feel that they are learning Chinese because it is personally meaningful, the more they engage in the learning process. Third, positive and constructive experiences from Chinese heritage schools or universities are closely related to students' sense of ethnic pride and cultural belonging, and are an integral part of their self-concept. Fourth, compared with non-heritage learners, many heritage language learners feel that learning Chinese is their obligation. Fifth, subgroups of Chinese heritage language learners seem to be more alike than different. As can be seen from the review of the literature, due to the limited number of studies, findings related to CSL learning motivation are tentative. Research is needed, especially in the area of Chinese heritage learners' motivation in relation to their learning processes, such as learning effort exerted and strategies used. Based on the previous research, the present study addresses three questions:

1. What motivational factors are found among learners of Chinese at the university level in the U.S.?
2. What is the relationship between the heritage status of learners and motivational factors?
3. What factors predict the magnitude and the direction of motivation among subgroups of learners?

Method

Participants

The sample consisted of 317 students who had been taking credit-bearing Chinese language courses in 18 classes at three large state universities. The three universities offered four-year Chinese programs, Chinese study abroad programs, and a major/minor in Asian Studies or Chinese Studies. They used the same textbooks at the elementary and intermediate levels, with similar instructional schedules and learning assessments.

The participants' heritage status was identified according to the following information: 1) whether any ancestors or relatives were Chinese, and 2) whether their mother, father, or both parents were native Chinese speakers. Participants were classified as HL learners if one of their ancestors/relatives was Chinese or at least one parent's native language was Chinese (including varieties of Chinese dialects such as Cantonese, Hakka, Fujian, and Taiwanese). This HL learner group was further divided into two groups: 1) the CBL group if they claimed to be bilingual with Chinese as one of the languages and both their parents were native speakers of Chinese; 2) the CHCL group if they identified that one of their ancestors/relatives was Chinese, or at least one parent's native language was Chinese. The third subgroup, Non-Chinese Heritage Learners (NCHLs), reported that their first language was English and none of their ancestors or family members was Chinese. Students were excluded from participation if they reported that their first language was neither Chinese nor English and did not have Chinese ancestors or family members.

Among 317 participants, 118 (37.2%) were CBLs, 58 (18.3%) were CHCLs, and 141 (44.5%) were NCHLs. The CBL group consisted of 77 women and 40 men with one person not indicating gender. They all identified themselves as bilinguals. Both of their parents spoke Chinese, and most (77%) indicated that Chinese was the first language they learned. Their ages ranged from 18 to 24 years ($M = 20.14$, $SD = 1.44$). Approximately 43% of the participants were enrolled in elementary Chinese, and 25.4% and 31.4% were enrolled in intermediate and advanced Chinese courses respectively. The number of years they had attended Chinese heritage schools ranged from 0 to 5 years ($M = 1.06$, $SD = 1.37$) and their attendance in a Chinese class at secondary/high school level ranged from 0 to 3 years ($M = .60$, $SD = 1.05$).

The CHCL group consisted of 35 women and 23 men. Their ages ranged from 18 to 26 years ($M = 20.05$, $SD = 1.67$). Their first language was identified as English (56.9%), Asian languages (25.9%), or Chinese (15.5%); one student missed the response. They reported their cultural backgrounds as Chinese or Asian American (62.1%), citizens from Asian countries (22.4%), or mixed (15.5%). Approximately 48% of the participants were enrolled in elementary Chinese, and 39.7% and 12.1% were in intermediate and advanced Chinese courses respectively. The number of years spent in Chinese heritage schools ranged from 0 to 3 years ($M = .38$, $SD = .93$) and their attendance in secondary/high schools ranged from 0 to 3 years ($M = .36$, $SD = .93$).

The NCHL group consisted of 70 women and 70 men with one person not indicating gender. Their ages ranged from 18 to 66 years ($M = 21.01$, $SD = 5.48$). All spoke English as their first language. Approximately 52% of participants were enrolled in elementary Chinese, and 27.0% and 20.6% were in intermediate and advanced Chinese courses respectively. The number of years in Chinese heritage schools ranged from 0 to 3 years ($M = .04$, $SD = .31$) whereas their attendance in secondary/high schools ranged from 0 to 3 years ($M = .26$, $SD = .78$).

Among 317 participants, twenty seven from one of the three state universities also participated in an interview. This interview group consisted of 15 women and 12 men with seven CBLs, seven CHCLs, and 13 NCHLs. The researcher recruited interviewees by visiting classes and inviting students to volunteer.

Instrument

The instrument (see Appendix, I), a two-section questionnaire, was pilot-tested by 30 students at one of the three universities that participants attended, although none of these students retook the survey when data were collected. The instrument was modified based on the pilot study, which resulted in its present form. The first section was made up of 11 questions about participants' demographic information. The instrument also included questions on participants' intentions to continue studying Chinese the following semester and in the future, and if they planned to take more courses related to Chinese language and culture. The mean score of these items constituted a measure that I called *continuation of Chinese studies in the future*.

The second section consisted of 26 randomly arranged items measuring attitudes and motivation to learn the Chinese language. All items used a 7-point Likert scale except for the items on strategic efforts for engagement in learning, which were adapted from the Attitudes/Motivation

Test Battery (Gardner, 1985) and used a 5-point scale. Based on the theoretical frameworks of Gardner (1985, 2001), Dörnyei (1994), and Csizér and Dörnyei (2005) as reviewed previously, items in this section were adopted from the published motivation scales of language learning, including the Attitudes/Motivation Test Battery (Gardner, 1985), Csizér and Dörnyei (2005), and Wen (1997). The items addressed motivational orientations (integrativeness and instrumentality), social milieu such as support from family members or close friends, cultural interest as indicated through cultural products such as Chinese films and music, positive learning attitudes and experiences in learning situations; intended strategic efforts for engagement in learning, and language requirements. The questionnaire was tested for its internal consistency. The Cronbach alpha coefficient for the 26 items was .87, indicating that the measure had a high internal consistency.

In addition, the present study combined quantitative and qualitative approaches to complement the quantitative tradition of research on language learning motivation. As Larsen-Freeman and Long (1991) posited, quantitative and qualitative approaches should not be regarded as being mutually exclusive, but as complementary to each other. Ushioda (2001) argued that motivation, rather than being defined in terms of measurable activity, may be understood “in terms of what patterns of thinking and belief underlie such activity and shape students’ engagement in the learning process” (p. 96). It was hoped that integrating an interview strategy into the study that allowed for qualitative analysis, the results might shed light on the phenomenon in more depth and breadth.

The interview explored two dynamic motivational dimensions: motivational reasoning and motivational attributions for success or failure in class. Interview questions on attributions were included to provide tangible data for the understanding of learners’ motivational magnitude and direction.

In summary, there were four purposes to this study: 1) it investigated the motivational constructs of Chinese L2 learners. A factor analysis procedure was used to identify the motivational factors relevant to the context, 2) it made comparisons among three subgroups (CBLs, CHCLs, NCHLs) on the factors revealed by the factor analysis. MANOVA and ANOVA tests were used to determine the effects of heritage background on the set of motivational factors, 3) it examined which factors predicted motivational magnitude (i.e., learning effort) and motivational direction (i.e., intended continuation of Chinese studies), and regression procedures were conducted for this purpose; 4) it studied personal interpretations of perceived successes and failures, which may play a significant role in learners’ sustained engagement and continuing motivation to learn Chinese.

Procedure

The questionnaires were administered by instructors during a regular class session in spring semester. Students were informed that a survey would be conducted. The study was confidential and their participation was optional; no incentives were offered. Answering the survey took approximately 15 minutes. The instructors then collected the questionnaires and returned them to

the researcher. Among 350 questionnaires distributed, the data from 317 (90.6%) questionnaires were used (due to the aforementioned constraints).

Each interview was conducted individually in a conversational manner in the researcher's office one week after the questionnaire had been administered. Interviews lasted 10 minutes and were recorded with the interviewee's consent. The recorded speech was subsequently transcribed and analyzed.

Results

Factor analysis Factor analysis was conducted to address the first research question: "What motivational factors are found among learners of Chinese at the university level in the U.S.?" Twenty six questions went through a varimax rotation procedure. A principal component analysis was used to extract factors that had eigenvalues greater than 1.0. Six factors were discovered that accounted for 66.23% of the total variance. The factor loadings confirmed the validity of the survey instrument. The six factors are: 1) *positive learning attitudes and experience*, 2) *instrumentality*, 3) *interest in current culture*, 4) *intended strategic efforts*, 5) *social milieu*, and 6) *language requirement*.

Factor 1, *Positive learning attitudes and experience*, consisted of 5 items (items 18, 19, 20, 21, 17) with an internal coefficient $\alpha = .89$. The factor reflected the enjoyment of Chinese study in formal learning situations; students chose items such as "it is fun to learn Chinese", "appreciation of the opportunities to speak Chinese with classmates", and "enjoying communicative activities in class". Items revealed that positive learning attitudes and experience were derived from interactions and language use in class. This factor reflected motivational influences that may produce an "executive" effect on engaged learning efforts (Dörnyei & Otto, 1998).

Factor 2, *Instrumentality*, included 6 items (items 2, 1, 5, 9, 3, 4) with an internal coefficient $\alpha = .83$. The factor addressed the use of language for pragmatic purposes and to fulfill goals such as "getting a good job" and "traveling to a Chinese-speaking country," and included the global significance of the language. The factor included two items that indicate an interest in traveling to communities where Chinese is spoken, and meeting Chinese people. Although these two items were originally in the cluster of integrative orientation (Gardner, 1985), they loaded in the factor of instrumentality, suggesting learners' interest in using the language to know the L2 community.

Factor 3, *Interest in current culture*, consisted of 4 items (items 16, 15, 14, 11) with an internal coefficient $\alpha = .84$. It referred to learners' interest in cultural products through media. This factor revealed attitudes toward the target culture such as "I will be able to better understand and appreciate Chinese culture." As Csizér & Dörnyei (2005) pointed out, L2 cultural products play a role in familiarizing learners with the L2 community and contribute to shaping L2 learning attitudes.

Factor 4, *Intended strategic efforts*, remained with its original five items (items 18, 19, 20, 21, 17), with an internal coefficient $\alpha = .81$. It represented motivational engagement, and measured

motivational behavior leading to language achievement. The items were associated with action control/self-regulatory strategies and expected efforts.

Factor 5, *Social milieu*, had 4 items (items 8, 7, 6, 10), with an internal coefficient $\alpha = .69$. It addressed the socialization and community influences of peer group and family members. Both heritage and non-heritage learners may receive support from their family, friends, and communities. The socialization effect also included appreciation of one's heritage.

Factor 6, *fulfilling the language requirement*, had 2 items (items 13, 12), with an internal coefficient $\alpha = .61$. This factor signifies motivation to fulfill an academic degree requirement. Learners appreciated the value of the degree and thus the importance of taking Chinese courses. The items may also present a characteristic of compliance with requirements.

Comparisons of Three Sub-groups

Table 1 presents the means for the six factors as a function of heritage status and Figure 1 presents the same data with the percentage normalized means visualized as a graph. Four general patterns were observed: 1) CHCLs were between CBLs and NCHLs on most - factors, 2) heritage learners (CBLs and CHCLs) clearly differed from NCHLs, scoring higher on factors 3 and 5 (interest in current culture and social milieu), 3) NCHLs scored significantly higher than heritage learners on two factors (positive learning attitudes and experience and intended strategic efforts), and 4) participants, regardless of their heritage background, had similar scores on one motivational factor: instrumentality. Further detailed comparisons were conducted through MANOVA and ANOVA analyses.

Table 1

Means and Standard Deviations for Six Motivational Factors as a Function of Heritage Groups²

Motivational Factors	CBLs		CHCLs		NCHLs	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. Positive learning attitudes and experience	5.24	1.15	5.50	1.11	5.84	1.08
2. Instrumentality	5.92	.90	5.92	.78	5.98	1.01
3. Interest in current culture	5.19	1.45	4.97	1.36	4.02	1.35
4. Intended strategic efforts	4.07	.76	3.99	.72	4.16	.58
5. Social milieu	5.37	1.02	5.25	1.02	3.51	1.07
6. Language requirement	3.99	2.01	3.75	1.99	3.11	1.76

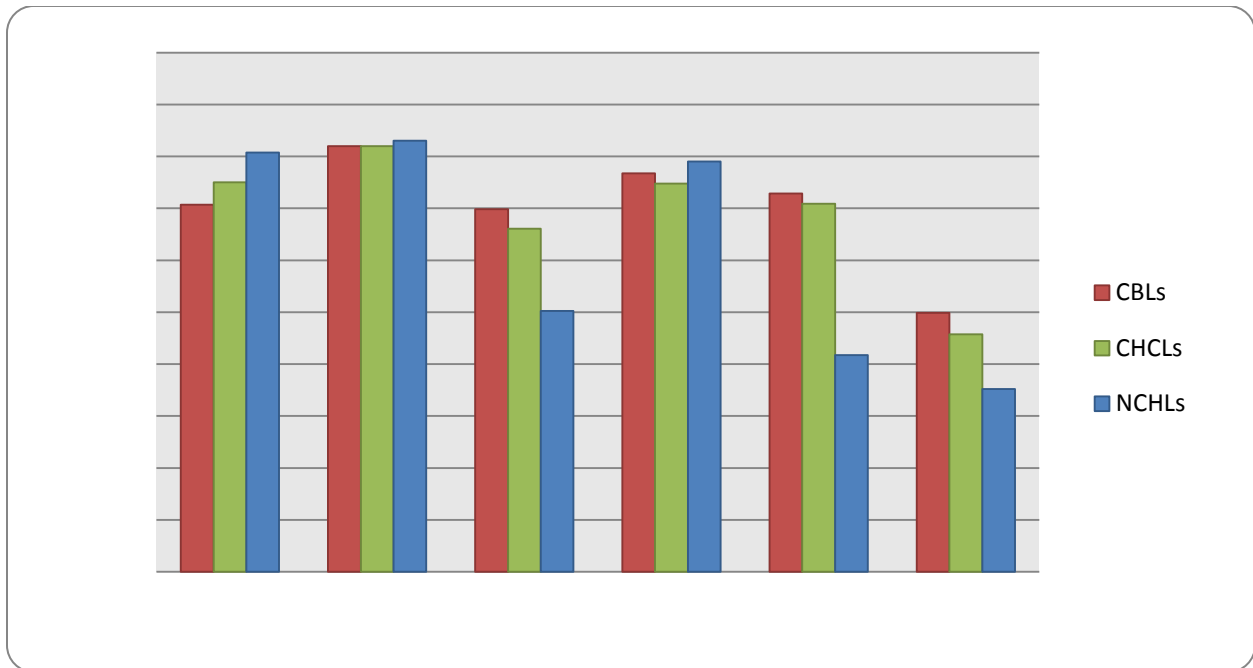


Figure 1. Means for the six motivational factors as a function of heritage groups (Percentage normalized means)

- | | |
|---|-------------------------------|
| 1. Positive learning attitudes and experience | 4. Intended strategic efforts |
| 2. Instrumentality | 5. Social milieu |
| 3. Interest in current culture | 6. Language requirement |

A one-way MANOVA was used to determine the effect of heritage status on the motivational variables derived from the factor analysis. The heritage status had a significant effect on the motivational factors: $F(12, 620) = 21.43, p < .000$. Follow-up univariate tests revealed that heritage status had significant effects on four motivational factors with two exceptions, (*Instrumentality* and *Intended strategic efforts*). For each significant effect, the Bonferroni post hoc procedure to contrast means was used.

The significant effect for *positive learning attitudes and experience* ($F(2, 314) = 9.42, p < .001$) revealed that NCHLs enjoyed class activities more than CBLs ($M = 5.84$ vs. $5.37, p < .001$). CHCLs had a higher mean than CBLs but the difference was not significant. NCHLs showed a stronger attitude on the items “Learning Chinese is challenging and it has provided me with mental exercise; It is fun to learn Chinese” and interest in classroom learning “appreciation of the opportunities to speak Chinese with classmates, enjoyment of communicative activities in class,” whereas CBLs scored the highest on the item “I like grammar explanation/exercises offered in the curriculum.” It should be noted that the *positive learning attitudes and experience* factor refers to formal learning experiences in class, which may be the only available access for NCHLs.

The significant effect for *interest in current culture* ($F(2, 314) = 25.40, p < .001$) showed that the heritage learners (CBLs and CHCLs) had higher mean scores (5.37 and 5.19 respectively) than NCHLs (4.02, $p < .001$ in both cases); CBLs and CHCLs did not differ significantly. Similar patterns were observed for *social milieu* ($F(2, 314) = 120.85, p < .001$). The mean differences (Table 1) were significant in both cases: $p < .001$. The results revealed that effects of socialization and vitality of the community, such as support from family members, influenced the heritage and non-heritage learners in different ways. Heritage learners showed a strong interest in their own heritage with a high mean (6.16) on the item “interest in my own Asian heritage”.

The significant effect for *language requirement* ($F(2, 314) = 7.26, p = .001$) emerged because more heritage learners (Table 1) were enrolled in Chinese courses to meet a language requirement than NCHLs (CBLs vs. NCHLs $p = .001$). This result is consistent with Yang’s (2003) findings.

Heritage status revealed little effect on *intended strategic efforts*. Although NCHLs had the highest mean, the difference was insignificant across three groups. Similar patterns were observed for *instrumentality*. The mean scores suggested that learners were all highly motivated to learn Chinese for practical and utilitarian purposes.

Comparisons also were made on *intended continuation of Chinese studies in the future*. The significant effect, $F(2, 313) = 15.75, p < .001$, occurred because NCHLs ($M = 6.05$) indicated a significantly higher desire to continue their language and culture studies than CBLs ($M = 5.35$) and CHCLs ($M = 5.65$), who did not differ significantly from each other. It should be noted that *intended continuation of Chinese studies in the future* consisted of items mainly on taking more Chinese language and culture courses in a university setting. This may be the venue for NHCLs, but not necessarily for heritage learners who may have other options.

To address the second research question: “What is the relationship between the heritage status of learners and motivational factors?” significant differences were observed among three groups for four factors, although the patterns of differences were not the same, as summarized below.

First, Chinese heritage learners differed significantly from NCHLs for four motivational factors (no significant differences were revealed between CBLs and CHCLs). Heritage learners were more highly motivated by *social milieu*, *cultural interest*, and *language requirement*, whereas NCHLs were more highly motivated by *positive learning attitudes and experience*.

Second, no significant differences were observed across all groups for *intended strategic effort* and for *instrumentality*. All three groups were equally and highly motivated to use self-regulatory strategies and to acquire language competence for pragmatic purposes. These results suggest two implications: First, learners, regardless their heritage background, all believed that they would exert their efforts and use self-regulatory strategies in learning the language. Second, learners all valued the usefulness of Chinese language proficiency and studied the language for future opportunities.

The Relationship among the Motivational Factors

Multiple regression analyses were used to determine the predictors for motivated engagement in learning. All five factors entered the procedure as independent variables, with *intended strategic efforts* as the criterion. The motivational factors accounted for, on average, 29.33% of the variance in *intended strategic efforts* across the three groups: $F(5,112) = 8.95, p = .000$ for CBLs; $F(5,52) = 5.61, p = .000$ for CHCLs; and $F(5,135) = 8.72, p = .000$ for NCHLs. (Table 2). Among the motivational factors, *positive learning attitudes and experience* was revealed as the overall strongest predictor. None of the other factor scores were significant. Learners with positive learning attitudes and experiences were likely to exert more efforts and be engaged in the learning process.

Table 2

Regression: Factors Predicting the Motivational Magnitude: Intended Strategic Efforts

Predictors	Equation		Coefficients				
	R^2	F	B	SE B	β	t	Sig.
CBLs	.29	8.95					
<i>PLAE</i>			.16	.05	.36	3.27	.001
CHCLs	.35	5.61					
<i>PLAE</i>			.22	.07	.42	3.17	.003
NCHLs	.24	8.32					
<i>PLAE</i>			.21	.05	.41	4.54	.000

Note: *PLAE: positive learning attitudes and experience*

Motivation has a potent effect on future behavior. In the second multiple regression procedure, *continuation of Chinese studies* entered the equation as a criterion. The motivational factors significantly predicted intended future studies across all groups: $F(6, 111) = 6.22, p = .000$ for CBLs; $F(6, 50) = 4.26, p = .002$ for CHCLs; $F(6, 134) = 3.67, p = .002$ for NCHLs, accounting for 24.33% of the variance in *continuation of Chinese studies* across the three groups (Table 3). *Positive learning attitudes and experience* was again the overall strongest predictor, with *instrumentality* as the second significant predictor for heritage learners. *Intended strategic efforts* revealed the strongest predictor for NCHLs.

Table 3

Regression: Factors predicting the motivational direction: Continuation of Chinese Studies

Predictors	Equation		Coefficients				
	R^2	F	B	SE B	B	t	Sig.
CBLS	.25	6.22					
<i>PLAE</i>			.16	.05	.36	3.27	.001
Instrumentality			.55	.21	.33	2.67	.009
CHCLs	.34	4.26					
<i>PLAE</i>			.47	.19	.38	2.52	.015
Instrumentality			.64	.28	.36	2.32	.025
NCHLs	.14	3.67					
<i>Intended strategic efforts</i>			.51	.24	.19	2.11	.037

Note: *PLAE*: positive learning attitudes and experience

To address the third research question: “What factors predict the magnitude and the direction of motivation among subgroups of learners?” *positive learning attitudes and experience* was the strongest predictor for both the magnitude and the direction of the motivation across the three groups, with an exception for NCHLs, for whom *Intended strategic efforts* was the strongest predictor for the motivational direction. The results suggest that learning Chinese is indeed an arduous task for NCHLs, who must commit to their learning and exert efforts to continue their studies. *Instrumentality* was also a significant predictor for motivational direction with heritage learners, suggesting that they would continue their studies so that they could use the language for career and future purposes.

The Interview Data I: Reasons for Learning Chinese

Although Chinese language learning motivations were examined through a qualitative approach presented above, the scope and the depth may be limited, e.g., the six motivations derived from the survey results may not be inclusive. *Motivational thoughts and perspectives*, deeply rooted in one’s socio-cultural background, may not be revealed in a questionnaire and subsequently were not measured. An interview strategy was combined with a quantitative approach to discover the motivational beliefs that underlie learners’ activities. Learners’ attributions consequently shape their engagement in the learning process.

The interview data categorize and show the reasons learners give for learning Chinese. The CBL group showed two motivations, 1) the socio-cultural dimension such as heritage, identity, and/or family connections, and 2) the desire to improve their language competence, especially in productive skills. For example, Tim³ (CBL) and Lily (CBL) indicated an obligation to the family as well as their own choice to learn the language; Stephanie (CBL) indicated that learning the language reflected her identity and defined her sense of self.

Tim (CBL): “As a Chinese, I think I have to learn how to speak in Mandarin. I want to talk to my grandparents who cannot speak English. That is why I am taking Chinese classes.”

Stephanie (CBL): “[I am] a Chinese girl and have been learning Chinese all my life. I am interested in learning about my own culture and language. Having a second language as Chinese will benefit me later on in life.”

Lily (CBL): “My family, my mom wanted me to take Chinese classes. I agreed. Chinese is one of the most important languages in the world.... I want to speak better; I also want to improve my reading and writing Chinese.”

The CHCL group added one motivation that also was recognized by the other two groups: the belief that Chinese proficiency will bring them future career opportunities.

Alice (CHCL): “My family, and the job market potential. My mom is a Korean and my dad is a Chinese. I might find a job because of my Chinese language knowledge. My parents support me to take Chinese.”

Tom (CHCL): “The reason why I take Chinese is I am a business major. I want to go to China and stay there to do business there. The more Chinese I speak, the better chance I will be chosen to work there when I graduate. In addition, I would like to understand my relatives who do not speak English.”

The NCHL group presented three motivations in the interview: 1) desire for challenging tasks and new learning experiences, 2) enjoyment of Chinese classes, and 3) genuine interest in Chinese language and culture as reflected in the following statement:

Kelvin (NCHL): “I have a passionate interest in Chinese culture and China. I have been fascinated by its culture and language since I was young. I want to live in China for at least a few years, to speak Chinese and to explore my career opportunities. So my Chinese’d better be good enough when I get there. ”

In summary, the interview results demonstrated that the three groups shared two motivations: 1) an enthusiastic and genuine interest in Chinese language and culture, and 2) a belief in the importance of Chinese in the world and future career enhancement. They seemed to differ in the dimensions that closely related to their socio-cultural backgrounds and heritage status. Heritage learners showed appreciation of their socio-cultural environment from which they derived feelings of pride and belonging and, not surprisingly, NCHLs were unable to experience these feelings. NCHLs did, however, show a strong passion for learning Chinese and understanding Chinese culture.

Interview data II: Attributions for Success and Failure

Although all three groups agreed that learning efforts/practice and good learning strategies/habits were important factors in their performance success, they differed on two points. First, both CBLs and CHCLs frequently expressed the view that external and uncontrollable factors, e.g.,

their family language environment as well as their language background, contributed to their successful class performance as in the following examples:

David (CBL): “Hearing Chinese being spoken around house helped me. The family environment helps. Also I learn a little Chinese when I was very young.”

Alice (CHCL): “I have a little language background and I can speak some Chinese at home. That helps.”

Tom (CHCL): “Writing is pretty easy for me because I learned Japanese before.”

Furthermore, several heritage learners considered other external, relatively unstable and uncontrollable factors, such as the textbook/learning materials and the teacher, as important contributors to their success. NCHLs, by contrast, replied that intrinsic factors and positive learning attitudes and experience were primary to their successful performances. The following two examples demonstrate the contrast. Tony related his success in the course to his teacher and the textbooks, whereas Rachel responded that she appreciated the language challenge and overcame difficulties by herself.

Tony (CHCL): “I like the teacher. The textbooks are very good. I can do better, but I have English as my first language.”

Rachel (NCHL): “My first semester was very hard, but I enjoyed the challenge and did not want to give up so I studied more and began to watch Chinese movies as a fun way to improve my Chinese. It was also very rewarding to me that I was learning so much about a culture so foreign to me. I study and prepare for class for one hour before every class. It helps so I can focus more on the lesson after I ‘warm up’ before class. I also watch Chinese movies to help me with tones and understanding different dialects of Mandarin. Most recently, I bought a note book and I make myself write a couple of sentences in Chinese every day.”

Second, both CBLs and CHCLs believed that internal causes such as “lack of practice/efforts” were the reason for their performance failure (although one CHCL (Tony) also attributed this failure to language background as presented above). NCHLs, however, frequently considered external and uncontrollable causes (“The learning task is very difficult”, “do not have time”) to be the major reasons for their performance failure:

Mary (CBL): “I am not doing it so well, not as well as I would like to. I do not study enough and do not use it enough.”

Ben (NCHL): “[I’m] trying to memorize all the homework exercises, because there is no study guide...[it] is extremely difficult. There are not enough days to study graded homework before the test. Sometimes we have the graded homework and the quiz on the same day, then I do not have time to prepare for the quiz.”

Discussion

Constructs of Chinese Language Learning Motivation

The study has revealed several important findings. First, the integrative motivation was fused in the factor analysis. Three items adopted from the literature (Csizér & Dörnyei, 2005; Gardner, 1985) were originally included in the questionnaire. As mentioned in the factor analysis section, two items loaded to *instrumentality* and one to *interest in current culture*. The results of factor analysis suggest that items in the original integrative orientation category may be more in the nature of other motivations than the integrative orientation.

Motivational orientations, concerning “who learns what in that milieu” vary according to the given situation as Clément and Kruidenier (1983) postulated. Ely (1986) speculated that orientation could be either integrative or instrumental depending on the social and psychological factors involved. Chen, Warden, and Chang (2005), who studied Chinese EFL learners’ motivation in Taiwan, found that integrative motivation played no significant role, belonging to one of the “motivators that do not motivate.” Sung and Padilla (1998) concluded that integrative and instrumental items merged into one factor in their investigation of learning motivation of Asian languages in elementary and secondary schools. Wen (1999) investigated the factors motivating learners of Chinese with Asian or Asian-American backgrounds. These participants showed that the initial motivators to begin learning Chinese were intrinsic interest in Chinese culture and the desire to understand one’s own cultural heritage rather than integrative motivation. In a setting where Chinese culture and native speakers are not directly accessible, integrative orientation becomes a minor motivation and might be integrated into more dynamic motivational dimensions such as *instrumentality*.

Indeed, *instrumentality* has proven to be a powerful motivation in this and other studies (Lu & Li, 2008; Warden & Lin, 2000; Wen, 1997, 1999). Lu and Li (2008) reported that heritage learners were more influenced by instrumental motivation than non-heritage learners. In this study, although all three groups endorsed *instrumentality* highly, it was a significant predictor for continuing Chinese studies with the heritage learners only, suggesting that the decision to continue their Chinese is closely related to the perceived usefulness of the language career-wise, and the perceived importance of the language in today’s global economy.

The factor *positive learning attitudes and experience* emerged as a motivational variable that predicted motivational magnitude (*intended strategic efforts*) with all groups, and motivational direction with the heritage learners. Therefore, positive learning attitudes and interactive learning processes are critical in formal educational situations. When learners perceived the task as challenging yet fun, and as personally meaningful to their goals, they became engaged in the process. As Dörnyei and Ottó (1998) postulated in their process model, the quality of the learning experience in the educational context is in the actional phase,⁴ which consequently becomes a driving force for learning achievement.

Comparisons across Heritage Status

Unlike previous studies (Lu & Li, 2008; Yang, 2003; Wen, 1997) this study distinguished between CBLs and CHCLs. The findings suggest that the CBL and CHCL groups share more

commonalities than differences, especially in socio-cultural dimensions. They chose to learn their heritage language as an integral part of their self-concept, ethnic identity, and a desire, personal and/or derived from a sense of obligation, to communicate with members of their community. Such findings are consistent with the results of Comanaru and Noels (2009) who concluded that subgroups of heritage language learners were more alike than different, and pre-existing Chinese language proficiency generally plays a minor role from the standpoint of social psychology.

In a comparison of heritage and non-heritage learners, more significant differences have been observed regarding two dimensions: socio-cultural interactions (Factors 3 and 5) and learning situations (Factor 1 and the interview data). First, the heritage learners surveyed regard Chinese as central to their sense of self, and this view is also evident from interview data. They are exposed more to Chinese culture via Chinese community and media, identify themselves as Chinese, and may feel less autonomous than the non-heritage group. Indeed, they frequently attribute their Chinese course success to their language background and family environment. In contrast, although the non-heritage learners express a passionate desire to learn the language and a profound appreciation of Chinese culture, their motivational orientation in the socio-cultural dimension is different than that of heritage learners. Heritage learners are exposed to more relevant opportunities to use the language and learn the culture outside the classroom. Cultural festivals and events at home and in the community provide them with learning experiences.

Non-heritage learners take pride in learning a challenging language and are stimulated by new learning experiences in the classroom. They clearly demonstrate the effect of *positive learning attitudes and experience* more than the heritage learners. The data suggest that heritage learners would continue their Chinese learning in order to reach a level of proficiency required to use the language competently, whereas non-heritage learners would continue their learning because of the positive experiences they derived from learning. For them, the task of learning Chinese is indeed demanding, and continuation requires sustained efforts and self-regulatory learning strategies.

The Limitations of the Study and Future Research

The present study examined additional issues important in Chinese HL learning, including the differentiation between HL learners, their motivational constructs, their socio-cultural effects in relation to motivation, and the interactions between attitudes and Chinese learning processes. Many issues remain unaddressed, such as the impact of proficiency levels, ethnic backgrounds, and language achievements on attitudes and motivation. Although the classifications of the heritage subgroups are based on previous studies (Comanaru & Noels, 2009; Fishman, 2001; Van Deusen-Scholl, 2003; Valdés, 2001) and defined with careful criteria, they may still lack details and subtleties to distinguish the two sub-heritage groups more precisely. In addition, because a limited number of students (27) participated in the interviews, interpretation of the interview data requires caution.

The constructs of integrative orientation, instrumentality, and positive learning attitudes and experience have revealed unique patterns in this study. Further investigations of these constructs

of HL motivation may reveal more defining features that will explain additional the reasons behind motivation.

Implications of the Study

The findings of this study have important implications in the context of teaching Chinese as a second language and as a heritage language. First, positive learning attitudes and experience represent as a robust motivational force to predict learning efforts and strategies. Learners, regardless of their background, unanimously and highly endorse a classroom where they are provided “opportunities to speak Chinese with classmates” and have “fun in learning.” The elements of “fun” could include challenging tasks under the learner’s control, grammar instruction through meaningful interactions, and practicing of language skills via communicative activities. All these require language instructors to create an environment where learners can focus on negotiation for meaning in a series of well-structured input activities, interpreting form and expressing ideas through accessing form-meaning associations, and negotiating meaning with their classmates who may be from different HL backgrounds.

Second, the finding that instrumentality is a predictor of continued Chinese studies for heritage learners suggests that a Chinese class should focus on helping learners use the language to develop their communicative competence. By doing this, a pedagogical shift is in order from predominantly teacher-fronted lectures as a common practice in Chinese language classes to student-centered pair and group activities, in which students poll classmates and gather information from each other to address topic-driven questions, and perform simple research tasks (Mandell, 2002). These communicative interactions are similar to the kinds of activities that learners may undertake with Chinese speakers outside the classroom.

Third, data from this study show that learners from different heritage backgrounds differ in their motivations. Although all in the study are highly interested in Chinese culture and motivated to acquire communicative skills, heritage learners are more motivated to read and write, as indicated in their interviews. Non-heritage learners have fewer opportunities for exposure to, and experience with, Chinese culture. The data suggest that a different type of instruction is necessary to accommodate learners’ diverse needs. Instructors could address literacy development with heritage learners by providing level-appropriate assignments for reading and writing. With non-heritage learners, a wide exposure to Chinese culture, both integrated in the curriculum and in the form of extra-curricular activities (e.g., Chinese ethnic festival events, film festivals, etc.), is recommended to help learners develop a sustained interest in understanding Chinese culture. The motivation of an HL group can be maintained through teachers’ and administrators’ efforts to foster encouraging and engaging environments in the classroom and the community.

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Appendix: Student Questionnaire

Following are a number of statements. Check or circle the alternative below the statement which best indicates your information and feeling in that statement. Please give your immediate but very careful response. The information you give is confidential, and has absolutely no bearing on your course grade.

I. General Information

1. Give your age in years: ____.
2. Indicate your sex: ___ M; ___ F.
3. Check your ethnic background:
 ___ Caucasian; ___ African-American; ___ Hispanic; ___ Chinese American;
 ___ Asian-American; _____ Asian (specify your nationality); _____
 Other (specify).
4. Are any of your ancestors or family relatives Chinese? ___ Yes; ___ No.
5. Your first language is: _____; Are you bilingual with Chinese as one of the languages?
 ___ Yes; ___ No.
6. What is your parents' native language? _____.
 _____ Mother, _____ Father.
7. Level at the university: ___ Fr; ___ So; ___ Jr; ___ Sr; ___ Gr; _____ Other.
8. The Chinese language course you are currently enrolled:
 _____ 1st year; _____ 2nd year; _____ 3rd year.
9. Your major: _____; Your Minor: _____.
10. Number of years of Chinese language study in secondary and/or high school:
 ___ 0; ___ 1; ___ 2; ___ 3.
11. Number of years of Chinese language study in community Chinese schools:
 ___ 0; ___ 1; ___ 2; ___ 3.

Scale: 1. Strongly disagree; 2. Moderately disagree; 3. Slightly disagree; **4. Neutral (no opinion)**; 5. Slightly agree; 6. Moderately agree; 7. Strongly agree.

After this course, I will ...

12. continue to learn Chinese in the next semester.
 Strongly disagree 1 2 3 4 5 6 7 Strongly agree
13. continue to learn Chinese in the future.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

14. take more courses related to Chinese language and culture.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

II. Motivation Information

I am taking Chinese,

1. because I want to use Chinese when I travel to a Chinese-Speaking country.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

2. because I think that it will someday be useful in getting me a good job.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

3. because I feel Chinese is an important language in the world.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

4. so that I will be able to meet and converse with more Chinese people.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

5. because I want to visit a country where the Chinese language is spoken.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

6. because I feel that my friends support me in learning Chinese.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

7. because people around me think it is good to learn Chinese.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

8. because my parents or relatives encourage me to learn Chinese.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

9. because I think that I will need the language for my future career.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

10. because of interest in my own Asian heritage.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

11. so that I will be able to better understand and appreciate Chinese culture.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

12. because my major, or minor requires me to take Chinese language courses.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

13. because I need to fulfill a general foreign language requirement.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

14. because I like to see Chinese films.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

15. because I like Chinese pop music and songs.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

16. because I like to understand Chinese TV programs.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

I like my Chinese class because ...

17. Learning Chinese is challenging and it has provided me with mental exercise.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

18. it is fun to learn Chinese.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

19. I appreciate opportunities to speak Chinese with my classmates.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

20. I enjoy communicative activities in class.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

21. I like grammar explanation/exercises offered in the curriculum.

Strongly disagree 1 2 3 4 5 6 7 Strongly agree

When I learn the Chinese language, I expect ...

22. I will think about the words and ideas that I have learned in my Chinese class.

Never 1 2 3 4 5 All the time

23. I will be active and interactive in my Chinese class participation.

Rarely participate 1 2 3 4 5 Always participate

24. I will try to use Chinese outside the Chinese class with my classmates and friends.

Never 1 2 3 4 5 All the time

25. I will not give up on my course assignments before I complete them.

Strongly disagree 1 2 3 4 5 Strongly agree

26. I will make good efforts to improve my Chinese language skills.

Strongly disagree 1 2 3 4 5 Strongly agree

Notes

1. Dispositional or internal attributions are explanations of something that occurs because of someone's personality, as opposed to any outside influence.
2. A 7-point Likert scale was used to rate all items except for those related to strategic efforts for engagement in learning, which were adapted from the Attitudes/Motivation Test Battery and were rated on a 5-point scale.
3. The student names presented in this section are all pseudonyms.
4. Dörnyei & Ottó (1998) refer to the actional phase as the point where an "individual has committed him/herself to action and now the emphasis shifts to factors concerning the implementation of action" (p. 50).