The relationship between language learning strategy use, language proficiency level and learner gender

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Abstract

Language learning strategies are a key factor in language learning; thus, significant efforts have been made to highlight the importance of language learning strategy use and factors affecting learners’ strategy choice. The aim of this study was to explore the relationship between choice of learning strategies and frequency of their use and learners’ gender and level of proficiency in English. The results revealed that Iranian high school learners employed learning strategies with medium frequency; meta-cognitive strategies were the most frequent, while cognitive strategies were the least frequent. The use of learning strategies in terms of learners’ proficiency and gender was examined using a T-test. Proficient learners showed significantly more strategy use, as well as more use of meta-cognitive and social strategies. According to the results, females used learning strategies more frequently than males.

Keywords: Learning strategies; language proficiency; gender

1. Introduction

During its modern history, language teaching in general and second/foreign language teaching in particular has been subject to a few turning points. Some of the most influential trends have been in fact responses to new insights originated in other disciplines such as linguistics and education shortly in the second half of the 20th century.

One such turning point to mention is what is known as communicative approach to language teaching, the rise of which owes a great deal, though indirectly, to Chomsky’s criticism of then-status-quo structuralist approach in linguistics. Chomsky (1957), in his famous book, Syntactic Structures,
effectively attacked linguistic structuralism and behaviouristic psychology for their inadequacies in accounting for the productivity of language system and creativity of human mind and in using language very uniquely and creatively. He argued for a model of linguistics that can deal with the deeper layers of language system and non-observable cognitive processes employed by human mind in acquiring language. These led to formation of his famous dichotomous concepts of competence versus performance and deep structure versus surface structure (Chomsky, 1965).

On the educational side, due to some new socio-political and socioeconomic realities, English rose to become the international language to be used in diplomacy, air navigation, commerce, finance, banking, tourism, and above all scientific publication. With the growing interrelationship of European countries and the establishment, growth and expansion of European Trade Market (currently European Union) in the aftermath of Second World War, cultural and educational relationship among the member countries increased considerably, highlighting a need for teaching the major European languages (English as the most essential of all) among the European nations.

All this meant a surge in the need to learn English throughout the world, more specifically in developing countries. Alongside with this promoted status of English in global spheres, traditional methods of language education went under severe criticism and revision. What, in essence, this criticism aimed at was to underline the communicative aspect of language, an aspect which was thought to have been neglected in previous approaches at the expense of developing structural competence.

The notion of communicative competence is the coinage of the American sociolinguist, Dell Hymes (1972), who found that Chomsky’s notion of competence is too narrow to account for the ability of a native speaker to use the language for real communicative purposes. He argued reasonably that during a normal communicative act, a person uses not only grammatical competence, but also sociolinguistic competence, discourse competence, and above all, strategic competence. Strategic competence focused on the communication strategies that one employs to compensate for deficiencies that may occur in one or more of other strategies.

The realization that second language learners employ different learning strategies that may affect the outcome of their learning has fostered a great number of studies since 1970s. For instance, the positive effect of adopting monitoring, elaborating, and inferencing strategies on the quality of listening comprehension among second language learners has been reported by O’Malley et al. (1989). In a study of exploratory nature by Anderson (1991), an inventory of different learning strategies used by second language learners during their reading comprehension test was formulated. In a fascinating study by Bacon (1992), the relationship between gender and different types of learning strategies employed was sought. It was revealed that male and female subjects make use of different strategies. Oxford (1990) concentrated on the factors that affect the frequency and type of language learning strategy use among second language learners and suggested that the frequency and type of learning strategy use are subject to variation in such factors as degree of awareness of learning strategies, stage of learning, task requirements, age, gender, cultural and mother language background, purpose of learning, personality traits, and motivation. The question that various studies left unanswered was which of the external factors they considered in their studies was most influential in determining patterns of strategy use that contribute either to successful or unsuccessful language learner groups (Wharton, 2000).

Among the many factors that are generally conceived to affect use of language learning strategies two factors, namely language proficiency and gender factors, have not gained due attention. It is believed that if the effect of these two factors is investigated, more insights can be gained regarding the learning process and more particularly the learning strategies used by different second language learners. To address this gap in literature, the current research aimed at investigating the type and frequencies of language learning strategies used by Iranian high school students in relation to their level of language proficiency and gender.
Thus, two questions of the study may be addressed as the following:

- Are the frequency and type of language learning strategy use subject to second language learners’ different levels of language proficiency?
- Are the frequency and type of language learning strategy use subject to second language learners’ gender?

2. Research Design

To address the above questions, the following research design was devised and executed. Sixty five (25= male, 40= female) grade three high school students from four different classes were involved in the study. The average age was 17 and all subjects came from the same L1 (Azeri Turkish) background except one whose first language was Farsi. Two sets of instruments, one being a language proficiency test known as The Nelson English Language Test (Fowler & Coe, 1976), and the other the Strategy Inventory for Language Learning (SILL), developed by Oxford (1990), were used to collect data from the subjects. Version 7.0 of the SILL was employed. It is a self-report instrument that examines the frequency with which language learners use different learning strategies during the process of learning a second language. There exists evidence that endorses both the reliability of SILL and its construct, content, concurrent, and predictive validity (Oxford & Burry-Stock, 1995). A translated version of this inventory was used in the study since the English version was thought to be beyond Iranian high school students’ English language competence.

As the first step in the analysis of data, the data obtained from the Nelson Test was analyzed. Each participant’s responses to the test questions were checked and given scores. A correct response was given one point. No negative points were given to incorrect responses. For scoring the SILL questionnaire, the procedure suggested by Oxford (1990) was followed. That is, participants’ responses to the question items were given scores on the basis of a five-point Likert scale. The questionnaire was divided into six parts, which showed different categories of strategies. For the statistical analysis of the data the raw scores were entered onto Statistical Package for the Social Sciences Programs (SPSS).

3. Results

In this section, the results of the analysis of the data obtained are presented followed by a discussion.

3.1. The overall use of language learning strategies

The overall use of language learning strategies by the subjects has been shown in Table 1. This table presents the mean and standard deviation of strategy use among all the subjects. The average strategy use for overall strategy use ranged from a high 3.2 to a low of 2.65, while the overall mean for the sample was 2.91. As for strategy categories, meta-cognitive strategies were the most frequently used strategies (M=3.2) and cognitive strategies were the least frequently used (M=2.65), while between the two in descending order were social strategies (M=3.00), compensation strategies (M= 2.98), affective strategies (M=2.91), and memory strategies (M=2.71). Results of T-test showed statistically significant differences (p<.010) in the overall use of strategies by the subjects.
Table 1. Description of overall use of language learning strategies

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory strategies</td>
<td>9</td>
<td>1.84</td>
<td>3.40</td>
<td>2.71</td>
<td>.56</td>
</tr>
<tr>
<td>Cognitive strategies</td>
<td>14</td>
<td>2.07</td>
<td>4.16</td>
<td>2.65</td>
<td>.56</td>
</tr>
<tr>
<td>Compensation strategies</td>
<td>6</td>
<td>2.67</td>
<td>3.25</td>
<td>2.98</td>
<td>.22</td>
</tr>
<tr>
<td>Meta-cognitive strategies</td>
<td>9</td>
<td>2.31</td>
<td>3.77</td>
<td>3.2</td>
<td>.51</td>
</tr>
<tr>
<td>Affective strategies</td>
<td>6</td>
<td>1.40</td>
<td>3.58</td>
<td>2.91</td>
<td>.89</td>
</tr>
<tr>
<td>Social strategies</td>
<td>6</td>
<td>2.05</td>
<td>3.74</td>
<td>3.00</td>
<td>.64</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>2.65</td>
<td>3.2</td>
<td>2.91</td>
<td>.2</td>
</tr>
</tbody>
</table>

Table 2. Results of T-test for the overall strategy use

<table>
<thead>
<tr>
<th>Overall strategy use</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>66.720</td>
<td>1</td>
<td>.010</td>
<td>2.95570</td>
<td>2.3928–3.5186</td>
</tr>
</tbody>
</table>

Figure 1. Mean scores for strategy use

3.2. Strategy use and proficiency level
The mean scores of strategy use for high and low proficiency level subjects have been displayed in Table 3. Results indicate that high proficiency learners reported higher mean scores in all of the six strategy categories than low proficiency learners. To be more precise, learners with higher proficiency levels used all types of strategies more frequently than those with lower levels of proficiency. The most preferred strategy types for high proficiency level learners were meta-cognitive strategies (M=3.53) and social strategies (M=3.27) respectively, while for learners with lower proficiency levels cognitive strategies (M=2.80) and compensation strategies (M=2.80) were most preferred strategy types. Also, the least preferred category for high proficiency group was affective category (M=2.75), and for low proficiency subjects was meta-cognitive category (M=2.42).

Results of the T-test showed a statistically significant difference in overall strategy use between high proficiency and low proficiency groups of learners (p<.046). It is further revealed that the difference is significant for two strategy categories: meta-cognitive strategies (p<.002) and social strategies (p<.025). These two strategy types were employed significantly more by high proficiency group than the low proficiency group.

Table 3. Summary of strategy use showing difference by proficiency level

<table>
<thead>
<tr>
<th>Variables</th>
<th>High Proficiency M</th>
<th>S.D</th>
<th>Low Proficiency M</th>
<th>S. D</th>
<th>T</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory strategies</td>
<td>2.84</td>
<td>.59</td>
<td>2.58</td>
<td>.57</td>
<td>3.76</td>
<td>.00</td>
</tr>
<tr>
<td>Cognitive strategies</td>
<td>2.98</td>
<td>.67</td>
<td>2.80</td>
<td>.6</td>
<td>1.75</td>
<td>.1</td>
</tr>
<tr>
<td>Compensation strategies</td>
<td>3.2</td>
<td>.5</td>
<td>2.80</td>
<td>.1</td>
<td>1.84</td>
<td>.124</td>
</tr>
<tr>
<td>Meta-cognitive strategies</td>
<td>3.53</td>
<td>.51</td>
<td>2.42</td>
<td>.59</td>
<td>4.33</td>
<td>.00</td>
</tr>
<tr>
<td>Affective strategies</td>
<td>2.75</td>
<td>1.00</td>
<td>2.67</td>
<td>.84</td>
<td>.36</td>
<td>.72</td>
</tr>
<tr>
<td>Social strategies</td>
<td>3.27</td>
<td>.77</td>
<td>2.76</td>
<td>.56</td>
<td>3.15</td>
<td>.02</td>
</tr>
<tr>
<td>Total</td>
<td>3.1</td>
<td>.29</td>
<td>2.67</td>
<td>.15</td>
<td>13.74</td>
<td>.046</td>
</tr>
</tbody>
</table>

3.3. Use of strategies by gender

The second question that the present study tried to address was the relationship between strategy use and gender. A summary of the statistical analysis of data on this issue has been presented in Table 4. What this analysis, particularly the mean differences, revealed was that female subjects engaged in strategy use more frequently than male subjects. Also, the table shows that male subjects used meta-cognitive strategies (M=3.1) and social strategies (M=2.9) most frequently, while memory strategies (M=2.68) were
the least used strategies. Female learners, on the other hand, tended to use meta-cognitive strategies (M=3.12) and compensation strategies (M=3.09) more frequently, while favouring memory strategies (M=2.66) the least.

In addition, on the basis of T-test results, overall strategy use varied significantly (p<.004). T-test also revealed a statistically significant difference in the use of cognitive strategies between male and female learners (p<.013), with the latter group employing cognitive strategies more frequently than the
former one. No significant differences were found in the employment of memory, compensation, meta-cognitive, affective, and social strategy categories.

Table 4. Summary of the results on the relationship between strategy use and gender

<table>
<thead>
<tr>
<th>Variables</th>
<th>Male Group</th>
<th></th>
<th>Female Group</th>
<th></th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory strategies</td>
<td>2.68</td>
<td>.43</td>
<td>2.66</td>
<td>.72</td>
<td>- .19</td>
<td>.85</td>
</tr>
<tr>
<td>Cognitive strategies</td>
<td>2.73</td>
<td>.64</td>
<td>2.96</td>
<td>.64</td>
<td>-2.86</td>
<td>.01</td>
</tr>
<tr>
<td>Compensation strategies</td>
<td>2.82</td>
<td>.25</td>
<td>3.09</td>
<td>.29</td>
<td>-1.86</td>
<td>.12</td>
</tr>
<tr>
<td>Meta-cognitive strategies</td>
<td>3.1</td>
<td>.55</td>
<td>3.12</td>
<td>.51</td>
<td>.342</td>
<td>.74</td>
</tr>
<tr>
<td>Affective strategies</td>
<td>2.87</td>
<td>.85</td>
<td>2.72</td>
<td>.87</td>
<td>1.51</td>
<td>.19</td>
</tr>
<tr>
<td>Social strategies</td>
<td>2.9</td>
<td>.59</td>
<td>3.06</td>
<td>.68</td>
<td>-1.57</td>
<td>.17</td>
</tr>
<tr>
<td>Total</td>
<td>2.85</td>
<td>.14</td>
<td>2.89</td>
<td>.22</td>
<td>143.5</td>
<td>.00</td>
</tr>
</tbody>
</table>

4. Discussion

Generally speaking, the findings of the current research are compatible with those of previous researches (Abraham & Vann, 1987; O’Malley & Chamot, 1990; Politzer & McGroarty, 1985), which have indicated that more successful second language learners make use of language learning strategies more frequently and more appropriately than less successful ones.

Coming to specific results, learners in our project employed meta-cognitive strategies with the highest frequency (M=32) among other strategy categories. This is similar to the findings of research on Korean and Indian subjects as reported by Oh (1992), and Sheorey (1999). Also, despite the fact that high use of social strategies in this study somehow contradicted with the findings of Polizter and McGroarty (1985), and O’Malley and Chamot (1990), who reported that Asian second language learners tended to use more rote learning and language rules and less communicative strategies, it matched with the findings of another study (Wharton, 2000), which reported more frequent use of social strategies by Singaporean students.

Another finding of the current research is concerned with the use of cognitive strategies which ranked the lowest among strategy categories. This means that cognitive strategies such as ‘dividing words into smaller parts to understand’, ‘using words in different ways’, and ‘making summaries’ are not very common among Iranian high school second language learners. One explanation can be the type of literacy practices in the mainstream curriculum which normally do not focus on developing students’ cognitive strategies.

Low use of memory strategies was another surprising finding in this study in that it is contrary to the practices of instructional culture of Iran, in which rote learning is a learning trait advocated by the system. However, when compared to some other studies such as Oh (1992), Liu (2003), and Hong-Nam and Leavell (2006), who also reported low use of memory strategies among their subjects, some consistencies can be observed.

Concerning the relationship of strategy use to language proficiency and gender, the findings of the current study are consistent with previous reports on the same issues. For instance, studies by Chien and Wei (1998), Oxford and Crookall (1989), Oxford and Nyikos (1989), and Wharton (2000) have shown that learners with high proficiency in English use more learning strategies than learners with low proficiency. Similarly, many studies (Green & Oxford 1995; Mochizuki, 1999; Oxford & Nyikos, 1989;
Peacock & Ho, 2003) have reported that female learners use learning strategies more frequently than male learners, observations that match with the findings of the present study.

As for the use of meta-cognitive and social strategies, this study was able to draw a parallel with previous investigations (Liu, 2004; Magogwe & Oliver 2007), which pointed out a positive correlation between learners’ proficiency levels and frequency of use of these strategies. It also seems to support Oxford’s (1990) claim that meta-cognitive strategies are an important ingredient of successful language learning.

Cognitive strategies were used significantly more often by female than male learners. This may be due to female learners’ high degree of awareness of their needs and also due to this possible explanation that female learners look for more opportunities to engage in the analysis and practice of second language input. It also offers valuable insights to language teachers that if female learners are more aware of the importance and more prepared to use learning strategies in learning a new language, then male learners may need more help and attention than female learners in developing such capacities in strategy use.

5. Conclusion

This study investigated the use of language learning strategies among Iranian high school students to provide a deeper understanding of the processes learners engage in the process of learning a second language. It was revealed that all six language learning strategies were employed at varying degrees of frequency by the subjects, and that this variation was subject to learners’ gender and level of proficiency.

This study has certain implications for second language pedagogy. For one thing, what research of this sort may indicate is the necessity of raising awareness among language learners of the functions and usefulness of such strategies so that they become encouraged to select and use more appropriate strategies at various stages of learning their second language. But, this does not end in here. Awareness should also be built among language teachers to recognize the salient role of learning strategies for language learners, and also to be aware of the significance of factors such as gender and level of proficiency in the learners’ choice of strategy use. Such awareness would undoubtedly help language teachers in respecting individual differences among language learners and thus may lead them towards implementing a learner centred class. There also exists an implication for syllabus designers and material developers in that realization of the significance of learning strategies should be incorporated into syllabi, textbooks, tasks and activities that not only require the development of learning strategies but also provide opportunities to use such strategies.

References


