

THE RELATIONSHIP OF THE USE OF LANGUAGE LEARNING STRATEGIES AND ACADEMIC ACHIEVEMENT IN ENGLISH LANGUAGE CLASS OF CHINESE JUNIOR HIGH SCHOOL STUDENTS

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Abstract: This study was aimed to determine whether there was a significant relationship of the use of language learning strategies and the academic achievement of first-year junior high school students at a public secondary school in China. A conveniently chosen sample of 109 students, enrolled in the target school during the academic year 2021-2022, participated in this study. For the data collection, Yang's (1992) Chinese version of the Strategy Inventory of Language Learning (SILL; Oxford, 1990), and the English subject's final test, were used. From performing descriptive statistics on the collected data, it was found that the level of use of language learning strategies held by the participants, in terms of direct and indirect strategies, was moderate, as well as the overall levels of use of memory, cognitive, compensation, metacognitive, affective and social strategies for learning English held by the participants. On average, the participants academically underachieved in English language class. From a correlational analysis, it was found that the participants' use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) significantly and strongly correlated with their academic achievement in English language class, and also accounted for 45% of its variance. Based on the research findings, recommendations for students, teachers and future researchers are provided.

Keywords: English Language Learning, Academic Achievement, Language Learning Strategies, Direct Learning Strategies, Indirect Learning Strategies.

1. INTRODUCTION

According to Oxford (1990), learning strategies are especially crucial for language learning because they are tools for learners' self-directed involvement and active participation in the learning process, which is important for developing learner's communicative competence. According to previous research (e.g., Shang, 2021), training students to use learning strategies let them become better language learners.

With the deepening of the reform of Chinese education system, and the focus of school education research shifting from teachers' teaching to students' learning, research on learning strategies started to develop in China in 1980, and since then, research on this area has gradually attracted the attention of Chinese and foreign researchers. Although the related research continues to deepen, the actual use of students' foreign language is not such good. In a study conducted by Xu (2008), it was found that Chinese students sometimes use English learning strategies, but their awareness is not strong, and their use of social strategies is significantly lower than that of British students, and they do not use affective strategies. However, in the study of English learning strategies in China, the volume of research conducted so far has mainly focused on the university level, or it just focus on a certain aspect of English learning. For example, previous studies conducted in China on English learning strategies (e.g., Xu, 2008; Zhang, 2020) have mainly focused on the impact of English learning strategies on a certain aspect of language learning, such as English reading performance or English vocabulary performance, and hence there is a lack of research on the impact of English learning strategies on the students' overall academic achievement. Moreover, there is a lack of research conducted in China on students' English learning strategies in the stage of basic education.

With this concern in mind, the researchers believe that good learning methods play a great role in English language learning, so it is very important to cultivate students' correct learning strategies from childhood, and it is very necessary to study the influence of learning strategies on students' academic achievement in the basic education stage. To the knowledge of the researchers, there is no previous study on these variables in the target school. Therefore, the researchers decided to conduct a study in a public secondary school located in Chongqing, China, in order to determine whether there was a significant relationship between the use of language learning strategies in English language learning and academic achievement in English language class of first-year junior high school students enrolled in the target school.

Research Objectives

The following were the specific research objectives addressed by this study.

1. To determine the level of the use of language learning strategies in English language class, in terms of direct strategies (i.e., memory strategies, cognitive strategies, and compensation strategies) and indirect strategies (i.e., metacognitive strategies, affective strategies, and social strategies), of first-year junior high school students at a public secondary school in Chongqing, China.
2. To determine the level of academic achievement in English language class of first-year junior high school students at a public secondary school in Chongqing, China.
3. To determine whether there is a significant relationship of the use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) and academic achievement in English language class of first-year junior high school students at a public secondary school in Chongqing, China.

Theoretical Framework

This study was guided by the following main theory: Oxford's (1990) language learning strategy system.

Oxford's (1990) Language Learning Strategy System

According to this theoretical model, language learning strategies are defined as the actions or steps taken by the learners to improve the development of their own language skills. Oxford (1990) developed a language learning strategy system that includes two classifications: direct strategies and indirect strategies.

Direct Strategies

Direct strategies are patterns of behavior that involve use of language and directly affect the learning progress. These strategies are sub-divided into memory strategies (e.g., creating mental linkages, or applying images and sounds strategies), cognitive strategies (e.g., practice, or analyzing and reasoning), and compensation strategies (e.g., guessing intelligently).

Indirect Strategies

Indirect strategies are patterns of behavior that do not directly involve using the language, but they support language learning and indirectly affect the learning effect by acting on other means (Oxford, 1990). These strategies are further

divided into metacognitive strategies (e.g., arranging, planning and evaluating your own learning), affective strategies (e.g., lowering your anxiety, or encouraging yourself), and social strategies (e.g., cooperating and empathizing with others).

Conceptual Framework

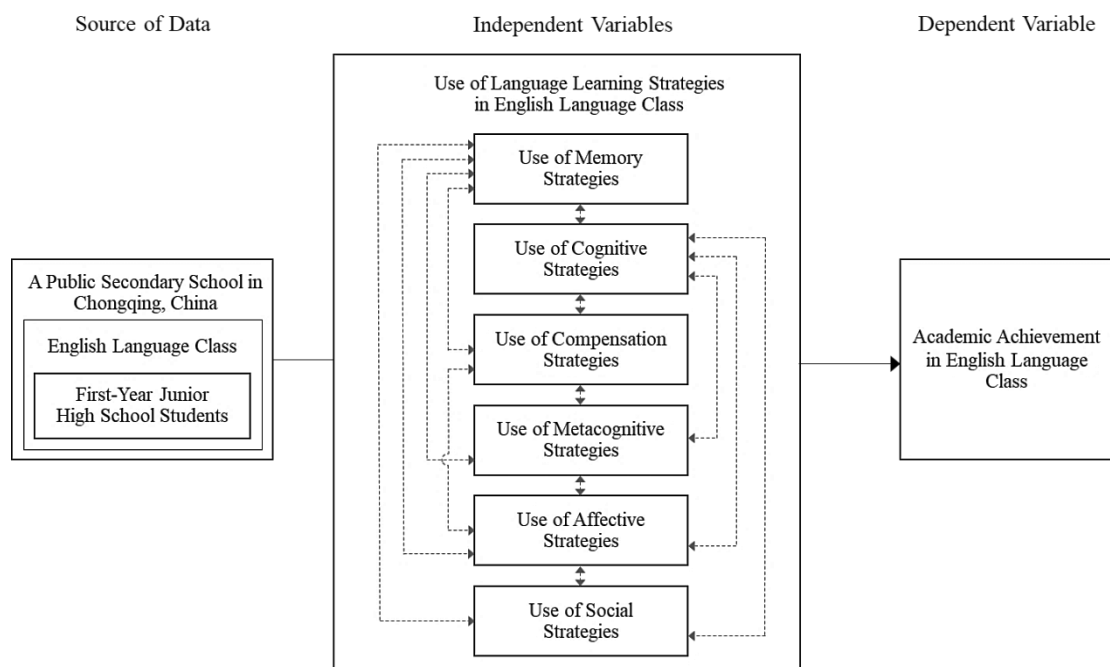


Figure 1: shows the conceptual framework of this thesis research project.

2. LITERATURE REVIEW

In this section, some previous studies related to the research variables addressed in this study are reviewed and summarized.

Zhang (2020) conducted a study on excellent English language learners in Liaoning Province, China, targeting an experimental middle school as the research object. Firstly, a questionnaire survey was conducted among 200 students of the school. Then, four excellent language learners were observed and interviewed, in order to analyze the correlation between language learning strategies and English learning performance. By analyzing the questionnaire data with a statistical software package and classifying the data obtained from the observations and interviews, the researcher found that excellent language learners would use various strategies to meet their learning requirements. Cognitive strategies and metacognitive strategies were the most commonly used. There was a significant positive correlation between language learning strategies and English learning performance, among which memory strategies have the strongest correlation with English learning performance. Students who frequently used a variety of language learning strategies were found to have the higher English proficiency.

Xu (2006) used the Strategy Inventory for Language Learning (SILL) developed by Oxford (1990) on a group of secondary vocational school students in Guizhou Province, China, in order to study the relationship between English learning strategies and test scores by means of questionnaire survey, interviews and performance analysis. The findings showed that the rational application of learning strategies is positively correlated with overall learning achievement. The more learners can use learning strategies in a reasonable and scientific way, the more effective they will be in English learning. This study showed that the more effectively students can be guided to use learning strategies in language teaching, the better the learning effect will be.

Yeh (2010) carried out a comparative case study on the use of language learning strategies by vocational college foreign language-majored students enrolled in the Technology and Science Institute of Northern Taiwan, Republic of China. The participants were studying their second year in this vocational college, and were distributed in two classes with different

learning backgrounds. The study was conducted on a regular class with 34 students, and an extensive class with 25 students. The overall levels of the use of direct strategies and indirect strategies for learning English were found to be moderate for both the regular and extensive classes. The overall level of use of memory strategies, cognitive strategies, compensation strategies, affective strategies, and social strategies for learning English was found to be moderate for both the regular class and extensive class as well. However, the overall level of the use of metacognitive strategies for learning English was found to be low for the students in the regular class, and moderate for the students in the extensive class.

3. METHODOLOGY/PROCEDURE

In this section, details on the study's population, sample and research instruments are provided.

Population and Sample

A convenience sample comprised of 109 students enrolled in three out of the eight classes of the first year of junior high school at a public secondary school in Chongqing, China, during the academic year of 2021-2022, was chosen for this study. These three classes were selected because they were taught by the same English language teacher, who agreed to support the current study by the time of conducting the data collection.

Research Instruments

This study was conducted based on the following research instruments: Yang's (1992) Chinese version of the Strategy Inventory of Language Learning (SILL; see Table 1), and the English subject's final test held at the end of the academic year 2021-2022 at the target school.

Yang's (1992) Chinese Version of the SILL. This instrument is based on Oxford's (1990) Strategy Inventory for Language Learning (SILL), which has been claimed as the most often used language learning strategy questionnaire around the world to date. The Chinese SILL includes 50 items (see Table 1). The questionnaire includes six sub-categories: memory strategies (9 items, Items 1 to 9), cognitive strategies (14 items, Items 10 to 23), compensation strategies (6 items, Items 24 to 29), metacognitive strategies (9 items, Items 30 to 38), affective strategies (6 items, Items 39 to 44), and social strategies (6 items, Items 45 to 50). The scale used a 5-point Likert-type scale, ranging from 1 (*never or almost never true of me*) to 5 (*always or almost always true of me*). The mean scores from the Likert-type scale ratings were interpreted using a continuum from "very low level of use" to "very high level of use".

Table 1: Items in Yang's (1992) Chinese Version of the SILL

Item No.	Item statement
I. Memory strategies	
1	When I learn new words, I associate the new words with the ones I have already learned
2	I deepen my memory by making sentences with the new words
3	I associate the sounds of English words with images or graphics to help me remember them
4	I remember an English word by imagining how it might be used
5	I use similar sounds to remember new words
6	I use word cards to memorize new English words
7	I remember new English words by grouping them (like sense words, anti-sense words, nouns, verbs)
8	I will review my English lessons
9	I remember by the position of English words or cards in books, on the blackboard or signs
II. Cognitive strategies	
10	I can practice or write new English words repeatedly
11	I try to speak like a native speaker
12	I practice English pronunciation
13	I practice my English in different ways
14	I try to talk in English
15	I do not pay much attention to the feedback I receive in my English class
16	I amuse myself by reading English weekly magazines
17	I write notes, letters or reports in English

- 18 I try to think in English
 19 I look for similarities and differences between English and Chinese
 20 I tried to find English sentence patterns
 21 I try to find the meaning of a new English word by breaking it down into parts (such as a prefix or root) that I can recognize
 22 Make summary notes in English conversation or reading in English
 23 Make summary notes in English conversation or reading in English

III. Compensation strategies

- 24 When I meet an unfamiliar English word, I will guess its meaning
 25 In English conversation, if I can't think of a word, I will use a gesture or action to express it
 26 When I don't know the right English word, I make my own words to say it (such as airball for balloon)
 27 When I read English, I don't look up every word in the dictionary
 28 I guess what the next sentence is going to be in English
 29 When I can't think of an English word, I use words and phrases that have the same meaning

IV. Metacognitive strategies

- 30 I will find various ways to use the English I have learned
 31 I will notice my English mistakes and use them to improve
 32 When others speak English, I pay special attention to listen
 33 I try to find out how to learn English well
 34 I will make a schedule so that I have enough time to study English
 35 I keep an eye out for people I can talk to in English
 36 I will look for opportunities to read more English
 37 I have a clear goal to improve my English skills
 38 I will measure my progress in learning English

V. Affective strategies

- 39 Whenever people feel afraid of using English, I try to relax myself
 40 Even though I'm afraid of making mistakes, I encourage myself to speak English
 41 Whenever I do well in English, I will reward myself
 42 When I read or speak English, I will pay attention to whether I am nervous or not
 43 I will write down my feelings in a diary
 44 I will discuss my feelings about learning English with others

V. Social strategies

- 45 If I don't understand something in an English conversation, I will ask the other person to speak slowly or harder
 46 When speaking English, I will ask the other person to correct my mistakes
 47 I will practice English with other students
 48 I will ask English speakers for help
 49 I will ask questions to clarify and confirm any questions in English
 50 I try to learn the culture of English-speaking countries

English Subject's Final Test. The scores of English subject's final test were used to measure the participants' English academic achievement. Through the administration of this instrument, the students were assessed on the implementation of grammatical skills (i.e., fill in the blanks, multiple choice), reading skill (i.e., read the passage), writing skills (i.e., essay). Students were required to obtain at least 60 points in the test, out of 100, in order to pass it. The scores under 60 points were considered as failure. Scores between 90-100 were regarded as excellent.

4. RESEARCH FINDINGS

The research findings obtained from the data collection and analysis follows, presented by research objective.

Findings From Research Objective 1

Table 2 shows the overall mean scores, standard deviations and interpretations of the level of use of language learning strategies, and its subscales, held by the first-year junior high school students from a public secondary school in Chongqing, China, who participated in this study.

Table 2: Mean Scores, Standard Deviations, and Interpretations for the Use of Language Learning Strategies in English Language Class of First-Year Junior High School Students at a Public Secondary School in Chongqing, China

Language learning strategies used in English language class	<i>M</i>	<i>SD</i>	Interpretation
Direct strategies	3.05	1.19	Moderate
Memory strategies	3.07	1.07	Moderate
Cognitive strategies	2.95	1.22	Moderate
Compensation strategies	3.27	1.15	Moderate
Indirect strategies	3.12	1.24	Moderate
Metacognitive strategies	3.17	1.10	Moderate
Affective strategies	3.04	1.32	Moderate
Social strategies	3.07	1.33	Moderate

Findings From Research Objective 2

Table 3 shows the overall mean score, standard deviation, and the interpretation for the academic achievement in English language class obtained by the first-year junior high school students at a public secondary school in Chongqing, China, participating in this study.

Table 3: Overall Mean Score, Standard Deviation, and Interpretation of First-Year Junior High School Students' Academic Achievement in English Language Class

<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>	Interpretation
109	17	90	59.36	21.53	Failure

Findings From Research Objective 3

Table 4 below indicates the results of the correlational analysis performed between the use of language learning strategies (in terms of its six different categories) and academic achievement in English language class of first-year junior high school students at a public secondary school in Chongqing, China.

Table 4: Correlational Analysis Between the Use of Language Learning Strategies and Academic Achievement in English Language Class of First-Year Junior High School Students at a Public Secondary School in Chongqing, China

Variables	1	2	3	4	5	6	7
1. Use of memory strategies	–						
2. Use of cognitive strategies	.71* ($<.001$)	–					
3. Use of compensation strategies	.55* ($<.001$)	-.58* ($<.001$)	–				
4. Use of metacognitive strategies	.71* ($<.001$)	.84* ($<.001$)	.63* ($<.001$)	–			
5. Use of affective strategies	.59* ($<.001$)	.62* ($<.001$)	.49* ($<.001$)	.62* ($<.001$)	–		
6. Use of social strategies	.54* ($<.001$)	.54* ($<.001$)	.39* ($<.001$)	.49* ($<.001$)	.72* ($<.001$)	–	
7. Academic achievement in English Language class	.56* ($<.001$)	.53* ($<.001$)	.38* ($<.001$)	.42* ($<.001$)	.60* ($<.001$)	.51* ($<.001$)	–
$r^2 \times 100\%$	31%	28%	14%	18%	36%	26%	
<i>R</i>	.67						
$R^2 \times 100\%$	45%						

Note. *denotes a statistically significant relationship (statistical significance level set at $p = .05$, two tailed). p -values appear within parentheses below the correlation coefficients.

As shown in Table 4, a significant, strong multiple correlation was obtained between the use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective

strategies and social strategies) and academic achievement in English language class of first-year junior high school students at a public secondary school in Chongqing, China, $R = .67$, $F(6, 102) = 14.14$, $p < .001$. The multiple coefficient of determination obtained, $R^2 = .45$, indicates that the use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) accounted for 45% of the variance of the participants' academic achievement in English language class.

5. DISCUSSION

In the following sections, the researchers present a discussion of the findings obtained from conducting the current study, by relating them with the findings reported by previous research studies.

Use of Language Learning Strategies in English Language Class

The results of the current study revealed that the level of use of language learning strategies in English language class held by first-year junior high school students at a public secondary school in Chongqing, China, was moderate in terms of both direct and indirect strategies. This result is similar with the one reported by Yeh (2010), who found that the mean level of using direct strategies and indirect strategies for learning English was both found moderate for foreign language-majored students enrolled in both a regular class and an extensive class at a vocational college in Taiwan.

The Relationship of Students' Use of Language Learning Strategies With Academic Achievement in English Language Class

The data analysis from the current study showed that a significant, strong multiple correlation between the use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) and academic achievement in English language class of first- junior high school students at the target school. This result is similar with the one reported by Tian (2018), who found that there was a significant, positive, and moderately strong correlation among the use of language learning strategies and the English academic achievement held by 217 junior high school students from YiLi Province, China ($r = .50$, $p < .001$).

The participants in the current study were found to have a failing level of academic achievement in English language class, but were also found to have significant correlations of the use of the six language learning strategies ranging from .38 to .60 (see Table 4). This result is slightly different to the one reported by Zhang (2020), who found, through a study conducted on middle school students learning English in Liaoning Province, China, that excellent language learners are those who frequently use a variety of language learning strategies, and stronger correlations with English learning performance are tied to having a higher English proficiency and academic achievement.

6. RECOMMENDATIONS

The researchers would like to provide the following recommendations for students, school administrators and future researchers according to the findings of current study of first-year junior high school students at a public secondary school in Chongqing, China.

Recommendations for Students

The findings of this study revealed that there is a significant relationship of the use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) and academic in English language class of first-year junior high school students at a public secondary school in Chongqing, China. At the same time, the overall level of use language learning strategies in English language class was moderate. The findings lead students deeply understand language learning strategies and use those strategies deliberately. For example, the study reported the level of students' use of language learning strategies stated in Item 6 ("I use word cards to memorize new English words") was interpreted low. The students can try to memorize new English words intentionally. Item 16 ("I amuse myself by reading English weekly magazines") and Item 17 ("I write notes, letters or reports in English") were also reported low. In order to improve their English academic achievement, they also can read English weekly magazines and write notes, letter or reports in English regularly. They will find out the reasons about why they failed in first-year junior high school students' English academic achievement in English language class. Then, they could change their learning strategies and get success in the future (Oxford, 1990).

Recommendations for Teachers

The findings of this study revealed that the level of students' use of language learning strategies was moderate as well as a failing level of academic achievement in English language class. Therefore, English language teachers should deeply understand language learning strategies and use those strategies deliberately to improve students' academic achievement. For example, the study found that the level of students' use of memory strategies stated in Item 6 ("I use word cards to memorize new English words") was interpreted low ($M = 2.32$, $SD = 1.23$). When teaching, teachers can compare similar words to deepen students' memory and teach this method to the students, letting them to use memory strategies more frequently. Two items related to the use of cognitive strategies, Item 16 ("I amuse myself by reading English weekly magazines"; $M = 2.34$, $SD = 1.08$) and Item 17 ("I write notes, letters or reports in English"; $M = 2.48$, $SD = 1.23$), were also found to have a low level of use by the participants. Therefore, teachers can give students homework about read English weekly magazines and write notes, letters or reports in English.

Recommendations for Future Researchers

The findings of this study revealed that the combination of the participants' level of use of language learning strategies (in terms of memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies and social strategies) accounted for 45% of the variance of their academic achievement in English language class. Therefore, there is still a 55% of the variance of participants' academic achievement in English language class that is explained by other variables that were not addressed in the current study. Therefore, future researchers can consider conducting studies with other teaching and learning strategies or focus on other factors that will influence students' academic achievement in English language learning or in any other subjects. The use of different English language learning strategies depends on students' interest in English learning, which varies greatly among individuals (Oxford, 1990). Therefore, future researchers could explore the relationship between the level of using language learning strategies and the students' interest in learning English, among other variables.

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