A Correlational Study of Language Learning Motivation and Strategies of Chinese Undergraduate

UNE ÉTUDE CORRÉLATIVE SUR LA MOTIVATION DE L'APPRENTISSAGE DE LANGUE ET LA STRATÉGIES DES ÉTUDIANTS CHINOIS DU PREMIER CYCLE

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Abstract: Since the 1960s the focus of research in second language acquisition has shifted from teaching to learning, and language learners become the center of language teaching and learning. As to learners, language learning motivation and language learning strategies are two main research topics. The present study investigates Chinese college students' motivation types and strategy use as well as the relationships between language learning motivation and language learning strategies. The study aims to show whether motivation is related to learning strategies, and to shed light on the study of learning motivation, learning strategies, and pedagogy.
Key Words: language learning motivation; language learning strategies; gender; correlation

Résumé: Depuis les années soixante, l'objet de recherche dans l'acquisition de deuxième langues est passé de l'enseignement à l'apprentissage et les apprenants deviendront le centre de l'enseignement et de l'apprentissage de langue. En ce qui concerne les apprenants, la motivation de l'apprentissage de langue et la stratégies d'apprentissage sont deux thèmes principaux de recherche. La présente étude examine les types de motivation des étudiants chinois et leur stratégie d'apprentissage ainsi que les relations entre la motivation de l'apprentissage de langue et la stratégie d'apprentissage. L'étude vise à montrer si la motivation est liée à des stratégies d'apprentissage, et à éclairer l'étude de la motivation d'apprentissage, les stratégies d'apprentissage et la pédagogie.
Mots-clés: motivation de l'apprentissage de langue; stratégie d'apprentissage; sexe; corrélation

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1. INTRODUCTION

With the development of research on psycholinguistics and foreign language teaching, more attention has been paid to the learners' characteristics. The reason lies in the fact that language learners vary in many ways, that they are affected by many social and psychological factors, and that language is a skill that can only be acquired through their efforts.

There is veritable plethora of individual learner variables that researchers have identified as influencing learning outcome. These variables mainly include three areas: learning styles, learning strategies, and affective variables (e.g. motivation, self-efficacy, tolerance of ambiguity, and anxiety). As for how language learning is affected by learners' differences, Ellis (1997: 473) provides a frame work for investigating individual learner differences (Figure 1).
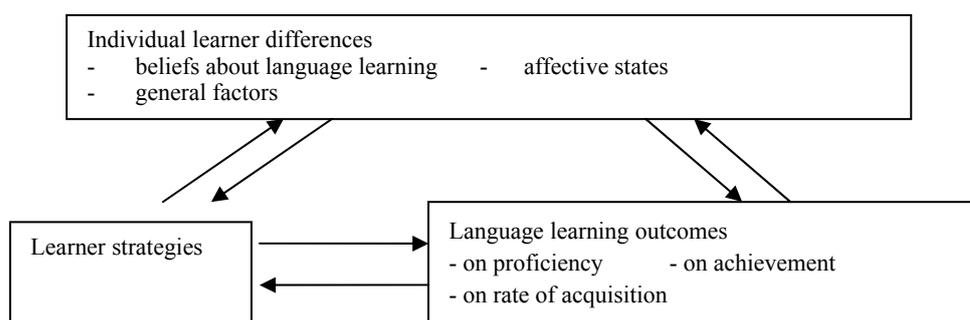

Figure 1: A Framework for Investigating Individual Learner Differences

From the framework, it can be seen that language learning outcomes, individual learner differences and learner strategies affect each other. Among the individual learner variables, language learning motivation and language learning strategies are two main factors that affect the study of foreign/ second language. Since the 1990s, many researchers have done some studies on the interrelationship between language learning motivation and the use of language learning strategies (MacIntyre and Noels, 1996; Schmidt, Boraie, and Kassabgy, 1996; Schmidt and Watanabe, 2001). The results indicate that motivation is significantly correlated with strategies. However, few, if any, studies have been conducted to investigate the relationships of the two among Chinese college students who learn English as a foreign language. In order to bridge this gap, an exploratory study is carried out to investigate the relationships between language learning motivation and language learning strategies.

2. METHODOLOGY

2.1 Participants

The participants of this study were 300 sophomores in Shandong Jianzhu University (SDJZU), a public university at the provincial level. They came from 6 classes with an average of 50 students in each class majoring in business, mechanics, electricity, environmental engineering, heat energy engineering, and civil engineering. All the participants had studied English for at least 6 years before entering the university in September 2008.

2.2 Instrument

The study used a questionnaire including three parts: individual background, motivation, and Strategy Inventory for Language Learning. As both the participants and the researcher are Chinese, the data collection, carried out in May 2010, was done in Chinese. The contents of the questionnaire are summarized as follows:

Part One is designed to elicit personal data from the participants. It includes items such as major, gender, age, family background, time when the participants began to study English, education of the participants' parents and the scores of entrance examination of English to university. Part Two consists of 30 items concerning students' motivation in the form of a five-point Likert scale from "strongly disagree" to "strongly agree" to check the participants' motivation types. The scales are designed according to Gao Yihong (2003). According to Gao Yihong, Cronbach's alpha of the questionnaire is 0.84. Part Three is composed of 50 objective questions concerning English learning strategies. This part is designed according to Strategy Inventory for Language Learning (SILL Version 7.0 ESL/EFL) (Oxford, 1990), which is an influential questionnaire listing a set of strategies for English learning and sets a solid foundation for other researchers in this area.

3. RESULTS

3.1 Motivation Types

The results indicate that the participants responded with a medium degree of motivation in learning English. The mean of overall motivation is 3.02, with a standard deviation of 0.27. The means of 24 items (80% of the overall items) are in the middle range (mean 3.4-2.5), while 5 items (16.7% of the overall items) fit in the high range (mean 5-3.5). The remaining 1 item is in the low range (mean 2.4-1.0).

Concerning three types of motivations, most participants have strong instrumental motivation (mean=3.18, SD= .31). The mean score of situational motivation is in the middle range (mean= 2.82, SD= .59). Compared with the participants' instrumental and situational motivations, cultural motivation gets the lowest mean score (mean= 2.71, SD= .42). With regard to seven sub-types of motivations, the mean score of personal development is the highest while that of going abroad is the lowest. The rank orders of the other five motivations are achievement, information media, social responsibility, learning situation, and internal interest.

3.2 Strategy Use

The results indicate that there are differences in levels of use by learning strategy category, and mean score of overall strategies falls within the range from 2.50 to 3.40, which is defined by Oxford (1990) at medium use.

Moreover, in order to investigate the frequency of different categories of strategies that participants employ, the mean of each category is calculated. The mean of overall strategies is moderate (mean= 2.87, SD= .32) out of a possible 5. The means of individual items range from 3.87 to 2.19. The results indicate that the most frequently used strategy category is compensation strategy (mean=3.21, SD= .49), followed by metacognitive strategy (mean=2.93, SD= .49), cognitive strategy (mean =2.83, SD= .41), affective strategy (mean= 2.80, SD= .50), and memory strategy (mean =2.77, SD= .42). The least frequently used strategy is social strategy (mean= 2.75, SD= .46).

3.3 Correlation of Learning Motivation with Strategies

To find the correlation, Spearman's rho is computed to investigate the correlation between three types of motivations and six categories of strategies. The result shows that there is a higher correlation between overall motivation and overall strategies (.414**). That is to say, the more motivated the learners are to learn English, the more frequently they report using strategies. Table 1 indicates that overall motivation has significant correlations with six categories of strategies. Especially, cognitive strategies are highly correlated with overall motivation (.344**).

Table 1: Correlation Coefficients between Overall Motivation and Learning Strategies

Strategies	Motivation	Strategies	Motivation
Overall strategies	.414(**)	Metacognitive	.284(**)
Memory	.284(**)	Affective	.277(**)
Cognitive	.344(**)	Social	.261(**)
Compensation	.240(**)		

**p<.01

Table 2 indicates that SILL is also correlated with cultural motivation and instrumental motivation. However, there is no significant correlation between situational motivation and SILL.

Table 2: Correlation Coefficients between Overall SILL and Motivation Types

Motivation Type	SILL
Cultural Motivation	.547(**)
Instrumental Motivation	.259(**)
Situational Motivation	.24

**p<.01

So far, the possible correlations between language learning motivation and language learning strategies have been computed. Though most of the Spearman coefficients are less than half, suggesting relatively weak relationships, they are still interesting, and, to some degree, meaningful in the sense that it is only a tentative study aiming at a group of learners instead of individuals.

In summary, overall motivation is correlated significantly with the six categories of strategies as well as with SILL. Among the six categories of strategies, the correlations of overall motivation with cognitive strategies, social strategies and memory strategies are meaningful. Among the three types of motivations, only the correlations of cultural motivation with SILL as well as six categories of learning strategies are meaningful.

4. DISCUSSION

4.1 Motivation Profile of Chinese College Students

The results demonstrate that Chinese college students mainly have three types of motivations: cultural, instrumental and situational. The three types include seven sub-types (internal interest, achievement, learning situation, going abroad, social responsibility, personal development, and information media). Among the three types of motivations, instrumental motivation is the first one that most students have. The results are consistent with the conclusion of Wang Chunming (1989) and support Dörnyei's (1990) conclusion that instrumental motivation is more relevant to foreign language learners than to those learning a second language.

Situational motivation is isolated from instrumental and cultural motivations. It tests "situational level" of classical expanding framework (Dörnyei 1994). 12% of the participants get high mean scores over 3.50. 58.7% get medium scores. It shows that participants have relatively strong situational motivation. The last and the lowest is cultural motivation. Only 5.7% of the participants get the high scores above 3.50. 69% get the medium scores. It indicates that non-English major students show weak interest in foreign cultures.

4.2 Profile of Strategy Used by Chinese College Students

Concerning the type and frequency of learning strategies used by Chinese college students, the results indicate that in general Chinese college students are moderate users of six categories of learning strategies included in SILL. They can be listed, in the order of frequency as follows: compensation strategies, metacognitive strategies, cognitive strategies, affective strategies, memory strategies, and social strategies. The results are consistent with those of Jiang Xiaohong (2003) and are different from Li Jiongying's (2002)

conclusion that the strategies most frequently used by Chinese college students are memory strategies, then cognitive strategies, metacognitive strategies, compensation strategies, social strategies and affective strategies in turn. The mean score of overall strategies is 2.87, indicating that the frequency of strategy use of the participants is not high. The mean scores of most strategies are in the medium range (2.5-3.4). Only the mean score of compensation strategies is over 3.

The above findings that students use learning strategies at a medium frequency level rather than at a high level match the result of a similar study by Zhang Wenpeng (1998), which suggests Chinese students use limited strategies at a medium frequency level. The frequencies in the present study appear to be lower than those found with other samples of learners (Ehrman and Oxford, 1989; Oxford et al. 1992; Oxford and Ehrman, 1995) which showed that 40% of the strategies were used at a high frequency and the other 60% at a medium frequency. That is to say, when compared with the participants in other SILL studies, the participants in this study use strategies less often than second language learners who are involved in speaking the new language for daily survival.

4.3 Correlations between Language Learning Motivation and Strategies

The results of the study show that overall motivation is correlated significantly with overall strategies, which means that the more motivated the learners are to learn English, the more frequently they report using strategies. The results are in accordance with studies carried out by some researchers (MacIntyre, 1994; Oxford and Ehrman, 1995; Okada, Oxford and Abo, 1996; Schmidt et al. 1996). However, as to the relationships between the three types of motivations and overall strategies as well as six categories of strategies, it is found that only situational motivation is not correlated with overall strategies and each category of strategies. Further statistical analyses with ANOVA demonstrate that although cultural motivation and instrumental motivation are both significantly correlated with each category of strategies, only the correlations of cultural motivation with six categories of strategies are meaningful. The results may be caused by the classification of motivation made by Gao Yihong (2003).

5. IMPLICATIONS

5.1 Pedagogical Implications for Motivation

The results indicate that language learning motivation of Chinese college students is manifold. Various motivations affect learning enthusiasm. All the seven sub-types of motivations affect the effort that students make, but the direction and degree of effects are different. Therefore, teachers should pay more attention to the motivation which can promote and intensify language learning according to students' concrete situation.

Internal interest is an important factor stimulating learning enthusiasm. It can promote the learning effort of students and really affect their purpose of language learning. Consequently, teachers should foster students' interest in the target language. Achievement is another kind of motivation that most students have because they must pass one essential exam − College English Test. They show strong achievement motivation. However, achievement motivation affects students' effort and makes them have wrong attitudes to language learning. Therefore, teachers and educational departments should not make test as the main method to stimulate students' language learning enthusiasm.

The improvement of teaching situation can also affect language learning. Textbooks, teachers and syllabi have direct effects on language learning, especially of students who make little effort. Consequently, teachers should make good use of situational factors to stimulate students' learning interest. Teachers should also put the practice of improving students' interest in the culture of target language as the main task of teaching and testing, and use multimedia to improve students' enthusiasm.

5. 2 Pedagogical Implications for Strategy Use

The low overall mean of strategy use in the current study suggests that Chinese college students do not apply the full range of appropriate strategies and are not aware of the available strategies that they use.

Therefore, it is important for teachers to raise students' awareness of the broad range of strategy options available to them; it is also important to introduce learners to the variety and versatility of strategy use by providing successful learners' experiences. The resulting awareness and expansion of strategy use may improve learners' motivation and, may help them to function better in language learning.

As regards pedagogical implications for each strategy category, compensation strategies are reported as the most frequently used strategies in the current study. However, the overall mean of compensation strategies is still low. Therefore, this result might suggest that compensation strategies should be more emphasized. Teachers should encourage learners to overcome their learning obstacles and compensate for the absence of language knowledge by the use of strategies such as guessing intelligently, predicting responses, and choosing a familiar topic.

The next most frequently used strategies in the current study are metacognitive strategies. Teachers should train learners to effectively use metacognitive strategies such as planning, organizing, and evaluating their own learning. The next moderately used strategies are cognitive strategies. Cognitive strategies are extremely important in learning languages because they involve deep processing in which mental connections are built between learners' new information and their existing knowledge. Therefore, cognitive strategies may be the most powerful strategies for these students to learn in order to improve their English achievement. Teachers should introduce these techniques to students who may need a fundamental change in their language learning.

Affective strategies are used infrequently by students which help learners to keep emotional balance on language classroom. The infrequent use of affective strategies reflects that students often relate language learning to internal intellectual abilities rather than external factors. As a result, they are not aware of the power of affective strategies. Teachers should encourage students to participate in more activities and obtain more experiences. Memory strategies have the second lowest frequency. It implies that strategy training should emphasize more memory strategies, such as specific techniques and systematic mnemonics. Teachers can demonstrate strategies such as using rhymes and groupings to memorize new vocabulary. The use of these memory strategies might help learners improve their mental processes in learning foreign languages.

The minimal use of social strategies suggests that in language classrooms teachers should offer learners a "language-learning-experience" environment as suggested by Oxford and Ehrman (1995), in which the use of authentic language interaction in role play and simulation is strongly encouraged.

5.3 Suggestions for Further Research

The current study has opened a number of avenues to further research. First, further investigation into the relationship between motivation and strategies can be done. By surveying more participants, the relationships between the two factors can be obtained. Second, further research should focus on the creation of a new motivation questionnaire based on Gao's and the modification of SILL. Researchers should further the investigation of motivation and strategy use of Chinese college students. Third, the current study, based on cross-section and correlation design, is not capable of definitely establishing causality between learning motivation and strategies. Although an investigation into the causal relationships between them is beyond the present study, considerable further research would be needed to establish causality. Further research might focus on an experimental paradigm or use repeated or new measurements to test causal relations.

6. CONCLUSION

In sum, this study provides a deep understanding of motivation type and strategy use of non-English major college students as well as the relationships of language learning motivation, language learning strategies and gender.

As to motivation, there are three types of motivations: instrumental, cultural and situational. The results show that most of the students have strong instrumental motivation because English is mainly a tool for Chinese students. Concerning the relationship between motivation and gender, female students show higher

means in three types of motivations than male students. However, there are no significant differences between male and female students except cultural motivation.

In terms of learning strategies, the study shows that most Chinese EFL students are aware of using learning strategies, but in different ways. In the choice of learning strategies, learners more often use compensation strategies, metacognitive strategies and cognitive strategies. On the other hand, they seldom use affective strategies, memory strategies and social strategies. This may be attributed to both internal and external influences. Chinese ideology of education, culture, circumstances, teaching methodology, and learners' psychological and emotional characteristics all work together to shape the strategies that students use. Further studies are necessary to establish how widespread this phenomenon is among Chinese speakers. With regard to the relationship between strategy use and gender, there are also no significant differences between female and male except compensation strategies.

The results show that motivation has significant correlation with strategies. Strong motivation generates both the necessity and desire for the employment of a wider range of strategies. In addition, cultural motivation and instrumental motivation are correlated with the six categories of learning strategies. However, only the correlations of cultural motivation with overall strategies and six categories of learning strategies are meaningful. The results indicate that learning motivation and strategies in foreign language learning have some relationship but it might not be a causal-and-effect issue.

In conclusion, motivation does have an important influence on learners' use of learning strategies. This study gives more useful information about motivation and strategies of Chinese college students and provides a lot of pedagogical implications for foreign language teachers, learners and researchers. At the same time, the relationship of the two factors is complex, and needs more research.

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