

# Motivation and Language Learning with Students of Chinese<sup>1</sup>

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**ABSTRACT** *The present study investigates the motivational factors of students who are from Asian and Asian-American backgrounds and learn Chinese at the university level in the United States. Seventy-seven students at the beginning and intermediate levels of proficiency participated in the study. The data were collected through a survey method. Factor analysis, regression procedures, t-tests, and correlation coefficients were used to address the research questions.*

*The results of the study indicate that intrinsic interest in Chinese culture and the desire to understand one's own cultural heritage are the initial motivation for students to start learning the Chinese language. Expectations of learning task and effort keep students continuing their Chinese at the intermediate level. In addition, motivational factors correlate significantly with desired learning outcomes from the expectancy theory. Based upon the findings, recommendations are made to enhance students' motivation, expectancy, and self-efficacy in learning.*

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In recent years, a nationwide interest in the Less Commonly Taught Languages (LCTLs) has emerged in the United States. According to the statistics of the Modern Language Association (Brod 1988; MLA 1991), languages with the highest enrollment growth rates in the United States at the college level are Japanese and Chinese. For example, Chinese language enrollment expanded 72 percent between 1980 and 1990. This increase in Chinese enrollment comes largely from students with an Asian background. Students whose ethnic backgrounds are Asian and Asian-American usually comprise an overwhelming number of the student body in Chinese language classes at universities in the United States. The present study investigates the motivational factors associated with the learning of Chinese by students from Asian and Asian-American backgrounds.

Gardner and Lambert (1959) are the early scholars who laid the foundation of the theory of second language (L2) learning motivation. In studying the relationship between atti-

tude/motivation and the achievement of an L2 learner, they identified two motivational orientations: integrative and instrumental. "The orientation is integrative if the student wishes to learn more about the other cultural community because he is interested in it in an open-minded way to the point of eventually being accepted as a member of that other group" (Gardner and Lambert 1972; 3). An instrumentally oriented student hopes to derive a special benefit, such as career-based opportunities, from knowing the foreign language. He or she has little interest in the target language and culture. Gardner's early studies showed that integrative motivation was more powerful than instrumental motivation because the L2 learner's ultimate goal was not only to attain language competence but also to achieve "psychological integration" with the target culture. In their later studies, however, Gardner and MacIntyre (1991) found that instrumental motivation was also an effective factor in L2 learning and integrative motivation may not necessarily be superior to instrumental motivation. Those who are integratively motivated, however, are probably more successful at an advanced language

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level than those who are not, mainly because psychological integration sustains interest in learning the language longer (Gardner 1985; Dornyei 1990).

Although the work of Gardner and Lambert laid a strong foundation for the theory of L2 learning motivation (1959, 1972, 1974), and was supported by subsequent studies (Laine 1984; Gardner 1985; Svanes 1987), some studies found insignificant or even conflicting results with those of Gardner and his associates (Lukmani 1972; Pierson, Fu, and Lee 1980; Oller 1981). Clement and Kruidenier (1983), for example, suggested that certain motivation factors are context-specific, and may not be discovered and analyzed by using the integrative-instrumental approach. In other words, the integrative-instrumental approach has certain limitations on the learning context. Recently, researchers such as Crookes and Schmidt (1991) and Oxford and Shearin (1994) have called for extending the current notion of L2 learning motivation and adding integrative motivation theories of general psychology. It is important to explore the motivation structures in a broad approach on the one hand, and to be context-specific on the other.

In the context of Chinese language learning, a student's expectation of both the learning task involved and the outcome are important factors. This is mainly because the task involved in learning Chinese is quite different from that of learning European languages. The present study incorporates expectancy-value theories in investigating the motivation of Chinese language learning. Expectancy-value theories were originally proposed by Lewin (1951), Vroom (1964), and others (Mitchell and Nebeker 1973). Vroom postulated that any action could potentially lead to a wide range of outcomes. The effort exerted toward any particular action is determined by the valence (i.e., relative attractiveness) of outcomes and the expectation that the action would lead to the desired outcomes. Valence is defined as an "affective orientation toward particular outcomes" by Vroom (1964, 14). Lewin (1951) referred to it as the psychological value of a particular goal.

Expectancy is defined as "effort that will lead to successful performance" (Oxford and Shearin 1994, 21). The extent to which a person values the outcomes, the probability of achieving the outcomes, and those effortful behaviors that lead to perceived success constitute an important motivation. In other words, a person has an idea about the possible consequences of an act and, therefore, makes conscious choices leading to potential consequences according to the probability of achieving the desired outcome. To apply expectancy models to language learning, it is assumed that valence of learning outcomes, expectancies of learning ability, and probability of obtaining the outcomes greatly influence the motivation of students.

#### *Motivation and Less Commonly Taught Languages*

One problem with LCTLs, such as Chinese and Japanese, at universities in the United States is the low retention rate of students. For example, it is reported that the attrition rate among students who take Japanese is sometimes estimated as high as 80 percent (Mills, Samuels, and Sherwood 1987). Samimy and Tabuse (1992) reported that learning less commonly taught languages can produce strong negative affective reactions from the students which hinder their learning motivation. The high difficulty level of the learning task may be one factor that decreases motivation for learning the Chinese language. For instance, students may not be clearly aware of the level of difficulty of Chinese when they begin their language study. According to data of the U.S. Foreign Service Institute, it takes English-speaking Americans at least three times longer to learn Chinese than to learn French or Spanish. This is mainly because the Chinese orthographic system is difficult, and learning it may create a major affective and motivational barrier. If students are not psychologically prepared for the demands of the language, they may become frustrated at the beginning of their learning. Further, in the process of learning Chinese and Japanese, the expectations of students toward the learning task and effort required often may

not match the reality of learning. They may start learning Chinese fascinated by the orthographic calligraphy and may ignore the effort one has to put into the calligraphy. Consequently, students may develop negative reactions to the language, and their motivation may greatly decrease.

The above assumptions need to be tested by research studies. Since the focus of this study is to explore the reasons that some students persist in Chinese language study while others do not, and possible interactions between learning a "truly foreign" language (Jordan and Walton 1989) and motivation, we will investigate motivation at two levels: the initial motivation and the motivation that inspires students to continue their study. Thus, the purposes of the present study are three-fold: to examine the initial motivation of students choosing to learn the Chinese language, to investigate the motivation that encourages students to continue their study beyond the beginning level, and to examine the interaction between motivation and desired learning outcomes using the expectancy model.

## **Method**

### *Subjects*

One hundred and twenty-two students from six Chinese classes at two U. S. universities participated in this study. Of 135 questionnaires sent, 122 or 90 percent were returned. The present study, however, only presents the sample of 77 students from the Asian and Asian-American background. Forty-five students who were from non-Asian or non-Asian-American background were not included in this study. The ethnic compositions of the sample included 59 Asian-American, 6 Vietnamese, 2 Japanese, 4 Indonesian, 3 Korean, 2 Malaysian, and 2 Thai. Seventy-one students (92 percent) could speak or understand a Chinese dialect when they enrolled in Chinese classes. It should be noted that even though most of the students in this study can speak or understand a Chinese dialect, they had little language background in Mandarin Chinese when they enrolled in beginning Chinese courses. The requirement of

beginning Chinese courses excluded the students who had any linguistic background in Mandarin Chinese. The sample was composed of 77 students enrolled in first- and second-year Chinese classes. Fifty-three first-year students had been learning Chinese for two months, and 24 second-year students had been learning Chinese for 14 months when the questionnaire was administered. Of 24 second-year students, 21 were from their first-year classes, and three joined in the classes after taking a Chinese placement test. The students who were not from an Asian background were not included in this study because the motivational constructs of students from the Asian background may differ from students from a non-Asian background.

### *Instruments*

The first instrument, a two-part questionnaire, is presented in the appendix. The first part of the questionnaire measures the motivation variables, which include expectations of learning strategies and of efforts required. The expectations of learning strategies and of efforts were assumed to be direct indicators of motivation, that is, persons who had high expectations of strategies and efforts would be actively engaged in their learning. Questions in this section were mostly adopted from the published motivation scales of language learning: the Attitude/Motivation Test Battery (Gardener 1985) and the questionnaire developed by Ely (1986). Because these two scales do not contain questions relevant to expectations of learning strategies and efforts, several newly designed questions were added. It was thought that by including items from the previous studies, and new items relevant to learning Chinese as a foreign language, a more complete and valid description of the motivation of the targeted population would result. Seven-point rating scales for the motivational variables were used. Multiple choices on a four-point scale were used to measure the learner's expectations of the learning strategies, efforts, and task.

The second part of the questionnaire was developed based on expectancy theories proposed by Vroom (1964) and Mitchell (1974).

Expectancy theories conceptualize motivation as a function of value and expectancies. Questions were developed in two steps. First, a preliminary study was conducted. Fifteen students from the first- and second-year Chinese classes were asked to list the outcomes that they strongly desired to achieve from the Chinese classes that they were taking. The frequencies of the outcomes generated by the students were calculated. Based on the results of the preliminary study, the six outcomes with the highest frequency were developed into a questionnaire. The final questionnaire had 18 items divided equally among valence, expected learning ability, and probability of achieving the outcome.

Each group of six items of the questionnaire represents the different outcomes that students desire to achieve in taking Chinese courses. Items 1 to 3 refer to language skills, e.g., *to speak Chinese fairly fluently*, *to communicate with Chinese-speakers in basic Chinese*, and *to develop reading comprehension of Chinese*. Item 4 presents the general concern of students *to receive a grade of A from the class*. This outcome is of a different type from the other five outcomes: it is an external reward, whereas other outcomes indicate the desires for language proficiency and knowledge of a different culture. Items 5 and 6 refer to cultural enrichment: *to better understand Chinese people and their way of thinking* and *to learn more about Chinese culture and customs*.

Items on valence are measured on a seven-point rating scale. Items on expected learning ability and learning outcomes are measured by probability on a scale of 0 to 100. The formula for the expectancy theory to be used in an education setting is:  $f(\text{motive} \times \text{ability})$  where  $\text{motive} = \text{valence} \times \text{expected outcome}$ ;  $\text{ability} = \text{expected learning ability}$ . Such a method of developing the questionnaire and measuring expectancy was proposed and used by Mitchell (1974). It was assumed that valence and expectancies would influence the level of effort exerted in learning.

The second instrument consisted of midterm and final examinations administered in all the classes. The contents of the examinations for

different classes were very similar and included listening and reading comprehension, writing production, translation, and grammar. The midterm and final examination scores of each student were converted into percentage scores and averaged to become a compound criterion variable.

### *Procedure*

The questionnaire was administered during regular class sessions. Students were asked to give their immediate reaction to the questions as accurately as possible. Confidentiality was assured by using student ID numbers. The data were analyzed statistically as follows: (1) factor analysis was conducted to identify the motivation variables in this study; (2) factors discovered from the factor analysis were examined through regression procedures to determine which factors played the most important role in language attainment; (3) the score for each item in the expectancy model was computed by using the formula of the motivation and expectancy model; (4) correlation coefficients between the motivation factors and variables in the expectancy model were calculated; and (5) scores obtained from students at the beginning and intermediate levels were compared by using t-test to discern significant differences between subgroups' mean scores.

## **Results**

### *Factor Analysis*

Factor analysis was used to determine the structures of motivation. Eighteen questions went through correlation matrix, factor extraction, and rotation procedures. Principal component analysis was used to extract factors that had eigenvalues of greater than 1.0. Four factors were found and conceptualized as motivation of instrumentality, intrinsic motivation, expected learning strategies and efforts, and passivity toward requirements.

Motivation of instrumentality consisted of six items (items 5, 9, 2, 7, 8, 3). The Cronbach alpha coefficient for this scale was .85. All the items in this factor have the salient trait of using

language as a tool to fulfill certain goals such as *to use Chinese when traveling to a Chinese-speaking country, to meet and converse with more and varied people, to use it with Chinese-speaking friends, and Chinese is an important language in the economic development of the world.* In comparison with Gardner's concept of instrumental motivation, instrumental purposes from this factor are broader and more generalized.

The second factor, intrinsic motivation, had four items (items 4, 1, 13, 6). The Cronbach alpha for the scale was .59. Items in this factor indicate the internal appreciation and enjoyment of learning the language, such as *because of interest in my cultural heritage, to better understand and appreciate Chinese art and literature, and enjoy doing all the work.* These items emphasize exploring the nature of learning. For example, because students are curious about their own cultural heritage or interested in the arts and literature of the target culture, they take Chinese language courses to explore the areas that interest them. Thus, the intrinsic motivation in this study is culturally oriented.

The third factor, expectations of learning strategies and efforts, remained with its five original items (items 14, 15, 17, 18, 16). The Cronbach alpha coefficient of the scale was .66. Items 14, 17, and 18 are concerned with learning strategies, item 15 is concerned with the time commitment for learning, and item 16 with class interaction.

The final factor, *passivity toward requirements*, contained three items (items 12, 11, 10), and the Cronbach alpha was .51. The motivation in this factor came from *meeting a requirement of my degree* or from an external reason, such as *the classes are less demanding than other five-unit courses.* These items present a characteristic of compliance with requirements and a passive attitude toward taking Chinese.

#### *Significant Predictors of Chinese Language Attainment*

A multiple regression analysis was used to determine how well the different factors can

predict Chinese language achievement. All four factors entered stepwise multiple regression procedures as independent variables, and the score of examinations entered as the dependent variable. The results showed that for the first-year students, 16.9 percent of the variance of the dependent variable can be accounted for by *intrinsic motivation*, and, for the second-year students, 10 percent of the variance can be accounted for by the factor of *expectation of learning strategies and efforts.* The first-year students who had high intrinsic motivation received high examination scores; the second-year students who were willing to exert a high level of effort and to use effective learning strategies received high examination scores. Table 1 on page 246 shows the results of the regression of the four factors.

A forward stepwise regression was used to determine the variables that best predict language attainment. All the variables in intrinsic motivation of the students at the beginning level and all the variables of expected learning strategies and efforts of students at the intermediate level were entered into the regression as independent variables. Course achievement score was the dependent variable. The results are presented in Tables 2 and 3 on page 246. It was discovered that *interest in one's cultural heritage* was the significant predictor of language achievement for students at the beginning level, whereas *expected learning strategies* in a classroom was a significant predictor for students at the intermediate level.

The variable of *expected learning strategies and efforts* was found to be a significant predictor of language attainment for students at the intermediate level. To ascertain motivational variables that could best predict expected learning strategies and efforts, a forward stepwise regression was used. Table 4 on page 246 shows the results of regression of *expected learning strategies and efforts* with students at the intermediate level.

As shown in Table 4, *motivation instrumentality* is the significant predictor of *expected learning strategies and efforts.* It accounted for 49.7 percent of the variance of *expectations of*

*learning strategies and efforts.* Students who were highly motivated to learn the language for certain purposes had better expectations of learning strategies and efforts. Further, they were willing to make efforts and to use effective strategies in their learning.

In summary, the results of regression analysis suggest that intrinsic motivation plays an important role in enrolling students in Chinese classes. The most important items in intrinsic motivation include *interest in one's heritage*. Expectations of learning strategies and efforts are the motives that retain students for the intermediate level. Students who are interactive in class, make a time commitment, and learn from feedback are likely to continue to the second year of Chinese classes.

#### *Independent t-tests*

Independent t-tests were used to discover motivation differences between students of Chinese at the beginning and intermediate levels. Significant differences were found in two factors, *passivity toward requirement* ( $t = -1.82, p = .004$ ) and *expectations of learning strategies and efforts* ( $t = 2.45, p = .016$ ). The results of t-tests showed that students at the beginning level had a higher score for passive attitude toward taking Chinese than students at the intermediate level. Students at the intermediate level obtained higher scores on *expectation of the learning task* and lower scores on *passivity toward requirements* than students at the beginning level. These findings suggest that an appropriate expectation of learning strategies and efforts is an important factor for students to continue their Chinese beyond the beginning level. The passive attitude and compliance with requirements, on the other hand, may be a factor for some students to enroll initially in Chinese classes.

Students are generally more familiar with commonly taught languages such as French and less familiar with LCTLs such as Japanese and Chinese. Their expectation of the learning task may develop and change in the process of learning Chinese. First-hand experience in learning Chinese may help students develop appropriate expectations of learning strate-

gies and efforts. Consequently, students at a higher proficiency level may use more appropriate learning strategies and exert more effort in their learning.

Since no questionnaire had been administered to second-year students at the beginning of their Chinese learning, we do not have data to determine whether they had an appropriate expectation of the learning task and strategies at the very beginning of their learning or developed it later. Late development of expectation seems most likely. It is assumed that those students who did not have or did not develop an appropriate expectation of their learning strategies were likely to discontinue Chinese before they reached the intermediate level. Those who wanted to continue may have quickly learned that the task of Chinese language learning was time-consuming and demanding. Students may accordingly alter their expectation, develop expectations of the learning task and strategies, and continue learning at the intermediate level.

#### *Correlations of the Two Sets of Variables*

Correlations between desired outcomes in the expectancy model and the motivation factors identified in this study were analyzed by using Pearson product-moment correlations. The high correlation coefficients among the variables provide us with information about the structures of motivation of Chinese language learning. Table 5 and Table 6 on page 247 present the correlations with the students at the beginning and intermediate levels respectively.

*Motivation of instrumentality* significantly correlated to items 5 and 6, the culture-oriented outcomes with students at the beginning level, and to all desired outcomes except item 4 with students at the intermediate level. The differences between the students at the different levels suggest that the first-year students were much more culturally oriented. They intended to use Chinese as a tool *to understand Chinese people* and *to learn Chinese culture*. The second-year students had a broad motivation orientation that included the acquisition of cultural understanding and lan-

guage skills. The desire to receive a grade of A had a very weak correlation to motivation of instrumentality with students at both levels. The desire to receive a grade of A is different from all the other desired outcomes. The other desired outcomes concern language and cultural skills, whereas the desire to receive a grade of A is an external factor that concerns the formal course reward. In addition, it is possible that a student may not be concerned with the instrumental variables such as meeting and conversing with more varied people (which will reduce the score on instrumentality) but may be concerned only with the grade and yet be able to be actively engaged in learning to achieve a high course grade.

*Intrinsic motivation* significantly correlated to all desired outcomes except item 4 with the students at the intermediate level, and to item 5 (*understand Chinese people*) with the students at the beginning level. The correlations between the intrinsic motivation and the desired outcomes indicate that the intrinsic motivation of the first-year students is more culture- than language-oriented. Those who were highly intrinsically motivated wanted to learn more about Chinese culture, whereas students at the intermediate level were both culture- and language-oriented since the correlations between their intrinsic motivation and desired outcomes of both language and culture skills were significant.

*Expectations of the learning strategies and efforts* significantly correlated to most desired outcomes with students at both levels. Students who were willing to use effective learning strategies and to exert effort in learning also highly valued the outcomes in the expectancy model. Since to receive a grade of A was a different type of desired outcome, it did not correlate with *expected learning strategies and effort*.

Passivity toward requirements had either negative or little correlation with desired outcomes. This finding suggested that passivity toward taking Chinese was of a different pattern from the other motivation factors. This variable seemed to be more related to students' passivity in responding to requirements

and coping with courses without engaging effort than to motivation in the usual sense.

The only outcome that did not correlate to any motivation factors with students at the both levels was *receiving a grade of A*. To further examine this variable, correlations among all desired outcomes were computed. It was discovered that to achieve a grade of A significantly correlated with *to be able to speak Chinese fluently* ( $r = .487, p = .000$ ), *to communicate with Chinese people* ( $r = .311, p = .003$ ), *to develop reading comprehension skills* ( $r = .412, p = .000$ ), and to the average score of course achievement ( $r = .528, p = .000$ ). In other words, students who desired a high grade were also motivated to achieve basic language skills such as conversation and reading comprehension. They were usually able to achieve language proficiency and receive a high course grade. *To receive a high course grade* was not correlated with culture-oriented outcomes. This suggests that it is possible for students who are only interested in acquiring language skills and a high course grade to be actively engaged in learning and to exert effort to achieve language proficiency.

Instrumentality had significant correlations to expected efforts and desired outcomes with the second-year students (Table 4), but it had low correlations with their course achievement score. It seems that instrumentality does not directly contribute to Chinese language attainment as the intrinsic motivation and expected efforts do. The finding that instrumentality is the significant predictor of expected learning strategies and effort with the second-year students suggests that their motivation orientation is characterized by instrumentality. When students learn Chinese for certain purposes and use Chinese to accomplish their goals, they are highly motivated to try effective strategies. This finding is consistent with Dornyer's study (1990) in showing that instrumental goals contribute significantly to motivation for foreign language learners.

Passivity toward requirements seems to be a factor promoting some students' entrance into Chinese courses, but it does not sustain

them to the intermediate level. Its weak correlations with the other motivation factors, desired outcomes, and the course achievement score suggest that it may not belong to the motivation framework discussed in this study.

In summary, the factors of intrinsic motivation, expected learning efforts and strategies, and the desired learning outcomes, including the desire to receive a grade of A, are important motivational variables in the context of Chinese language learning. These factors are significantly related to course achievement scores and to predictors of Chinese language attainment.

### **Discussion**

#### *Motivation to Begin Learning Chinese*

Findings of this study indicate that two factors account for students beginning to learn the Chinese language. The first is intrinsic motivation: that is, to be interested in one's own cultural heritage and to better understand and appreciate Chinese art and literature. Intrinsic motivation has significant correlation with the desired outcome: *understand Chinese people*. Students who have culture-oriented motivation start to learn Chinese and to receive high achievement scores in their course. The motive *to be interested in one's own culture heritage* is a significant motivator for choosing to learn Chinese.

Another factor that motivates students to learn Chinese is passivity toward requirements. The presumption that *Chinese classes were less demanding than other five-unit courses* and the reason of *fulfilling requirements* stimulate students to enroll in Chinese classes; however, it only stimulates students to the extent of registering for a Chinese course. The students who have a certain Chinese or Asian language background might think that the course is less demanding to them because of their background. Their expectation of the learning task may not match the reality: that is, Chinese language courses are much more demanding than they expected. As the data of correlations between desired outcomes and four motivation factors show, students who had this passive factor received low test scores

and were more likely to discontinue their study before reaching the intermediate level.

#### *The Motivation to Continue Learning Chinese*

The intrinsic motivation of learning about Chinese culture is a significant predictor for students to decide to learn the Chinese language. It is not a significant factor for students to continue learning at the intermediate level. *Expectations of learning efforts and strategies* is the significant predictor of student achievement at the intermediate level.

The above finding is not consistent with those of previous studies (Gardner 1985; Dornyei 1990). Their studies indicate that interest in a target culture is strongly associated with language attainment at higher language proficiency levels. Two factors may explain the inconsistency. One may reflect the language background of the ethnic body of subjects of this study. Many students with Asian backgrounds possess a greater or lesser amount of linguistic knowledge of Mandarin Chinese or another Chinese dialect. They may anticipate having an advanced status in Chinese classes or, owing to their background, may assume they can exert less effort than other students. They enroll in Chinese courses because, on the one hand, they are interested in their own Asian culture and, on the other, they expect that the course may be, for them, less demanding than other courses. They may, however, discover a gap between what they know or expect from learning Chinese and what a formal Chinese course requires. In the process of learning Mandarin Chinese, they may realize the great commitment that the course demands. Consequently, those who are not willing to make considerable effort in their learning may discontinue their study. Those who understand or gradually realize the time-consuming process of learning Chinese may continue to the intermediate level. Therefore, the factor of expectations of learning efforts and strategies becomes a strong predictor at the intermediate level.

Contextual factors, that is, different language learning contexts, may also explain the inconsistency between the present study and



those of Gardner and Dornyei. The Chinese writing system is very different from English. It is possible that many students, when they first start to learn Chinese, are fascinated by the Chinese writing system but are not aware of the amount of time required to learn Chinese characters. They may not know the kind of learning task that awaits them. Students who study Chinese for one year gradually understand the importance of memorizing characters and develop their expectations of learning strategies and of effort. At this stage, *expected learning task and strategies* becomes the primary factor in predicting learning achievement. Oxford and Shearin (1994) also point out that language learners with established goals and a sense of self-efficacy, which they define as "one's judgment of how well one can execute courses of action required to deal with prospective situations" (21), will focus on learning tasks and will develop strategies to complete tasks.

Thus, it is not that intrinsic motivation in the target language disappears for intermediate students, but that expectation of the learning task and strategies becomes the best predictor of language attainment as a result of interaction between learning and motivation. In the process of learning, students gradually develop their expectation of learning task and strategies.

#### *Expectancy-Value and Motivation Factors*

The desired learning outcomes in this study are based on expectancy theories. Most of the desired outcomes correlate significantly with course achievement. The desired outcomes also correlate significantly with the motivation factors of instrumentality and expectations of learning efforts. Therefore, the results of this study suggest that when students think that outcomes and learning performance will lead to certain meaningful results or valued instrumentality, they are most likely to be motivated to exert effort in learning. They will be motivated to use effective and high-level learning strategies to achieve goals. Thus, the factors of *desired outcomes*, *valued instrumentality*, *purposeful efforts*, and *effective learning strategies* correlate and interact to form a strong motiva-

tion to encourage students in their learning. When students see the internal relationships among these factors, they are motivated to identify specific outcomes, employ strategies to accomplish them, and develop a sense of self-control in their learning.

The desired outcome or goal can be an external factor. For example, item 4, *to receive a grade of A*, has the highest correlation with achievement scores. Does this mean that those who really value a high score and believe the probability of receiving a high score is strong will receive a high score on their examinations? A further study of the correlation coefficients revealed that desire for a high grade correlates significantly with *speaking Chinese fairly fluently*, *communicating with Chinese speakers in basic Chinese language*, and *developing reading comprehension of Chinese*. In a formal language-learning setting, students who are motivated to receive a high achievement score also highly value the acquisition of language skills. As a result, they are likely to be actively engaged in their learning and to achieve their goals.

#### **Implications**

The findings of this study present two implications. First, the results show that passivity to the foreign language itself and to the course requirements correlates little or negatively with Chinese language attainment. In most universities in the United States, however, two years of foreign-language study is required for a degree program. Such a mechanical requirement, measured by the numbers of classes or hours taken and the amount of grammatical knowledge covered in a course, does little to motivate a student to learn the language. To maximize student learning, the language requirement should be changed to one that measures how much students can use language to communicate.

When a foreign language requirement specifies not credit hours to be taken but a language proficiency level to be attained, passivity may cease to be a relevant motivation. The usefulness of the foreign language becomes emphasized, and students can readily see the value of

becoming proficient. Furthermore, when the language studied is one that, other than English, is used by large American communities and that is important in today's economic development, the value of proficiency should become obvious. As Ramage (1990) proposed, the tradition of offering only European languages should be expanded to offer a wide range of such useful languages as Japanese, Chinese, Russian, and Vietnamese: that is, the languages that are currently needed in American business, diplomacy, and education.

The second implication is directly linked to the first one. The results of this study suggest that appropriate and realistic expectations of the learning task and of one's own ability play an important role in starting and continuing Chinese. When the students' goal is achieving language proficiency, they may be more likely to tailor their expectations of themselves and their learning process toward achieving that goal. For example, they may expect to be able to exert serious effort in practicing conversation skills so as to achieve their language proficiency. It is primarily important for teachers to help students develop their goals, a realistic expectation of the learning process, and a strong sense of self-efficacy. When students believe that they are able to make differences in their learning process and outcomes, they actively exert effort in pursuit of their goals.

The expectations of self and of learning outcomes interact with motivation. Teachers need to create an encouraging and flexible learning environment where students can reflect on their expectations of their learning and develop a strong sense of self-efficacy. Strategies that can encourage students to put effort in learning and to develop a sense of success and self-control should be encouraged. For example, teachers can use simulations and games to promote students' interest and put grammar in action for awareness activities (Frank and Rinvolutri 1983) to enhance the effectiveness and successful experience in learning. Much research has been done in this area (Omaggio Hadley 1993; Scarcella and Oxford 1992).

Since the results of the present study are

drawn from Chinese learning situations and the sample is composed of students of a homogeneous background of Asian Americans and Asians, the ability to generalize its findings to all foreign language contexts may be limited. It would be interesting to conduct further studies with students of other LCTLs to see what role the factor of expectancy plays in their language learning. Other areas for future study may include comparing the results achieved by Chinese-language learners of different ethnic backgrounds. Since the language and ethnic backgrounds of Chinese-language learners in the United States vary significantly, it is important to investigate the various motivations and expectations that they bring with them to the Chinese learning task and the strategies and techniques that they adopt in the process of learning. The relationships among student language and ethnic backgrounds, motivation, learning strategies, and language attainment could provide important information in the research of LCTLs.

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## NOTES

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**TABLE 1**  
**Stepwise Regression of Course Achievement Subgroups of Students at Beginning and Intermediate Levels**

Step	Variable in equation	R <sup>2</sup>	beta	T	<i>p</i>
1	Intrinsic motivation	.169	.411	6.366	.000
1	Expected strategies and efforts	.100	.317	2.430	.018

**TABLE 2**  
**Stepwise Regression of Course Achievement: Students at the Beginning Level**

Step	Variable in equation	R <sup>2</sup>	beta	T	<i>p</i>
1	Interest in one's heritage (Item 4)	.253	.485	3.633	.001

**TABLE 3**  
**Stepwise Regression of Course Achievement: Students at the Intermediate Level**

Step	Variable in equation	R <sup>2</sup>	beta	T	<i>p</i>
1	Strategies in Classroom (Item 16)	.123	.350	2.724	.009

**TABLE 4**  
**Stepwise Regression of Expected Learning Strategies: Students at the Intermediate Level**

Step	Variable in equation	R <sup>2</sup>	beta	T	<i>p</i>
1	Instrumentality	.497	.704	7.303	.000

**TABLE 5**  
**Correlations Between Desired Outcomes and Four Motivation Factors:**  
**Students at the Beginning Level**

Desired Outcomes	Four Motivation Factors				
	Instru- mentality	intrinsic efforts	Expected	passivity score	Avg.
1 Speak Chinese fluently	.009	.041	.286*	-.109	.215
2 Communicate in basic Chinese	.225	.002	.347**	-.253*	.297**
3 Develop reading skill	.093	.017	.246*	-.208	.334**
4 Receive Grade A	-.147	.037	.198	-.217	.336**
5 Understand Chinese people	.363**	.289*	.389**	-.193	.170
6 Learn Chinese culture	.387**	.204	.353**	-.261*	.063
Average score of the course	.220	.303*	-.051	-.151	1.

\* p < .05      \*\*p<.01      \*\*\* p < .001

**TABLE 6**  
**Correlations Between Desired Outcomes and Four Motivation Factors:**  
**Students at the Intermediate Level**

Desired Outcomes	Four Motivation Factors				
	Instru- mentality	intrinsic efforts	Expected	passivity score	Avg.
1 Speak Chinese fluently	.380**	.354**	.249	.058	.150
2 Communicate in basic Chinese	.526***	.361**	.451***	-.116	.264
3 Develop reading skill	.536***	.289*	.468***	-.191	.331**
4 Receive Grade A	.064	.136	.127	-.179	.454**
5 Understand Chinese people	.617***	.517***	.591***	-.083	.205
6 Learn Chinese culture	.595***	.471***	.630***	-.103	.067
Average score of the course	.164	.151	.317*	-.268*	1.

\* p < .05      \*\*p<.01      \*\*\* p < .001

**APPENDIX**

**Student Questionnaire**

Student ID: \_\_\_\_\_

**I. General Information**

1. Give your age in years: \_\_\_\_ 2. Indicate your sex: \_\_\_\_ M; \_\_\_\_ F. \_\_\_\_

3. Check your ethnic membership below:

\_\_\_\_ Caucasian; \_\_\_\_ Asian (please specify your nationality); \_\_\_\_ Asian-American;  
\_\_\_\_ African-American; \_\_\_\_ Hispanic; \_\_\_\_ American Indian;  
\_\_\_\_ Other (Specify).

4. What is your major? \_\_\_\_\_.

5. Check your classification: \_\_\_\_ Fr; \_\_\_\_ So; \_\_\_\_ Jr; \_\_\_\_ Sr; \_\_\_\_ Gr;  
\_\_\_\_ Other (specify).

6. What year are you enrolled in: Chinese: \_\_\_\_ First Year; \_\_\_\_ Second Year.

7. The language(s) you can speak \_\_\_\_\_, understand \_\_\_\_\_,  
read \_\_\_\_\_, and write \_\_\_\_\_.

Following are a number of statements with which some people agree and others disagree. There are no right or wrong answers since many people have different opinions. Please give your immediate reactions to each of the items. On the other hand, please do not be careless, as it is important that we obtain your true feelings. Circle the number of the alternative below the statement which best indicates your feeling in that statement.

**II. Motivation Information**

I am taking Chinese:

1. so that I will be able to better understand and appreciate Chinese art and literature.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-------------------	---	---	---	---	---	---	---	----------------

2. so that I will be able to meet and converse with more and varied people.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-------------------	---	---	---	---	---	---	---	----------------

3. because I want to learn about other cultures to understand the world better.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-------------------	---	---	---	---	---	---	---	----------------

4. because of interest in my own Oriental heritage.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree
-------------------	---	---	---	---	---	---	---	----------------



16. I will:
- a. not necessarily be active in speaking the language in class.
  - b. answer the questions when I am called.
  - c. volunteer answers to the questions which are easy.
  - d. volunteer answers as much as possible.

17. After I get my Chinese assignments back, I will:
- a. just throw them in my desk and forget them.
  - b. look them over but don't bother correcting mistakes.
  - c. correct mistakes when I have time.
  - d. always rewrite them, correcting my mistakes.

18. I will try to speak Chinese after class:
- a. never.
  - b. when I have to.
  - c. when I am offered the opportunity to do so.
  - d. in a wide variety of situations and as much as possible.

**III. Information on Learning Outcomes: Valency, Expectancy, and Ability**

How significant are these outcomes from your Chinese class to you? Circle the number which best indicates your feeling in that statement.

- |  |   |   |   |   |   |   |   |           |  |
|--|---|---|---|---|---|---|---|-----------|--|
| 1. To speak Chinese fairly fluently.                               |   |   |   |   |   |   |   |           |  |
| Very insig.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very sig. |  |
|  |   |   |   |   |   |   |   |           |  |
| 2. To communicate with Chinese speakers in basic Chinese language. |   |   |   |   |   |   |   |           |  |
| Very insig.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very sig. |  |
|  |   |   |   |   |   |   |   |           |  |
| 3. To develop reading comprehension of Chinese.                    |   |   |   |   |   |   |   |           |  |
| Very insig.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very sig. |  |
|  |   |   |   |   |   |   |   |           |  |
| 4. To receive the grade of "A" from the class.                     |   |   |   |   |   |   |   |           |  |
| Very insig.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very sig. |  |
|  |   |   |   |   |   |   |   |           |  |
| 5. To better understand Chinese people and their way of thinking.  |   |   |   |   |   |   |   |           |  |
| Very insig.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very sig. |  |
|  |   |   |   |   |   |   |   |           |  |
| 6. To learn more about Chinese culture and custom.                 |   |   |   |   |   |   |   |           |  |
| Very insig.  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very sig. |  |

What is the probability you expect that you will achieve the above outcomes from the Chinese class that you are taking now? Circle the expected probability for each outcome.



**FOREIGN LANGUAGE ANNALS—SUMMER 1997**

- |   |    |    |    |    |    |    |    |    |  |                  |     |
|---|----|----|----|----|----|----|----|----|--|------------------|-----|
| 1. To speak /Chinese fairly fluently.                             |    |    |    |    |    |    |    |    |  |                  |     |
| no probability  |    |    |    |    |    |    |    |    |  | 100% probability |     |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90               | 100 |
|   |    |    |    |    |    |    |    |    |  |                  |     |
| 2. To communicate with Chinese speakers in basic Chinese.         |    |    |    |    |    |    |    |    |  |                  |     |
| no probability  |    |    |    |    |    |    |    |    |  | 100% probability |     |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90               | 100 |
|   |    |    |    |    |    |    |    |    |  |                  |     |
| 3. To develop reading comprehension of Chinese.                   |    |    |    |    |    |    |    |    |  |                  |     |
| no probability  |    |    |    |    |    |    |    |    |  | 100% probability |     |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90               | 100 |
|   |    |    |    |    |    |    |    |    |  |                  |     |
| 4. To receive the grade of "A" from the class.                    |    |    |    |    |    |    |    |    |  |                  |     |
| no probability  |    |    |    |    |    |    |    |    |  | 100% probability |     |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90               | 100 |
|   |    |    |    |    |    |    |    |    |  |                  |     |
| 5. To better understand Chinese people and their way of thinking. |    |    |    |    |    |    |    |    |  |                  |     |
| no probability  |    |    |    |    |    |    |    |    |  | 100% probability |     |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90               | 100 |
|   |    |    |    |    |    |    |    |    |  |                  |     |
| 6. To learn more about Chinese culture and customs.               |    |    |    |    |    |    |    |    |  |                  |     |
| no probability  |    |    |    |    |    |    |    |    |  | 100% probability |     |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90               | 100 |

What do you think of your own ability to achieve the above outcomes? Circle your estimated ability for each outcome.

- |   |    |    |    |    |    |    |    |    |  |    |                   |
|---|----|----|----|----|----|----|----|----|--|----|-------------------|
| 1. To speak Chinese fairly fluently.                              |    |    |    |    |    |    |    |    |  |    |                   |
| very low ability  |    |    |    |    |    |    |    |    |  |    | very high ability |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90 | 100               |
|   |    |    |    |    |    |    |    |    |  |    |                   |
| 2. To communicate with Chinese speakers in basic.                 |    |    |    |    |    |    |    |    |  |    |                   |
| very low ability  |    |    |    |    |    |    |    |    |  |    | very high ability |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90 | 100               |
|   |    |    |    |    |    |    |    |    |  |    |                   |
| 3. To develop reading comprehension of Chinese language.          |    |    |    |    |    |    |    |    |  |    |                   |
| very low ability  |    |    |    |    |    |    |    |    |  |    | very high ability |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90 | 100               |
|   |    |    |    |    |    |    |    |    |  |    |                   |
| 4. To receive the grade of "A" from the class.                    |    |    |    |    |    |    |    |    |  |    |                   |
| very low ability  |    |    |    |    |    |    |    |    |  |    | very high ability |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90 | 100               |
|   |    |    |    |    |    |    |    |    |  |    |                   |
| 5. To better understand Chinese people and their way of thinking. |    |    |    |    |    |    |    |    |  |    |                   |
| very low ability  |    |    |    |    |    |    |    |    |  |    | very high ability |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90 | 100               |
|   |    |    |    |    |    |    |    |    |  |    |                   |
| 6. To learn more about Chinese culture and custom.                |    |    |    |    |    |    |    |    |  |    |                   |
| very low ability  |    |    |    |    |    |    |    |    |  |    | very high ability |
| 0   | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |  | 90 | 100               |