

# **Changes in Motivation Among Chinese English-Major Students in Different Academic Years and the Relationship Between their Motivations and Strategies**

*Guo Xinhua*

Eötvös Loránd University  
Budapest, Egyetem tér 1-3, 1053 Hungary  
xinhuaquo@foxmail.com

## **Abstract**

The present research aims to investigate changes in Chinese English-major students' motivation and the correlation between their motivations and strategies. Through a questionnaire survey of 263 BA students in different academic years, it was found that out of seven different motivations, learning situation motivation shows the greatest difference; moreover, students' motivation increases with the advancement of academic years. In addition, there are significant differences in strategy use by differently motivated students; cognitive strategy is positively and highly correlated with interest motivation while meta-cognitive strategy is negatively correlated with context motivation.

**Keywords:** Motivation change, Strategies use, Correlation

## **1. Introduction**

When asked "Why do you study English?" some students might say: "I study English because I like American films, or I plan to study abroad in the future, or I want to get a better job in a foreign company." These answers are all related to what drives learners to study English, and this could be explained as language learning motivation. Moreover, when again asked "How do you usually study English?" some students would probably reply: "I study English by memorizing many vocabulary item, or by watching a lot of English movies, or by chatting with native speakers." Then, those answers are all about the methods or measures learners use to learn English, which is understood as language learning strategies. Language learning motivation and strategies are all vitally important to foreign language studies for every learner; accordingly, an increasing number of L2/FL researchers indicated that both learning motivation and learning strategies play important roles in successful language learning, which suggest a need to investigate the links between these two significant characteristics of learning (Ellis, 1994). Motivation is the drive, and strategy is the method. On the basis of a survey of the Chinese database of academic papers ([www.cnki.net](http://www.cnki.net)), it could be summarized that some research can be found on the relationship between learners' foreign language learning strategies and motivation, mostly focusing on non-English major university students in China; however, few studies have focused on motivational changes and the strength of correlation between specific motivation and strategies among Chinese English-major students. In view of this fact, this research is aimed to investigate how the motivation changes among English majors of different grades in China and which motivation and which learning strategies correlate with each other closely among Chinese university students. It aims to provide specific pedagogical implications and suggestions for teachers and learners for their effective language instruction and learning.

## **2. Literature review**

### **2.1. English learning motivation**

Most SLA researchers regard motivation as a key factor in L2/FL learning (Xu, 2011). Dornyei (1998, p. 117) stated that "Motivation, as one of the key factors that influence the

rate and success of second/foreign language learning, provides the primary impetus to initiate learning the L2 and later the driving force to sustain the long and often tedious learning process". Dörnyei defined language learning motivation as "What moves a person to make certain choices, to engage in action, to expend effort and persist in action" (Dörnyei & Ushioda, 2010, p. 3.), and he divided motivation into three levels: language level, learner level and learning situation level.

Gardner defined (1985) language learning motivation as efforts plus desire to achieve the goal of learning the language plus favorable attitudes toward learning the language. Gardner and Lambert (1997) divided language learning motivation into two categories: integrative motivation and instrumental motivation. Integrative motivation is about learning in a way that involves the culture of the target language, and instrumental motivation is about learning English as a tool to achieve the learners' purposes (Gao, 2003, p. 29). Previous studies on Chinese students' motivation mostly adopted the classic motivation framework by Gardner and Lambert, or by Dörnyei to investigate the relationship between motivation and achievement or motivation and other influencing factors (Gao, 2003, p. 30).

Based on the classic theories and frameworks by foreign scholars, Gao (2003) summarized and investigated seven types of motivation in Chinese students in the Chinese learning context, which created a new view and evidence for researching and teaching Chinese students for scholars. Achievement, information media and personal development scales are similar to Gardner's instrumental motivation, and cultural interest and social responsibility scales are like Gardner's integrative motivation. Going abroad scale could be instrumental or integrative according to students' purposes for either studying abroad or immigration abroad. The context scale should be an independent type, which is close to Dörnyei's learning situation level.

## **2.2. English learning strategies**

Ellis (1985) argued that language learning strategy use is considered a key process in SLA. Then, Oxford (1990) also stated that strategies are particularly important for language learning "because they are tools for active, self-directed involvement, which is essential for developing communicative competence". Furthermore, Wen (1995) pointed out that a series of studies on foreign language teaching show that if other conditions are the same, the differences in using strategies play a key influence on language achievement.

As far as the definition of language learning strategy is concerned, there are different versions by different scholars. Chamot (1987) gave a definition of language learning strategies as techniques, approaches or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information. In addition, O'Malley and Chamot (1990) proposed that language learning strategies are the special thought behaviors of processing information that individuals use to help them comprehend, learn, or retain new information. However, later Oxford defined language learning strategies as specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (1990, p. 8), and she also divided strategies into two major categories and six subcategories: direct (memory, cognitive and compensation) and indirect (metacognitive, affective and social). Oxford's classification has been regarded as the most comprehensive one of language learning strategies (Ellis, 1994) and has also been viewed as superior in accounting for the variety of strategies reported by language learners (Hsiao & Oxford, 2002; Chamot, 2004).

## **2.3. Relation between motivation and strategies**

Many empirical studies have been conducted to investigate the relationship between language learning motivation and strategies (Khamkhien, 2010). Motivation is a necessary component

of strategic behavior and a precursor to strategy use (Weinstein, et al., 1988). Research in language learning strategies suggested that several factors could influence strategy use; however, motivation is regarded as the most important one (Gardner, 1985). Motivation has always been considered as a critical factor affecting strategy choice (Ellis, 1994). The type of motivation may also influence strategy choice (Ellis, 1994). The effective use of learning strategies may sustain motivation in language learning (Vandergrift, 2005). Oxford and Nyikos (1989) found that motivation is the most important factor that affects the choice of learning strategies. So far, a large number of studies proved the close relationship between language learning motivation and learning strategies (Ellis, 1994; Wen, 2004; Xu, 2011); however, in the Chinese context only a few studies researched the changes in motivation among Chinese university students, especially English-major students. Moreover, few researchers studied the relation between motivation and strategies from the perspective of motivational changes of students. This study is to give new insights into English learning and teaching to Chinese students and teachers.

#### **2.4. Research questions**

Based on the literature review, the research questions are proposed as below.

(1) Are there any differences in the use of learning strategies among students in different years?

(2) Are there any differences in motivation among students in different academic years? If yes, how does the motivation change as students study in different years?

(3) Are there any differences in use of learning strategies among students with different overall motivation?

(4) Which learning strategy is most closely related to motivation among Chinese English-major students?

### **3. Methodology**

#### **3.1. Instrument**

A quantitative research design was adopted in this study to investigate the trends of learning strategies and motivations and the correlations between them among Chinese university students. The questionnaire consisted of three parts. The first part was about personal information, such as gender, age, school year, and score at the National English exam. The second part investigated students' motivation; professor Gao Yihong's Motivation Type Questionnaire was used, which consists of 30 items distributed across seven scale. The third part measured students learning strategies; Oxford's SILL 7.0 was adopted, but only three scales with 32 items were selected. Two direct strategies (memory and cognitive) and one indirect strategy (meta-cognitive) were chosen to keep the questionnaire relatively short. The Cronbach  $\alpha$  scores of each scale (motivations: interest=0.815, achievement=0.703, context=0.8, abroad=0.69, responsibility=0.725, development=0.728, media=0.482; strategies: memory=0.804, cognitive=0.875, metacongntive=0.895) show that the instrument is reliable, indicating that different items of each scale were measuring the same underlying construct.

#### **3.2. Participants**

262 English-major students at Xi'an International University were invited as research participants, with 24 boys and 138 girls. Among them, there are respectively 73 in year one, 37 in year two and 52 in year three. During their high school, 126 students specialised in arts, while 36 students chose science orientation At the National University Entrance Exam for English subject (total score=150), 27 students got more than 120 points, 91 students got more than 100, and 44 got fewer than 100.

### 3.3. Data collections and analysis

Data was collected with the help of a smartphone application. The link of the smart phone questionnaire was sent to the students by their teachers in the classroom before class, and participants submitted their answers online after the completion of the questionnaire. Then, the data was downloaded and saved as an Excel file to be read in SPSS. After the data collection, SPSS 22.0 was used to analyze the data according to the research questions. Descriptive analysis and ANOVA were used to investigate the differences of strategies use and motivation among Chinese English-major students. T-tests were used to find the differences in the use of learning strategies among students with different overall motivation. Correlation analysis was carried out to investigate which learning strategy is closely related to motivation among English major Chinese students.

## 4. Results and discussion

### 4.1. Differences in the use of learning strategies among students in different years

Results of the ANOVA test show that there is no significant difference in the use of strategies among students in different years. Although the mean values in Table 1 seem to indicate minor differences, these are statistically not significant, so there is no difference in strategy use across the different years of study for either of the strategies.

Table 1 *Mean values of strategy use of students in each year*

	No. of students	Mean value	Std. deviation	F	Sig.
Memory year 1	73	3.1811	.65430		
year 2	37	3.0300	.40203		
year 3	52	2.9893	.53548		
Total	162	3.0850	.57135	1.957	0.145
Cognitive year 1	73	3.4354	.64332		
year 2	37	3.2587	.46424		
year 3	52	3.3159	.51921		
Total	162	3.3567	.56940	1.386	0.253
Metacog year 1	73	3.4307	.71024		
year 2	37	3.3273	.67938		
year 3	52	3.2415	.59071		
Total	162	3.3464	.66797	1.243	0.291

In addition, the mean values of each strategy shown in Table 1 suggest that neither of them is used frequently by students. Mean values around 3.0 mean that strategies are sometimes used by students. However, from the total mean values of each strategy, it can be seen that cognitive and metacognitive strategies are relatively more often used than memory strategy by Chinese English-major students.

### 4.2. Changes of the motivation in different years

Based on the ANOVA test, there is a significant difference in learning context motivation across the years. Out of the seven different motivations, learning context motivation shows the greatest difference. Mean values are respectively 2.56 for year one, 2.68 for year two, 3.03 for year three. There appears to be an increasing trend among students as they step up into a higher level of study.

Table 2 *Mean values of the different year students in learning situation motivation*

	No. of students	Mean value	Std. deviation	F	Sig.
year 1	73	2.5644	.66778	6.449	0.002
year 2	37	2.6811	.72028		
year 3	52	3.03.8	.80136		

The mean values in Table 2 clearly indicate that with the advancement of the academic years, the motivation increases, as well. It is maybe due to different reasons. Firstly, other motivations are relatively stable, while situation/context is changeable and dynamic. That is why professor Dornyei introduced the learning situation dimension in his motivation model in addition to the language level and the learner level. Second, with the advancement of their school years, students would take more major courses, so their motivation would be stimulated by their preferred courses, teachers or class studying atmosphere because those courses are more interesting and practical for their future, those teachers are their example to follow, and they have to catch up with classmates, for example.

#### 4.3. Difference in use of learning strategies among students with different strength of motivation

Students are divided into two groups (high motivation and low motivation) by the mean values of all students' total motivation in three years. If the students' motivation is below the mean total motivation (22.67), they are assigned to the low motivation group; on the contrary, students above 22.67 belong to the high motivation group. Through T-tests, it could be found out that there are significant differences in strategy use by differently motivated students. The mean is 3.6 in cognitive and meta-cognitive strategies for the high motivation group. From the data of Table 3 below, it is easy to see that the more motivated students are, the more frequently students use learning strategies. Students with high motivation used learning strategies significantly more frequently than those with low motivation.

Table 3 *Mean values of strategies of students with different strength of motivation*

	No. of students	Mean value	Std. deviation	F	Sig.
Memory	low motivation	89	2.8777	3.931	0.000
	high motivation	73	3.3379		
Cognitive	low motivation	89	3.0979	0.030	0.000
	high motivation	73	3.6722		
Metacog	low motivation	89	3.1011	2.818	0.000
	high motivation	73	3.6454		

Moreover, for both the highly and lowly motivated students, the most often used learning strategies were cognitive (mean=3.0 for low, 3.67 for high) and meta-cognitive ones (mean=3.1 for low, 3.64 for high). Memory strategies were used the least frequently. It indicates that not only highly motivated but also lowly motivated students dislike memory strategies.

#### 4.4. Correlation between motivation and strategies among students

The correlation analysis performed on the full sample shows that some variables are significantly and positively correlated, and these are displayed in Table 4 below. The highest positive correlation can be found between cognitive strategies and interest motivation

( $R=0.647$ ,  $P=0.00$ ), while meta-cognitive strategies are negatively correlated with context motivation ( $R=-0.167$ ,  $P=0.034$ ).

Table 4 *Correlation between strategies and motivations*

	Interest	Achievement	context	abroad	responsibility	development	media
memory	.548**	-.104	-.116	.341**	.312**	.294**	.308**
cognitive	.647**	-.090	-.070	.357**	.428**	.396**	.411**
Metacog	.563**	-.145	-.167*	.315**	.457**	.425**	.394**

All strategies are correlated with different motivations except achievement-driven motivation. It seems that the more interested students are, the more strategies they would use. Students who have a strong motivation to go abroad will use different learning strategies. However, achievement-driven motivation has no correlation with any learning strategy, which is puzzling. Meta-cognitive strategies are negatively correlated with learning context motivation, probably because the more students depend on third party element, teachers, the less they will use meta-cognitive strategies to plan their studies for themselves.

## 5. Conclusion

According to the research above, three main findings could be briefly concluded: first, for the English program students at this Chinese university, learning strategies did not display significant differences. Out of the seven different motivations examined, learning situation motivation showed the greatest difference across the different years; with the advancement of academic years, the motivation increased as well. Second, there were significant differences in strategy use by differently motivated students, which means the more motivated students were, the more frequently learning strategies were used. Third, cognitive strategies were positively and highly correlated with interest motivation while meta-cognitive strategies were negatively correlated with context motivation.

Consequently, corresponding to the main findings above, three pedagogical suggestions are put forward. To start, teachers should flexibly adjust the teaching and learning context to keep students' motivation to learn English, for example, organizing group activities, recommending their favourite teaching materials, matching studying pairs. Besides, teachers should not only teach the specific language knowledge but also introduce effective learning strategies to less motivated students. Last, teachers should also increase students' learning interest motivation so as to make students fully use cognitive strategies in English learning.

In this study, there are some limitations which need improving in the future research. Interviews and think aloud could probably be used in the methodology to triangulate the results validly and reliably. Moreover, a larger samples of participants will be needed and autonomy should be also included in the future research.

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