

# A Study of the Relationship between English Self-concept and Language Learning Strategies

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**Abstract**—The present study concentrated on the relationship between self-concept and language learning strategies. Participants of the study were 157 students from one University in Shandong, China. Quantitative data was collected through two questionnaires. The first one was the revised Chinese version of self-concept scale modified by Pan (2003) from Marsh's (1992) SQDII. Another inventory based on Oxford's classification system of learning strategies (SILL) was used to assess learner's strategy use. By the reliability analysis, it was found that all these coefficients were significantly high, and the two questionnaires were reliable respectively. Based on the detailed analysis of data, some major findings through statistical analysis of SPSS 13.0 were summarized as follows. First of all, the subjects' English self-concept was medium, and the subjects' English pronunciation self-concept was better than their general English self-concept and English speaking self-concept. Second, gender had no significant effects on the general English self-concept and English speaking self-concept. Finally, in terms of the relationship between English self-concept and language learning strategies, by Pearson correlation coefficients and multiple regressions, it was concluded that general English self-concept, English speaking self-concept and English pronunciation self-concept had the highest correlation level with the cognitive strategy, and English pronunciation self-concept had the weakest correlation level with the memory strategy and compensatory strategy. The findings of the study imply that there are some pedagogical implications for English learning and teaching. At the same time, teachers should attach importance to enhancing students' English self-concept level in training their language learning strategies.

**Index Terms**—English self-concept, language learning strategies, relationship

## I. INTRODUCTION

### A. Background of the Study

Until now, more and more researchers have come to realize the importance of learning strategies and self-concept on ESL/EFL studies. However, the majority of previous studies on language learning strategies have focused mainly on one dominant modifiable variable, occasionally with reference to other unmodifiable variables such as gender and age. Meanwhile, individual learner variables interact with each other in the process of language teaching and learning, so it is necessary to have an overview on their interrelationships that are yet in shortage in reality.

Despite the fact that there have been empirical studies on factors that influence strategy use, and self-concept's influence on learning achievements, little has been done on the relationship between language learning strategies and English self-concept. Thus, more empirical ESL/EFL studies are in great need to explore such interrelationship, especially in different contexts. In recent years, second language learning strategies attract more and more researchers' (Bialystok, 1981b; Leino, 1982; Thomas & Gadbois, 2007; Watkins & Gerong, 1999; Wenden, 1991; William & James, 2002) attention. What makes them concern the aspect so much? According to Ellis (1994), learning strategies are the bridges that connect individual difference and environmental factors and the study results. The individual differences and environmental factors will decide the choice of learning strategies. Based on it, self-concept, as one factor of individual differences, will influence the choice of learning strategies. In Ellis's (1990) model of L2 acquisition, learning strategies play the mediating role between individual learner differences and learning outcomes. Individual learner differences (beliefs, affective states, general factors, and previous learning experiences) together with various situational factors determine the learners' choice of learning strategies.

During the past decades, researchers gave different definitions to self-concept from different perspectives. This study is based on the theory of Shavelson et al. (1976) who claimed that self-concept is "a person's self-perceptions formed through experience with and interpretations of his or her environment. They are influenced especially by evaluations by significant others, reinforcements, and attributions for the individual's own behavior" (p. 413).

Because Oxford's classification is perceived as most easily understood and the most readily accepted (Cheng Xiaotang & Zheng min, 2002), the present thesis is based on Oxford's classification of language learning strategies (LLSs). Oxford's (1990, pp. 17-22) taxonomy of LLSs is summarized in Table 1.1.

### B. Rationale for the Study

For learners, their optimal learning potential may be compromised in the presence of overly negative self-concept. Self-concept, as a dynamic and motivating set of attitudes held about oneself (Burns, 1979), is promoted as an important

and focal object within the experience of each individual because of its primacy, centrality, continuity and ubiquity in all aspects of behaviors, mediating as it does in both stimulus and response.

Self-concept has to do with a person's perceptions and evaluations regarding himself or herself. It is a basic requirement for successful cognitive and affective activity. According to Marsh (1990), self-concept is formed through experience with and interpretations of environment. It develops when we are children and gradually learn to identify a self as distinct from others. As we incorporate beliefs, attitudes and memories, new experience and ideas will be affected by the previously existing notion of who we are and by our need to protect this fragile self. In addition, an individual concept of self is especially influenced by evaluations from significant others, reinforcements, and attributions for one's behavior.

Among the factors that influence learners in language learning, learning strategies are important roles. According to Nunan (1991), one of the characteristics of the "good" language learner is an ability to reflect on and articulate the processes underlying their own learning. Effective learners are aware of the processes underlying their own learning and seek to use appropriate learning strategies to control their own learning (Jones et al., 1987). More effective learners differ from less effective ones in their use of strategies (O'Malley & Chamot, 1990). Students who are designated by their teachers as more effective learners use strategies more frequently, and use a greater variety of strategies than students who are designated as less effective.

Bialystok (1981b) found that Grade 10 and 12 learners of L2 French in Canada varied in the extent to which they believed that language learning involved formal as opposed to functional practice, and that this influenced their choice of strategies.

Wenden & Rubin (1987) also found that learners who emphasized the importance of learning tended to use cognitive strategies that helped them understand and remember specific items of language, while learners who emphasized the importance of using language employed few learning strategies, relying instead on communication strategies. Learners who stressed personal factors did not manifest any distinct pattern of strategy use.

Bialystok (1981) stated that aptitude was not as influential as learners' beliefs. However, it was possible that learners with enhanced decontextualized language skills (seen by Skehan (1989) as one aspect of aptitude) would be better able to talk about the strategies they used.

Leino (1982) pointed out that learners with high conceptual levels were better at describing their strategies than learners with low conceptual levels. It was possible, then, that learning strategies were related to that part of language aptitude shared with a general intelligence factor.

William and James (2002) pointed out that beginning readers' reported word identification strategies for identifying unfamiliar words in text were examined in relation to reading achievement, reading-related skills, and academic self-perceptions. Children who were participating in a three-year longitudinal study of reading acquisition in a whole language instructional context were placed in two groups according to their reported word identification strategies obtained towards the end of their first year of schooling. Results indicated that children who reported using wordbased strategies showed superior reading and reading-related performance, and reported more positive self-efficacy beliefs in reading and more positive academic self-concepts than children who reported using text-based strategies. The results were discussed in terms of predictions stemming from the different theoretical assumptions about reading acquisition that underlie the code-emphasis and whole language approaches to beginning reading instruction.

Although many researchers from home and abroad have made a lot of research to find out that there are significant differences of using learning strategies between the good learners and losers of examination, the research about individual and environmental factors' influences on learning strategies is little. In China, some research found out that English self-concept can influence learning strategies. Xu Jin and Zhao Jingbo (2006) conducted a survey among 598 medical sophomores of a medical university by using the self-concept questionnaire and strategy inventory of language learning. The results showed that self-concept had significant correlation with language learning strategies. It was concluded that during the training of language learning strategies, importance should be attached to enhancing English self-concept level.

Watkins and Gerong (1999) conducted a test about language of response and the spontaneous self-concept. Responses to the Twenty Statements Test were obtained from 166 Filipino secondary school children asked to respond either in English or Cebuano, their local language. Contrary to the cultural accommodation hypothesis, the respondents did not provide more independent self-references in the English language condition. Examination of responses indicated that when responding in English, the participants, particularly the males, were influenced by the school context. The females tended to provide more relational self-references.

Thomas and Gadbois (2007) examined students' self-esteem and self-concept clarity as well as their tendencies to employ deep- or surface-learning approaches and self-regulate while learning in relation to their self-handicapping tendencies and exam performance. Participants were 161 male and female Canadian, first-year university students. Participants completed a series of questionnaires that measured their self-esteem, self-concept clarity, approaches to learning, self-regulation and reflections on performance prior to and following their exam. The results were that self-handicapping was negatively correlated with self-concept clarity, deep learning, self-regulated learning and exam grades, and positively correlated with surface learning and test anxiety. Regression analyses showed that self-concept clarity, self-regulation, surface-learning and test anxiety scores predicted self-handicapping scores. Self-concept clarity,

test anxiety scores, academic self-efficacy and self-regulation were predictors of mid-term exam grades.

Previous studies have also shown that learners can not automatically know what strategies work best for them. For this reason, explicit strategy training, coupled with thinking about how one goes about learning and experimenting with different strategies, can lead to be more effective.

### C. Purpose and Significance of the Study

In this study, learners' self-concept and language learning strategies were discussed. It was well known that the learners' self-concept would not only influence their choice of activities that they undertook, but also affect the amount of effort that they prepared to expend and their level of persistence. Language learning strategies also had an effect on language learning.

The main objective of this study was to reveal the characteristics of Chinese non-English majors in terms of their self-concept on English learning and the learning strategies they used, and to investigate the way gender influenced self-concept and LLSs. Moreover, it aimed at studying the relationship between self-concept and LLSs. With regard to the relations between English self-concept and language learning strategies, the findings of the research can be in line with the hypothesis that positive self-concept contributes significantly to learning strategies, and learners with high self-concept might use the learning strategies better than those with lower self-concept and thus achieve better performance.

The results of the study can contribute to a better understanding of English self-concepts Chinese college non-English majors hold about themselves in English learning, and thereby help teachers find effective ways to stimulate and enhance them. Demonstrating the relationship between self-concept and language learning strategies can subsequently lead to better performance in English.

To begin with, the study on relationship between self-concept and LLSs promotes a new perspective to research into LLSs and can enrich research on second/foreign language learning strategies and self-concept. In addition, the findings of this study might serve as a foundation for further studies on EFL strategy instruction and self-concept.

Second, this study can help Chinese non-key university English teachers better understand the characteristics of EFL students' self-concept and strategy use. The results on the relationship between self-concept and LLSs can instruct teachers to teach students different LLSs according to their self-concept. It is beneficial to EFL learning and teaching.

Third, the research might provide some theoretical implications for psychological research into the nature of self-concept.

All these considerations lead to the following research questions:

- (1) What are the characteristics of Chinese non-English majors in terms of their self-concept on English learning and the learning strategies they use in English learning?
- (2) If yes, what roles does gender play on the development of self-concept and on the use of specific strategies?
- (3) What is the relationship between self-concept and learning strategies of Chinese non-English majors?

## II. METHODOLOGY

The current study involved 157 students majoring in computer science and international trade and business in Shandong University of Finance. The sources of data of the study came from two questionnaires, one on English self-concept and the other is on language learning strategies. The questionnaire on self-concept is created by modifying the Academic Status Quo of High School Students (ASQHSS) developed mainly by Pan (2003) which itself is substantially based on the Self Description Questionnaire II (SDQII) by Marsh (1992). The second questionnaire is the measure of language learning strategies: SILL. All the items represent the concrete strategies used throughout the whole learning process rather than being associated with specific task (Cohen, 1998). The questionnaires were administrated during normal class time. Only two students did not respond to the questionnaires properly because of the contradiction. As a result, 155 questionnaires were valid and used for statistical analyses.

Before the statistical analyses were conducted, responses to all negatively worded items in English self-concept scale were first reversely scored so that higher scores reflected higher self-concept. Then the total scores of each subject's general English self-concept, English speaking self-concept, English pronunciation self-concept, were computed respectively. At the same time, the scores of each subject's learning strategies were put into the computer. Then all the related data were put into the computer and statistical analyses were conducted with SPSS 13.0.

As to the first research question, descriptive statistics was conducted to find out the overall situation of all participants' self-concept and learning strategies. Then an independent samples t-test was carried out to identify whether there were significant differences in the self-concept between males and females. Similar statistical procedures were used to analyze the data obtained from the SILL. Finally, the Pearson correlation and regression analysis were conducted to reveal whether there was a significant relationship between the self-concept and the use of learning strategies.

## III. RESULTS AND DISCUSSIONS

### A. Characteristics on Self-concept and LLSs

As shown in Table 3.1, the mean scores (from 3.450 to 3.711) of both the specific and global measures of English self-concept indicated that Chinese college non-English majors did not hold high English self-concept. The mean scores of English pronunciation self-concept were found to be higher than those of English speaking self-concept and English general self-concept. So it meant that among the non-English major students' English self-concept, the level of English pronunciation self-concept was the highest, followed by the level of general English self-concept, and that of English speaking self-concept was the lowest.

The SPSS 13.0 was utilized to analyze the subjects' scores in the SILL. The discussion on each strategy set included the minimum, maximum, mean scores and standard deviation.

It was found that eleven strategy sets were categorized as the group of medium use. Among them, ten strategy sets belonged to memory, cognitive, social and affective strategies. This suggested that these strategies were used sometimes by the subjects. The strategies of overcoming limitations in speaking, centering one's learning, and self-evaluation obtained mean scores higher than 3.500, which meant these strategies were used frequently by the subjects (Table 3.2). It seemed that students in this college preferred to employ compensatory strategies and metacognitive strategies, because the mean scores of the two strategies were above 3.500. The compensation category had the highest mean scores. On the other hand, the mean scores of translation and transfer in cognitive strategy and cooperation in social strategy were all lower than 3. It indicated that these strategies were the least frequently used.

### B. *The Effects of Gender on Self-concept and LLSs*

As shown in Table 3.3, the analysis provided convincing evidence that male and female learners differed in their global English, speaking and pronunciation self-concepts. The mean of females' general English self-concept (3.8000) was higher than that of males' (3.566). To a certain extent it meant that female learners had more positive general English self-concept than the male. And the means of females' specific-domain English self-concept were also higher than those of males, which implied that females had more positive English self-concept in the facets of speaking and pronunciation than males. However, there was only statistically significant gender difference in the pronunciation self-concept (As shown in Table 3.3,  $p=0.018<0.05$ ). It indicated that females' pronunciation self-concept was significantly higher than males. Therefore, by the statistical analysis, no substantial impacts of interaction could be observed on all dependent variables.

The independent samples t-test was used to examine the role of gender difference in learning strategies. Table 3.4 shows that the P values of eleven strategy sets did not reach the significant level ( $p<0.05$ ) which indicated gender difference had a weak relation with learning strategies. But three strategy sets, as shown in Table 3.4, strongly relate to gender difference. Female students were found to more frequently use the strategies of centering one's learning, planning & organizing and empathy than male students. Generally speaking, gender had no significant effects on LLSs.

### C. *The Relationship between English Self-concept and LLSs*

In the study, the relationship between English self-concept and LLSs is the key question. Thus this part discussed the relationship in detail and by correlation analysis, more results were found.

#### 1. Results of Correlation Analysis

In this study, Pearson correlation coefficients were computed to determine the degree of association between English self-concept and language learning strategies. General English self-concept, English speaking self-concept and English pronunciation self-concept had the highest correlations with the cognitive strategy, with values of  $r=.523$ ,  $r=.478$  and  $r=.384$  respectively. Among them, English pronunciation self-concept had the lowest correlations with the memory strategy ( $r=.189$ ) and compensatory strategy ( $r=.220$ ). General English self-concept had higher correlations with six language learning strategies, comparing with English speaking self-concept and English pronunciation self-concept. The matrix of correlation coefficients between English self-concept and language learning strategies was shown in Table 3.5, which showed that all of the correlations were considered to be statistically significant.

#### 2. Results of Regression Analysis

In this study, the three aspects of English concept were treated as independent variables while the fourteen sets of strategies were considered as the dependent variables. That was to say, the fourteen sets of strategies were used as outcome measures in separate regression analyses, with the three aspects of English concept initially available to predict the language learning strategies. Results from Table 3.6 were seen as the powerful predictor on dependent variables. It showed that English general self-concept and two specific English self-concepts (speaking and pronunciation) were found to be significantly correlated with some language learning strategies.

Table 3.6 was just summary of the significant results of relationship between self-concept and language learning strategies. The author chose the four sets of learning strategies with the highest coefficients in three self-concepts respectively, because in each self-concept, highly-correlated strategy sets can specify the relationship between self-concept and language learning strategies.

As for general English self-concept, it correlated significantly to the strategies of centering one's learning, practicing, taking one's emotional temperature and planning & organizing. First, among them, it had the highest relationship with strategies of centering one's learning (.525). General English self-concept referred to global understanding of his or her English ability or knowledge. Second, when students had high assessments to their global English level, they were willing to spend more time practicing to get their higher expectation. So the general English self-concept correlated

significantly to practicing strategy (.515). Third, the strategies for taking one's temperature dealt with handling one's emotion state which included activities like writing diaries, sharing feeling with others and being aware of pressure on health. English learners, marked with a tendency for organizing and controlling, would use these strategies to minimize the influence from negative feelings. Finally, the planning and organizing strategies here referred to arranging a comfortable environment for learning, making plans ahead for weekly study and seeking personal goals in learning tasks. It was not surprised to see that students with the high general English self-concept would develop these strategies to arrange their own learning.

As for English speaking self-concept (ESSC), there were significant relationships between ESSC and the strategies of practicing, cooperation, encouragement, and overcoming limitations in speaking. Firstly, ESSC had highest correlation with practicing strategy (.520). Practicing was a good way to improve students' English speaking ability while students with high ESSC had more confidence to practice and had ability to put more time to practice. Secondly, strategy of cooperation was second highly correlated with ESSC (.442). When students with high consciousness in their English speaking were talking with people, they would naturally employ these strategies in communication. Thirdly, the strategies of encouragement dealt with taking some "reasonable" risks and then self-rewarding. Students who had high ESSC often put continuous effort because they determined to do the best. So they would use the strategies supporting their progresses in learning. Last but not least, if one student had high English speaking self-concept, it showed that he was confident in English speaking and could be satisfied with his speaking ability. So during talking with others, he could try his best to overcome limitations in his speaking and he would use some compensatory techniques such as inference, use of gesture and mother tongues that could help him temporarily narrow the gap of understanding or expressing in English.

Concerning English pronunciation self-concept (EPSC), it was significantly related to strategies of rehearsal, practicing, sending and receiving message and self-evaluation. To begin with, EPSC had a highest correlation with strategy of rehearsal (.435). In language leaning strategies, the rehearsal strategies concerned practicing spelling, pronunciation and getting familiar with useful expressions. Students with high EPSC would frequently use the strategies to develop a personal meaning in learning. Second, EPSC was correlated significantly to practicing strategies (.392). It was obvious that with the purpose in mind, students often actively sought for opportunity to read and practice. Third, the strategies for sending and receiving message mainly concerned building input and output structure which included activities like note taking, summarizing and outlining. Students with high EPSC would use the strategies of building structures for input or output. Finally, the strategies for self-evaluation concerned learning from one's mistakes and making progress in one's learning. Students who had high assessment of their English pronunciation would employ the strategies in correcting one's mistakes in coursework and seeking highest possible grades.

#### IV. CONCLUSION

The study explored some characteristics of college non-English majors' self-concept and language learning strategies, and the relationship between self-concept and LLSs. But the present study was constrained by time and personnel. The analysis tools were not perfect and the perspectives concerned were not so complete. Therefore, the depth and width of the results were far from satisfactory. Despite the limitations, the present study has made an attempt to examine language learning strategies from a completely new perspective and has yielded enlightening findings. Subsequent studies are hoped to overcome the above-mentioned limitations and draw a more complete picture of it.

#### V. PEDAGOGICAL IMPLICATIONS

From the major findings, it was found that improving self-concept is a good way to develop students' language learning strategies because self-concept has positive correlation with language learning strategies. In order to improve use of learning strategies, college students should shape a positive self-concept which means to identify and admit self. It is also a way of perfecting and developing oneself.

Through the above research and result analysis, English teachers should pay more attention to help students develop their positive self-concept that can motivate their language learning strategies. First, English teachers should enhance the students' general English self-concept. Second, English teachers should not ignore importance of pronunciation teaching, especially the teachers who teach students at the early elementary stage of English learning. Last but not least, teachers can integrate language learning strategies into language instruction to influence the students' self-concept and their performances. In fact, it has become clear that language instruction should accommodate to students' learning through flexible teaching techniques and language teachers should be more sensitive to individual learners.

#### APPENDIX

TABLE 1.1  
SUMMARY OF OXFORD'S (1990) LIST OF STRATEGIES

Direct Strategies	Indirect Strategies
Memory Strategies Creating mental links or connections Applying images to sounds Reviewing well Employing action	1. Metacognitive Strategies A. Centering your learning B. Arranging and planning your learning C. Evaluating your learning
Cognitive Strategies A. Practicing B. Receiving and sending messages C. Analyzing and reasoning D. Creating structure for input & output	2. Affective Strategies A. Lowering your anxiety B. Encouraging yourself C. Taking your emotional temperature
Compensation strategies Guessing intelligently Overcoming limitations in speaking and writing	3. Social Strategies A. Asking questions B. Cooperating with others C. Empathizing with others

TABLE 3.1  
RESULTS OF DESCRIPTIVE ANALYSIS OF STUDENTS' SELF-CONCEPT

Variables	Mean	Maximum	Minimum	SD
GESC	3.660	5.510	1.490	.940
ESSC	3.450	5.000	1.020	.914
EPSC	3.711	6.000	1.625	.902

Notes: GESC=General English Self-concept      ESSC=English Speaking Self-concept  
EPSC= English Pronunciation Self-concept      SD=Standard Deviation

TABLE 3.2  
RESULTS OF DESCRIPTIVE ANALYSIS OF STUDENTS' LLSs

Categories	Strategy Sets	Items	Mini	Maxi	Mean	Std.Deviation
Cognitive Strategy	Rehearsal	6	1.551	4.502	3.144	0.653
	Practicing	4	1.807	5.000	3.204	0.708
	Sending and receiving message	5	1.403	4.805	3.102	0.628
	Translation and transfer	5	1.006	4.304	2.706	0.639
Memory Strategy	Association	6	1.337	4.406	2.682	0.621
	Structured review	3	1.004	5.006	3.195	0.806
Compensatory Strategy	Overcoming limitations in speaking	5	2.007	5.002	3.981	0.774
Metacognitive Strategy	Centering one's learning	2	1.005	5.006	3.543	0.731
	Planning and organizing	5	2.003	5.006	3.358	0.644
	Self-evaluation	3	1.401	5.003	3.656	0.735
Affective Strategy	Encouragement	2	1.508	5.002	3.410	0.904
	Taking one's temperature	3	1.001	5.001	3.158	0.823
Social Strategy	Cooperation	4	1.203	5.003	2.902	0.707
	Empathizing with others	2	1.006	4.802	3.321	0.553

TABLE 3.3  
GENDER EFFECTS ON ENGLISH SELF-CONCEPT

	SEX	N	Mean	SD	t	df	Sig.(2-tailed)
GESC	1	75	3.566	.910	-1.230	151	.137
	2	80	3.800	1.050			
ESSC	1	75	3.310	.900	-1.003	151	.108
	2	80	3.621	.960			
EPSC	1	75	3.650	.920	0.786	151	.018
	2	80	3.910	.970			

Notes: GESC=General English Self-concept      ESSC=English Speaking Self-concept  
EPSC= English Pronunciation Self-concept      1=male, 2=female

TABLE 3.4  
RESULTS OF INDEPENDENT SAMPLES T-TEST ON GENDER DIFFERENCES

Categories	Strategy Sets	Mean		T	P
		Male	Female		
Cognitive Strategy	Rehearsal	3.093	3.441	.332	.765
	Practicing	2.940	3.515	1.577	.114
	Sending and receiving message	3.001	3.302	.485	.628
	Translation and transfer	2.607	3.104	-.270	.759
Memory Strategy	Association	2.508	2.980	.310	.700
	Structured review	2.984	3.402	1.674	.096
Compensatory Strategy	Overcoming limitations in speaking	3.773	4.307	.044	.970
Metacognitive Strategy	Centering one's learning	3.205	3.601	2.544	.009*
	Planning and organizing	3.252	3.506	3.055	.004*
	Self-evaluation	3.403	3.893	1.652	.210
Affective Strategy	Encouragement	3.502	3.201	1.962	.054
	Taking one's temperature	3.002	3.305	1.485	.150
Social Strategy	Cooperation	2.808	3.106	.387	.668
	Empathizing with others	3.201	3.351	2.320	.022*

Note: Levene's test for equality of variances (T and P) examines whether the grouping variable of gender (Female/Male) demonstrates difference on strategy sets.

TABLE 3.5  
CORRELATION BETWEEN SELF-CONCEPT AND LLSS

	Cognitive Strategy	Memory Strategy	Compensatory Strategy	Metacognitive Strategy	Affective Strategy	Social Strategy
GESC	0.523	0.310	0.340	0.464	0.396	0.430
ESSC	0.478	0.231	0.300	0.354	0.365	0.356
EPSC	0.384	0.189	0.220	0.276	0.284	0.280

p<0.01

Notes: GESC=General English Self-concept ESSC=English Speaking Self-concept  
EPSC= English Pronunciation Self-concept

TABLE 3.6  
RESULTS OF REGRESSION ANALYSIS

Self-concept	Strategy Sets	Standardized Coefficients
GESC	Centering one's learning	0.525
	Practicing	0.515
	Taking one's temperature	0.486
	Planning and organizing	0.441
ESSC	Practicing	0.520
	Cooperation	0.442
	Encouragement	0.356
	Overcoming limitations in speaking	0.346
EPSC	Rehearsal	0.435
	Practicing	0.392
	Sending and receiving message	0.356
	Self-evaluation	0.330

p<0.01

Notes: GESC=General English Self-concept ESSC=English Speaking Self-concept  
EPSC= English Pronunciation Self-concept

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