ANALYSIS OF CHINESE STUDENTS’ USE OF ENGLISH AS A SECOND LANGUAGE LEARNING STRATEGIES AT A COLLEGE IN HEILONGJIANG PROVINCE, CHINA

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This research mainly focused on the Chinese students strategies for learning English as a second language during the academic year 2023 at a college in Heilongjiang, China. A total

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of 292 students from the school of English at a college in Heilongjiang Province were surveyed in this study. The study adopted a questionnaire focused on students learning strategies to learn English as a second language. Based on research objectives, the researchers used frequency, percentage, mean, standard deviation, independent sample t-test, and one-way ANOVA to analyze the collected questionnaires. Accordingly, the results showed that: 1) college students used both direct and indirect strategies for their English learning at a high level; 2) there were no significant differences in students' use of second language learning strategies according to their gender; 3) however, there were significant differences in students' use of second language learning strategies according to their grade, home location, and family income. The researchers discussed each finding and provided related recommendations for encouraging students strategies for learning English as a second language at Chinese colleges.

Keywords: learning English as a second language; direct strategies; indirect strategies; Chinese College Students

Introduction

It is obvious that some people learn a second language faster and more effectively than others. In the early 1970s, with the development of cognitive psychology, researchers focused on students’ language learning and noticed that second language learning strategies were a key factor influencing second language learning. Various ways could be used to assess the use of language learning strategies; among them, one of the best ways is to use an asummative rating scale. The finding repeatedly confirmed that the use of second language learning strategies leads to better achievement, as much previous research suggested that effective use of learning strategies can greatly enhance student performance.


Direct learning strategies include three aspects: memory strategies, cognitive strategies, and compensation strategies. Indirect learning strategies consist of three aspects: metacognitive strategies, affective strategies, and social strategies. Oxford’s taxonomy is one of the most widely used taxonomies in foreign language learning and teaching research fields (Vlčková et al., 2013).

Based on this theory, Oxford (1990) produced a 5-point Likert scale questionnaire, the Strategy Inventory for Language Learning (SILL). SILL aims to investigate the use of foreign language learning strategies by learners. Oxford (1999) mentioned that SILL was the most broadly used assessment instrument among language learning strategies in the world. By the end of the 1990s, the SILL questionnaire had been translated into at least 17 languages, used by more than 9,000 students worldwide, and provided research data for over 40 dissertations, theses, and other research. Language Learning Strategies (LLSs) are important in learning a language, especially in learning a second or foreign language.

Chinese scholars started studying English as a second language learning strategy in China in the 1980s. Many studies have been devoted to second language learning strategies in Chinese higher education institutions.
The Chinese researchers have already suggested learning strategies should be introduced to all students (Zhao, 2008). English is a world language, that is also recognized as the most important second language required for all students to learn in China’s formal education system. With the economic development of China and the international cultural impact, more and more research has focused on Chinese students’ English learning at the higher education level.

As more and more Chinese students and teachers start to realize the effects of the second language learning strategies as well as how to improve English language teaching practice, it is necessary to conduct a study to identify the second language learning strategies used by college learners, understand their current situations, and analyze the differences in students’ English learning strategies according to their demographic backgrounds in the college (Yao, 2021).

**Research objectives**

This research was conducted for the following objectives:
- To identify the college students’ demographic background information;
- To determine the current level and situation of college students’ use of English learning as a second language strategies;
- To analyze the college students’ use of English learning as a second language strategies according to their different demographic backgrounds.

**Conceptual framework**

The independent variable is the college students’ demographic background, including their gender, grade, home location, and family income. While the students’ use of English as a second language strategies are regarded as the dependent variables,

The study aimed to examine the Chinese students strategies for learning English as a second language during the academic year 2023 at a college in Heilongjiang, China.

**Literature review**

*English as a second language learning strategy*

Initial studies on language learning strategies emerged since the mid-1970s, which developed with the research of cognitive science in psychology and education. Along with further studies, the research on language learning strategies (LLS) shifted from behaviorism in psychology and developed an independent field of study. LLS has been one of the most researched topics in the field of second language education for decades. Language learning strategy is a wild concept; experts are starting to consider the different definitions of language learning strategies.

Earlier, Rubin (1975) started to study the concept of language learning strategies; he developed the definition broadly, which was regarded as the tools or devices that a learner may apply to obtain knowledge. Later, Oxford (1990) defined language learning strategies as the systemic steps or behaviors used by language learners to promote the acquisition, storage, retention, recall, and getting of new information. Thus, language learning strategies are seen as related to aspects of learning and applying language.

Chamot (2004) considered language learning strategies as the special ideas or tools that are used to help language learners understand and acquire new information. This definition
showed that language learning strategies might be either visible (behaviors) or invisible (thoughts), but it is clear that strategies are helping the students acquire and get new information.

**Classifications of English language learning strategies**

The language learning strategies had been categorized by many previous educational experts. Different researchers have different ways of classifying, but most of them attempted to use the findings that were concluded from various studies to emphasize the learners’ self-reported strategies to develop the definition and classification of language learning strategies.

As Chamot (2004) pointed out, earlier researchers were likely to use their own observations to consider language learning strategies. Their consideration usually depends on whether the learning strategies are derived from first-language contexts or from other sources.

Rubin’s (1987) classification included three major types: learning, communication, and social strategies. Furthermore, language learning strategies are divided into cognitive and meta-cognitive strategies, which might directly affect the development of the language system when the learners use them.

Rubin (1987) also categorized the language learning strategies into communication strategies and social strategies. Communication strategies were not directly related to language learning, as they emphasized more the process of involving the listener in the communication and getting the listener to understand or know the initial purposes. Social strategies described by Rubin were the ones contributing indirectly to language learning, as they afforded more opportunities for and access to their knowledge (Aziz, 2005).

Oxford (1990) drew a distinction between direct and indirect strategies. Later, Jones (1998) commented that Oxford’s classification of language learning strategies was more comprehensive and systematic than earlier years’ models. He developed six categories of language learning strategies taxonomy in the 1990s. The six categories are as follows:

1) memory strategies;
2) cognitive strategies;
3) compensation strategies;
4) meta-cognitive strategies;
5) affective strategies;
6) social strategies.

Entire strategies are generalized into two main groups: direct LLS and indirect LLS (Oxford, 1990). Compared with early classifications, Oxford’s taxonomy is deemed to be the most comprehensive and systematic system of LLS.

**Previous studies on English as a second language learning strategy**

Much research has been done on investigating the relationship between language learning strategies used and other variables, such as foreign language proficiency, learning attitude, or learners’ gender.

Khamkhien (2010) conducted studies in identifying different learning strategies according to the students’ demographic variables, who studied in Thailand among Thai and Vietnamese ESL students. The researcher did not find a significant difference in the six strategies groups use according to gender when limited to one nationality.
Giang & Tuan (2018) investigated the language learning strategies used by Vietnamese ESL freshmen, and they found differences in the students’ use of English language learning strategies according to their grades. Chinese scholar Yao (2020) found that female students use more language learning strategies than male students in a Macau public university. Language learning strategies (LLSs) are important in learning a language, especially in learning second and foreign languages (Maram, 2009).

Chinese ancient education had a long history. In the traditional view, a teacher in a classroom represents knowledge and wisdom, and learners are passive receivers of knowledge, the research about learner individual learning for only a short time.

In China, related research focuses on English language learning strategies for individual learning and the relationship with language achievement.

**Research methodology**

*Population and sample*

The target group of this study was the college students majoring in English at a college in Heilongjiang, China, during the academic year 2023. A total of 1405 students were included in the study; 301 students were selected as the sample based on the convenient sampling method. The researcher distributed 301 questionnaires among students for investigation during September 18–December 28, 2023. All the questionnaires were distributed and collected through the class WeChat group; the questionnaire link was sent to the sampling students. By the end, the researchers had collected 292 valid questionnaires from the students, and the effective return rate reached 97%.

*Research instrument*

A questionnaire composed of two sections was used in this study. The questionnaire included two parts: Part I is demographic information; it asks students demographic background information, and Part II is the Strategy Inventory for Language Learning Survey (SILL), used to assess the use of language learning strategies.

The SILL for second language learning comprises a 5-point Likert-scale questionnaire that assesses the frequency of learners’ use of strategies. The scores range from 1 being “never or almost never true of me” to 5 being “always or almost always true of me.” The SILL had 50 items grouped into six categories of strategies, commonly referred to as Oxford’s (1990) taxonomy of language strategies. The following illustrates the six categories of strategies.

1. Memory strategies (9 items) are used for remembering and retrieving new information.
2. Cognitive strategies (14 items) are used for understanding and producing the language.
3. Compensation strategies (6 items) are used to gain more clues to fill any gaps in the knowledge of the target language.
4. Meta-cognitive strategies (9 items) are skills used for organizing and evaluating learning.
5. Affective Strategies (6 items) are techniques for managing emotions.
6. Social strategies (6 items) are used for learning with others.
ANALYSIS OF CHINESE STUDENTS’ USE

Table 1 - Oxford’s (1990) SILL Score Interpretation (made by the authors)

<table>
<thead>
<tr>
<th>Level</th>
<th>Interpretation</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Always or almost always true of me</td>
<td>4.5 to 5.0</td>
</tr>
<tr>
<td></td>
<td>Usually true of me</td>
<td>3.5 to 4.4</td>
</tr>
<tr>
<td>Medium</td>
<td>Somewhat true of me</td>
<td>2.5 to 3.4</td>
</tr>
<tr>
<td>Low</td>
<td>Usually not true of me</td>
<td>1.5 to 2.4</td>
</tr>
<tr>
<td></td>
<td>Never or almost never true of me</td>
<td>1.0 to 1.4</td>
</tr>
</tbody>
</table>

The questionnaire used in this study is the original questionnaire of Oxford (2003). The SILL had good predictive validity and was a high-reliability instrument to use for studies in foreign language learning strategies. The Cronbach alpha coefficient for the questionnaire of the SILL was identified as. 89 to 94 (Oxford, 2003)

Findings

For research objective one

Based on the data analysis results, Tab. 2 presents the students’ demographic background information in the School of English at a College in Heilongjiang, China. Out of the total sample of 292 participants, 136 (46.57%) were male and 156 (53.43%) were female. Among them, freshmen are 80 (27.40%), sophomores are 76 (26.02%), junior students are 72 (24.5%), and senior students are 64 (21.91%).

Table 2 - Students’ demographic background variables at a college in Heilongjiang, China (made by the authors)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>136</td>
<td>46.57</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>156</td>
<td>53.43</td>
</tr>
<tr>
<td>Grade</td>
<td>Freshmen</td>
<td>80</td>
<td>27.40</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>76</td>
<td>26.02</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>72</td>
<td>24.65</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>64</td>
<td>21.91</td>
</tr>
<tr>
<td>Home Location</td>
<td>Urban</td>
<td>123</td>
<td>42.12</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>169</td>
<td>57.88</td>
</tr>
<tr>
<td>Family Income (Monthly)</td>
<td>Below 5000 RMB</td>
<td>60</td>
<td>20.40</td>
</tr>
<tr>
<td></td>
<td>5000–9999 RMB</td>
<td>94</td>
<td>32.20</td>
</tr>
<tr>
<td></td>
<td>10000–19999 RMB</td>
<td>94</td>
<td>32.40</td>
</tr>
<tr>
<td></td>
<td>Over 20000 RMB</td>
<td>44</td>
<td>14.80</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>292</td>
<td>100</td>
</tr>
</tbody>
</table>
Regarding home location, 123 participants (42.12%) come from the urban area, while 169 participants (57.88%) come from the rural area. In terms of monthly family income, 60 participants (20.4%) reported a monthly family income of less than 5,000 RMB, 94 participants (32.2%) reported a monthly family income of 5,000–9999 RMB, 94 participants (32.4%) reported a monthly family income of 10,000–19,999 RMB, and 44 participants (14.8%) reported a monthly family income of over 20,000 RMB.

*For research objective two*

Tab. 3 below shows the mean, standard deviation, and interpretation of the students’ use of second language learning strategies, as the overall mean scores of uses of learning strategies showed that the college students’ use of English learning as a second language at a college in Heilongjiang, China, was at a high level.

Table 3 - Students’ Use of ESL Strategies at a College in Heilongjiang, China
(made by the authors)

<table>
<thead>
<tr>
<th>Strategies</th>
<th>M</th>
<th>SD</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct learning strategies</td>
<td>3.68</td>
<td>.635</td>
<td>High</td>
</tr>
<tr>
<td>Indirect learning strategies</td>
<td>3.56</td>
<td>.676</td>
<td>High</td>
</tr>
<tr>
<td>Overall</td>
<td>3.63</td>
<td>.657</td>
<td>High</td>
</tr>
</tbody>
</table>

*For research objective three*

1). Differences in students’ use of second language learning strategies with gender

Tab. 4 below shows the resulting data from the Independent Samples t-test between boys and girls for their use of second language learning strategies. The result data shows that t was -0.486, and Sig (2-tailed) was 0.628, which was more than 0.05. Therefore, it indicated that boys were not significantly different from girls in terms of using English as a second language learning strategy.

Table 4 - Differences in students’ use of second language learning strategies with different genders
(made by the authors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Use of ESL Strategies</td>
<td>Male</td>
<td>3.610</td>
<td>0.431</td>
<td>-0.486</td>
<td>0.628</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.635</td>
<td>0.544</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2) Differences in students’ use of second language learning strategies with grade

As the one-way ANOVA results from Tab. 5 showed, students’ use of ESL strategies with different grades was significantly different, which was reflected by the mean value. The students’ use of ESL strategies by juniors was the highest, and the seniors were similar to juniors, but that of sophomores was greater than that of freshmen, and freshmen relatively used the ESL strategies less.
ANALYSIS OF CHINESE STUDENTS’ USE

Table 5 - Differences in students’ use of second language learning strategies with different grades
(made by the authors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Grade</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Use of ESL Strategies</td>
<td>Freshman</td>
<td>3.28</td>
<td>2.56</td>
<td>3.738</td>
<td>0.003*</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>3.31</td>
<td>1.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>3.48</td>
<td>1.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>3.45</td>
<td>1.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*P < 0.05

3) Differences in students’ use of second language learning strategies with gender

Tab. 6 below shows the analysis of the Independent Samples t-test between the students’ use of second language learning strategies compared with their home location, whether they are from urban or rural areas. The result data shows that T was 0.869, and Sig (2-tailed) was .028, which was less than .05.

Therefore, it indicated that there are significant differences in students’ use of second language learning strategies in terms of where they’re coming from. Students from urban areas used ESL strategies more than those from rural areas.

Table 6 - Differences in students’ use of second language learning strategies with different home locations
(made by the authors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Home Location</th>
<th>Mean</th>
<th>SD</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Use of ESL Strategies</td>
<td>Urban</td>
<td>3.701</td>
<td>0.431</td>
<td>0.869</td>
<td>0.028*</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>3.405</td>
<td>0.544</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Noted: * P<0.05

4) Differences in students’ use of second language learning strategies with gender

Tab. 7 below shows the one-way ANOVA analysis between the students’ use of second language learning strategies compared with their monthly family income. The result data shows that F was 7.738, and P was .000, which was less than .05.

Therefore, it indicated that there are significant differences in students’ use of second language learning strategies based on their monthly family income. Students from higher-income families used ESL strategies more than those from lower-income families.
Table 7 - Differences in students’ use of second language learning strategies with different family incomes (made by the authors)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Monthly Family Income</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Use of ESL Strategies</td>
<td>Below 5000 RMB</td>
<td>3.27</td>
<td>1.56</td>
<td>7.738</td>
<td>0.000*</td>
</tr>
<tr>
<td></td>
<td>5000 RMB – 9999 RMB</td>
<td>3.42</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10000 RMB – 19999 RMB</td>
<td>3.57</td>
<td>0.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Over 20000 RMB</td>
<td>3.68</td>
<td>0.95</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Noted: * P<0.05; ** P<0.01; *** P<0.001

Discussion

For the overall learning strategies, the finding showed that the overall mean scores of uses of learning strategies showed that the college students’ use of English learning as a second language at a college in Heilongjiang, China, was at a high level.

As Yang (2013) pointed out, language learning strategies (LLSs) are a pluralistic and pervasive strategic system that has always attached great importance to second language acquisition (SLA), so if the students could use the language learning strategies frequently and highly, it would help improve their language acquisition. Since the students in this study are all English majors, they are taught by professional teachers at the college; therefore, they may be able to understand the importance of language learning strategies and use them highly.

This study found there were no significant differences in students’ use of second language learning strategies according to their gender at the college school of English in Yunnan Province, China. This finding is a bit different from the previous researcher, Yao (2021), who found female students use more language learning strategies than male students in a Macau public university.

And even Oxford et al. (1993) had also found the results that females used language learning strategies more than male students; however, Khamkhien’s (2010) study mentioned a significant difference according to gender when limited to one nationality. Her study also showed that there was no significant difference in the use of learning strategies according to their gender, but when comparing different nationalities such as Vietnam and Thai students, the differences also existed. In this study, the result is probably because all those Chinese students are from the same place, and they are all English major students who follow the same curriculum to learn at the same school at the same university.

The current study also found a significant difference in students’ use of second language learning strategies according to their grade, home location, and family income. The students’ use of ESL strategies by juniors was the highest, and the seniors were similar to juniors, but sophomores used them more than freshmen, and freshmen relatively used the ESL strategies less.
ANALYSIS OF CHINESE STUDENTS’ USE

Giang & Tuan (2018) investigated the language learning strategies used by Vietnamese ESL freshmen, and they found differences in the students’ use of English language learning strategies according to their grades.

Students from urban areas used ESL strategies more than those from rural areas. Students from higher-income families used ESL strategies more than those from lower-income families. The possible reasons behind these, as previous researchers also pointed out, might be because of the students’ learning styles and habits, which, to a certain degree, are related to their family rearing styles and family social and economic status.

For example, Chen (2004) studied the language learning strategies used by non-English majors, and he found a significant relationship between language learning strategies and learning styles. While students’ learning styles might be influenced by family rearing styles and family conditions, as Lindy (2005) pointed out in her article entitled The Challenge of Measuring Language Learning Strategies.

References


<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper submitted</td>
<td>16 December 2023</td>
</tr>
<tr>
<td>Paper accepted for publishing</td>
<td>14 February 2024</td>
</tr>
<tr>
<td>Paper revised</td>
<td>13 March 2024</td>
</tr>
<tr>
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