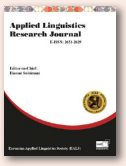
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The Relationship between Language Learning Strategies and Achievement among EFL University Students in Yemen

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ABSTRACT

This study investigated the relationship between language learning strategies and achievement among Yemeni EFL university students. It also identified the differences between high and low achievers in using language learning strategies. Seventy students were randomly selected from the fourth level on the basis of their university scores as high and low achievers. The study adopted the SILL questionnaire developed by Oxford (1990) to collect the data of the study. The obtained data were statistically analyzed through SPSS software. The results of the study showed that the most frequently used strategies of high achievers were meta-cognitive, compensation and cognitive strategies while the least frequently used strategies were affective, memory and social Strategies. On the other hand, the most frequently used strategies of low achievers were meta-cognitive strategies, the strategies entitled "others" and affective strategies whereas the least frequently used strategies were cognitive, social and memory strategies. The findings also revealed that there was a statistically significant difference between high and low achievers in the overall use of LLSs in favor of high achievers, there were significant differences between high and low achievers in using meta-cognitive, compensation and cognitive strategies in favor of high achievers and there was a positive relationship between the overall use of language learning strategies and students' academic achievement. It was also found that the meta-cognitive and compensation strategies positively correlate with the students' academic achievement. The findings have significant implications for research on LLSs, classroom instruction, materials design, and teacher preparation

Keywords: Affective strategies; Cognitive strategies; Compensation strategies; Memory strategies; Meta-cognitive strategies; Social strategies.

1. Introduction

Over last decades, language teachers and researchers realized that there is no a specific teaching method or method of teaching which can ensure absolute success in teaching a foreign or second language. Although language learners are taught in the same learning environment, by the same language teachers and learning material, they largely differ in terms of their achievement. Thus, there has been a shift of focus from teaching methods to the use of language learning strategies. Language learning strategies (henceforth LLSs) are viewed as "the special thoughts and behaviors that individuals use to comprehend, learn, or retain new information" (O'Malley & Chamot, 1990, p. 1). In fact, LLSs have been investigated and classified by many researchers

(Oxford, 1990; O'Malley & Chamot, 1990).

The present study adopts the classification of LLSs by Oxford (1990) in that it is more comprehensive than others. In the classification of LLSs, Oxford divided LLSs into two types: direct and indirect strategies. Direct strategies are the ones which assist language learning directly whereas the indirect strategies are those which influence the language indirectly and do not involve the subject matter. The direct strategies are comprised of cognitive, compensation and memory strategies while the indirect strategies include affective, meta-cognitive and social strategies.

It is crucial to shed light on these strategies and provide examples for each category to facilitate the understanding of the differences between such language learning strategies. Meta-cognitive strategies are utilized for centering, planning, arranging and evaluating the learning of learners (Oxford, 1990). This type of strategies offer executive control over the learning process and thus they are used to manage the learning process overall. However, cognitive strategies help language learners to manipulate the language in direct ways (Oxford, 1990). Examples of this type of strategies include reasoning, analysis, summarizing, note-taking, synthesizing, outlining, reorganizing information to develop stronger schemas (knowledge structures), practicing in naturalistic settings, and practicing sounds and structures formally. Memory strategies are those which help learners store new information in memory and retrieve it later while compensation strategies assist langue learners to make up for missing knowledge (Oxford, 1990). Finally the affective strategies are those which help language learners have better control over their attitudes, emotions, and motivations related to language learning while the social strategies are the ones which enable language learners to work with others and understand the target culture as well as the language (ibid).

Research on LLSs investigates the possibility of assisting language learners to be more effective learners by teaching them some of the learning strategies that are identified as features of good language learners (Rubin, 1975). Therefore, it is vitally important to identify the language strategies employed by successful language learners and draw the language learner, teachers and educators' attention to such strategies. This in turn helps them determine which language learning strategies need to be used or introduced. To this end, the current study investigates the relationship between LLSs and achievement among EFL Yemeni learners. This study attributes the difference in the achievement among the language learners to the language learning strategies utilized by those learners. Investigating the language learning strategies employed by both high and low achievers might lead to a better understanding of the way Yemeni EFL learners acquire the language. Such a kind of study would be of great importance particularly when there is a kind of misconception in the field of foreign language learning in Yemen.

This study highlights the language learning strategies that are common to high achievers and then attends the strategies which are frequent, salient and common to high achievers in the curricula. This may lead to design a more valuable and useful syllabus for EFL university learners in Yemen and to be constructed in the input. Such input would be supported by formal instruction which can influence a new route in the field of teaching English in Yemen.

2. Questions of the Study

The study is an attempt to answer the following questions:

1. What are the most and the least frequently used learning strategies among the fourth level EFL university students as revealed through achievement?
2. To what extent is there any statistically significant difference between high and low achievers in using language learning strategies?
3. What is the relationship between language learning strategies and achievement among fourth level EFL university students?

3. Method

3.1.The Study Design

This study is an exploratory correlational study. It aims at investigating the relationship between LLSs employed by EFL fourth level students studying English at the English department, Sana'a University and their level of academic achievement. The design of this study adopts the quantitative approach for collecting and analyzing the data of the study as it is useful to identify and analyze LLSs used by the selected learners in this study.

3.2.Population

The population of this study consists of 171 fourth level students (those who are in their last year of university) enrolled in the English Department at the Faculty of Education at Sana'a University, of whom 120 students are female while the other 51 students are male. The age of the participants ranges between 21 and 26 and the mean age is 23. For the purpose of this study, the subjects' university averages of the second semester of the academic year 2016-2017 were collected from the English department to report their achievement in the English courses. The university averages of the students were calculated and consequently the students were ordered according to their averages from high to low achievers. The whole population was divided equally into three groups, namely, high achievers (57 students), moderate achievers (57 students) and low achievers (57 students) based on their scores; the scores of high achievers range between 93.1 and 78.6; the scores of moderate achievers range between 78.3 and 63.8, and the scores of low achievers range between 63.8 and 23.1. Table 1 shows the classification of the participants of the study based on their scores.

3.3.Sampling

The sample of this study consisted of (40%) of the whole population. Forty percent of the whole population was selected from the first (i.e. high achievers) and the third groups (i.e. low achievers), (20%) each. In other words, (70) students were randomly selected from the two groups, (35) students each. The questionnaires were distributed upon them and they were gathered in the same day.

3.4.Instrumentation

Learning strategies are for the most part unobservable, though some may be associated with an observable behavior. For example, a learner could employ strategies like positive self-talk (unobservable); s/he can also utilize strategies like taking notes (observable). The methods of investigating LLSs use in the literature include self-reporting methods (such as interviews and questionnaires), formal and informal observation, group discussions, think-aloud tasks and diaries, as well as different combinations of the above (Ellis, 1994; Oxford, 1996; Oxford & Burry-Stock, 1995; O'Malley & Chamot, 1990). Nevertheless, the most frequent and efficient method for identifying the learning strategies of language learners is through questionnaires (Chamot, 2004). For the purpose of this study, the data collection instrument used for the collection of the data is the Strategy Inventory for Language Learning questionnaire (SILL) which was originally compiled by Oxford (1990). The SILL instrument comprises (50) questions with the five-point Likert scale ranged from 1–5 for responding to items and is divided into six parts: memory, cognitive, compensation, meta-cognitive, affective, and social strategies. Moreover, ten items proposed by Abu Shmais (2003) were also added to the questionnaire because they are identified in a similar language learning environment where English is spoken as a foreign language and Arabic as a first language.

3.5.Classification of Learners

It is initially crucial to look at how the learners were classified based on their scores of English subjects. Before the subjects were given the questionnaire, their averages of the previous semester were collected from the English department to measure their academic achievement in English

courses. The purpose of this step was to divide the learners into three groups: high, moderate and low achievers based on their scores. This step yielded the following results:

Table1. Classification of Students

Number of Students	Averages range	Groups
57	From (93.1) to (78.6)	High achievers
57	From (78.3) to (63.8)	Moderate achievers
57	From (63.8) to (23)	Low achievers

Based on this classification, two samples were derived from the first and third groups to identify their use of LLSs.

4. Results

The purpose of the study is to determine the relationship between language learning strategies employed by the fourth level students majoring English in the Faculty of Education and their academic achievement. The study also aims at finding out any statistically significant differences between high and low achievers in using LLSs. This section attempts to answer the three questions set earlier by analyzing the quantitative data of the questionnaire.

After statistical analysis of data, the quantitative results were categorized into three parts. The first part is related to the use of LLSs by the fourth level EFL learners and to the identification of the most and least frequently used strategies of the two groups, as well. The second part is related to the differences between high and low achievers in using LLSs. The third part is related to the relationship between LLSs and achievement. Tables are also provided throughout the course of this section for additional clarification. The results are presented based on the questions that guide the current study. In the light of the results obtained from the questionnaire, the overall strategy use, strategy use for each of the LLSs categories and strategy use for key individual items are presented.

4.1.Strategies of High and Low Achievers

To identify the most and the least frequently used learning strategies among fourth level EFL university students as revealed through achievement, the means, standard deviations and percentages of LLSs, overall and on each of the strategy categories, are used. For data analysis, these equally statistical means are used:

1. (4.21-5) is used as a value indicating a very high degree of LLSs use.
2. (3.41 – 4.20) is used as a value indicating a high degree of LLSs use.
3. (2.61 – 3.40) is used as a value indicating a moderate degree of LLSs use.
4. (1.81-2.60) is used as a value indicating a low degree of LLSs use.
5. (1- 1.80) is used as a value indicating a very low degree of LLSs use.

4.1.1.Memory Strategies

The first category of LLSs already stated in the questionnaire is the category of Memory Strategies. Table 2 displays the means, standard deviations and percentages of each item of Memory Strategies deployed by the participants.

As illustrated in Table 2, the memory strategies which registered a high frequency mean among the high achievers are those stated in items (1, 2, 4, 8 and 9). As shown, the frequency mean of strategy use is moderate in items (3 and 7). Moreover, the frequency mean is low in the Memory Strategies reported in items (5 and 6). Thus, the overall use of memory strategies of the high achievers is revealed to be moderate scoring a mean of (3.35). On the other hand, the memory strategies which registered a high degree of use among the low achievers are those stated in items (1, 2, 3, 4, 8 and 9).

Table 2 Means, Standard Deviations and Percentages of Memory Strategies

NO	Items	High/Low Achievers	Means	SD	Percent-age (%)	Degree
	Part A					
1	I think of relationships between what I already know and new things I learn in English.	H	4.09	0.98	81.71	High
2	I use new English words in a sentence so I can remember them.	H	3.54	1.01	70.86	High
3	I connect the sound of a new English word and an image or picture of the word to help me remember the word.	H	3.26	1.27	65.14	Moderate
4	I remember a new English word by making a mental picture of a situation in which the word might be used.	H	3.71	1.02	74.29	High
5	I use rhymes to remember new English words.	H	2.46	1.31	49.14	Low
6	I use flashcards to remember new English words.	H	2.00	1.21	40.00	Low
7	I physically act out new English words.	H	3.11	1.23	62.29	Moderate
8	I review English lessons often.	H	4.00	0.80	80.00	High
9	I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.	H	4.00	1.00	80.00	High
Total Scores		H	3.35	0.54	67.05	Moderate
		L	3.37	0.48	67.30	Moderate

Table (2) demonstrates that the frequency mean of strategy use is moderate in the strategies stated in items (6 and 7). Furthermore, the frequency mean is low in the memory strategies reported in item (5). Overall, the use of memory strategies by the low achievers is moderate scoring a mean of (3.37).

4.1.2.Cognitive Strategies

The second category of LLSs mentioned in the SILL questionnaire is the category of Cognitive Strategies. Table 3 illustrates the means, standard deviations and percentages of each item of the Cognitive Strategies employed by the subjects.

As seen in Table 3, the cognitive strategies which scored high among the high achievers are the strategies stated in items (10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21 and 23). The frequency mean of cognitive strategies is moderate in the strategies stated in items (19 and 22). As revealed in this Table, the high achievers are highly active users of cognitive strategies with a mean of (3.70). However, the cognitive strategies which scored high among the low achievers are the strategies stated in items (10, 11, 14, 17, 18, and 23). The frequency mean of cognitive strategies is moderate in those stated in items (12, 13, 15, 16, 19, 20, 21 and 22). It is noticed that the low achievers are highly active users of cognitive strategies with a mean of (3.41).

Table 3 Means, Standard Deviations and Percentages of Cognitive Strategies

NO	Items	High/Low Achievers	Means	SD	Percentage (%)	Degree
10	I say or write new English words several times.	H	3.94	1.06	78.86	High
11	I try to talk like native English speakers.	H	4.06	1.08	81.14	High
12	I practice the sounds of English.	H	3.83	0.92	76.57	High
13	I use the English words I know in different ways.	H	3.43	0.85	68.57	High
14	I start conversations in English.	H	3.74	0.78	74.86	High
15	I watch English language TV shows spoken in English or go to movies spoken in English.	H	3.89	1.18	77.71	High
16	I read for pleasure in English.	H	3.66	1.24	73.14	High
17	I write notes, messages, letters, or reports in English.	H	3.86	0.81	77.14	High
18	I first skim an English passage (read over the passage quickly) then go back and read carefully.	H	4.03	0.95	80.57	High
19	I look for words in my own language that are similar to new words in English.	H	3.23	1.03	64.57	Moderate
20	I try to find patterns in English.	H	3.54	1.17	70.86	High
21	I find the meaning of an English word by dividing it into parts that I understand.	H	3.66	1.06	73.14	High
22	I try not to translate word-for-word.	H	3.29	1.27	65.71	Moderate
23	I make summaries of information that I hear or read in English	H	3.63	1.09	72.57	High
Total Scores		H	3.70	0.54	73.96	High
		L	3.41	0.50	68.16	High

4.1.3.Compensation Strategies

The third category of LLSs mentioned in the SILL questionnaire is the category of Compensation Strategies. Table 4 shows the means, standard deviations and percentages of each item of Compensation Strategies used by the participants.

As displayed in Table 4, the frequency mean of the compensation strategies employed by the high achievers is very high in the compensation strategy stated in item (29). The compensation strategies which scored high among the high achievers are those mentioned in items (24, 25, 26, 27and 28). Obviously, the high achievers are highly active users of compensation strategies with a mean of (3.94) as shown in Table 4. However, the frequency mean of the compensation strategies employed by the low achievers is high in the strategies stated in items (24, 26, 28 and 29). The compensation strategies which scored moderate among the low achievers are those mentioned in items (25 and 27). It is shown that the low achievers are highly active users of compensation strategies with a mean of (3.41).

Table 4 Means, Standard Deviations and Percentages of Compensation Strategies

NO	Items	High/Low Achievers	Means	SD	Percentage (%)	Degree
24	To understand unfamiliar words, I make guesses.	H	4.17	0.75	83.43	High
25	When I can't think of a word during a conversation in English, I use gestures.	H	4.14	0.69	82.86	High
26	I make up new words if I don't know the right ones in English.	H	3.43	1.12	68.57	High
27	I read English without looking up every new word.	H	3.74	1.07	74.86	High
28	I try to guess what the other person will say next in English.	H	3.77	0.91	75.43	High
29	If I can't think of an English word, I use a word or phrase that means the same thing.	H	4.40	0.74	88.00	Very High
Total Scores		H	3.94	0.52	78.86	High
		L	3.41	0.50	68.29	High

4.1.4.Meta-cognitive Strategies

In terms of the fourth category of the SILL questionnaire**,** the meta-cognitive strategies**,** Table 5 displays the means, standard deviations and percentages of each item of such strategies as they are used by the high and low achievers.

Table 5 Means, Standard Deviations and Percentages of Meta-cognitive Strategies

NO	Items	High/Low Achievers	Means	SD	Percentage (%)	Degree
30	I try to find as many ways as I can to use my English.	H	3.86	0.81	77.14	High
31	I notice my English mistakes and use that information to help me do better.	H	4.40	0.65	88.00	Very High
32	I pay attention when someone is speaking English.	H	4.69	0.53	93.71	Very High
33	I try to find out how to be a better learner of English.	H	4.63	0.69	92.57	Very High
34	I plan my schedule so I will have enough time to study English.	H	3.74	1.17	74.86	High
35	I look for people I can talk to in English.	H	3.66	1.33	73.14	High
36	I look for opportunities to read as much as possible in English.	H	3.49	1.04	69.71	High
37	I have clear goals for improving my English skills.	H	4.20	0.87	84.00	High
38	I think about my progress in learning English.	H	4.71	0.52	94.29	Very High
Total		H	4.15	0.50	83.05	High
		L	3.61	0.54	72.19	High

As illustrated in Table 5, the meta-cognitive strategies which scored very high among the high

achievers are those stated in items (31, 32, 33 and 38). It is shown that the frequency mean of the meta-cognitive strategies is high in the strategies stated in items (30, 34, 35, 36 and 37). Therefore, it can be said that the use of meta-cognitive strategies among the high achievers is high scoring a mean of (4.15). On the other hand, the meta-cognitive strategy which scored very high among the low achievers is the strategy stated in item (32). As shown in the Table, the frequency mean of the meta-cognitive strategies is high in the strategies stated in items (30, 31, 33, 35 and 38). It is moderate in the strategies stated in items (34, 36 and 37). Obviously, the use of meta-cognitive strategies among the low achievers is high scoring a mean of (3.61).

4.1.5.Affective Strategies

The fifth category of LLSs stated in the SILL is the category of affective strategies. Table 6 displays the means, standard deviations and percentages of each item of affective strategies deployed by the subjects.

Table 6 Means, Standard Deviations and Percentages of Affective Strategies

NO	Items	High/Low Achievers	Means	SD	Percentage (%)	Degree
39	I try to relax whenever I feel afraid of using English.	H	4.03	1.01	80.57	High
40	I encourage myself to speak English even when I am afraid of making mistakes.	H	4.37	0.77	87.43	Very High
41	I give myself a reward or treat when I do well in English.	H	3.06	1.30	61.14	Moderate
42	I notice if I am tense or nervous when I am studying or using English.	H	3.71	1.25	74.29	High
43	I write down my feelings in a language learning diary.	H	2.40	1.40	48.00	Low
44	I talk to someone else about how I feel when I am learning English.	H	3.11	1.11	62.29	Moderate
Total		H	3.45	0.51	68.95	High
		L	3.43	0.53	68.67	High

As shown in Table 6, the affective strategy which scored very high among the high achievers is the strategy stated in item (40). It is also seen that the frequency mean of affective strategies is high in the strategies stated in items (39 and 42). As displayed in this table, the frequency mean of affective strategies is moderate and low in items (41) and (43) respectively. Overall, this table demonstrates that the high achievers used a high degree of affective strategies with a mean of (3.45). However, the affective strategies which scored high among the low achievers are the strategies stated in items (39, 40, 41 and 44). As displayed in this table, it is seen that the frequency mean of affective strategies is moderate in the strategies stated in items (42 and 43). This table also demonstrates that the frequency mean of affective strategies of low achievers is high scoring a mean of (3.43).

4.1.6.Social Strategies

The category of social strategies is the sixth category of LLSs as reported in the SILL questionnaire. Table 7 presents the social strategies employed by the high and low achievers with the means, standard deviations and percentages of each item.

Table 7 Means, Standard Deviations and Percentages of Social Strategies

NO	Items	High/Low Achievers	Means	SD	Percentage (%)	Degree
45	If I don't understand something in English, I ask the other person to slow down or say it again.	H	3.86	0.94	77.14	High
46	I ask English speakers to correct me when I talk.	H	2.69	1.25	53.71	Moderate
47	I practice English with other students.	H	3.34	0.68	66.86	Moderate
48	I ask for help from English speakers.	H	2.80	1.18	56.00	Moderate
49	I ask questions in English.	H	3.91	1.01	78.29	High
50	I try to learn about the culture of English speakers.	H	3.26	1.20	65.14	Moderate
Total Scores		H	3.31	0.55	66.19	Moderate
		L	3.39	0.71	67.81	Moderate

In terms of social strategies, Table 7 shows that the social strategies which scored high among the high achievers are the strategies stated in items (45 and 49). As illustrated, the frequency mean of such strategies is moderate in the strategies mentioned in items (46, 47, 48 and 50). Overall, the frequency mean of social strategies is estimated at (3.31), a value indicating a moderate use of these strategies. On the other hand, the social strategy which scored high among low achievers is the strategy stated in item (45). As illustrated, the frequency mean of social strategies is moderate in the strategies mentioned in items (46, 47, 48, 49 and 50). The mean of social strategies is estimated at (3.39), a value indicating a moderate use of such strategies among the low achievers.

4.1.7.Others

The strategies entitled "Others" in the questionnaire are the strategies developed by Abu Shmais (2003). These strategies belong to many categories of LLSs. However, these strategies were not classified under the already discussed categories. Rather, they were classified under a new category entitled "Others". Table 8 demonstrates the means, standard deviations and percentages of each item of the strategies entitled "Others" as they are used by the participants.

As illustrated in Table 8, the LLSs entitled "Others" scored very high among the high achievers in the strategies stated in items (53 and 60). It is shown that the use of these strategies is high in those reported in items (54, 55, 56, 58, and 59). It is also revealed that the use of such strategies is moderate in those stated in items (52 and 57). This table also shows that the use of these strategies is low in that stated in item (51). It is noticed that the high achievers use a high degree of the strategies entitled "Others" in the questionnaire, with a mean of (3.61). However, the strategies entitled "Others" scored high among the low achievers in the strategies stated in items (53, 54, 55, 56, 58, 59 and 60). As revealed in this table, the frequency mean of these strategies is moderate in the strategies reported in items (51, 52 and 57). Generally, it is noticed that the frequency mean of the strategies entitled "Others" in the questionnaire is high among the low achievers scoring a mean of (3.52).

Table 8 Means, Standard Deviations and Percentages of Others

No	Items	High/Low Achievers	Means	SD	Percentage (%)	Degree
51	I don't use a dictionary to understand unfamiliar words.	H	2.54	1.15	50.86	Low
52	I memorize meaning of words in a list form (out of context).	H	3.09	1.20	61.71	Moderate
53	I respond in English if asked a question in English.	H	4.43	0.70	88.57	Very High
54	I memorize English grammar rules in order to apply them.	H	4.06	1.08	81.14	High
55	I give self tests to prepare for exams.	H	3.51	1.27	70.29	High
56	I rehearse silently in English before speaking in English.	H	3.74	0.95	74.86	High
57	I ask others to test me on what I memorized in English.	H	2.83	1.22	56.57	Moderate
58	I try to think in English.	H	4.03	1.01	80.57	High
59	I memorize new English words by grouping them.	H	3.54	1.20	70.86	High
60	I repeat what I read to enhance my comprehension.	H	4.31	0.72	86.29	Very High
Total Scores		H	3.61	0.51	72.17	High
		L	3.52	0.39	70.40	High

4.2.High Achievers' Overall Use of LLSs

This section presents the high achievers' overall use of LLSs including their use of the seven categories of LLSs reported in the questionnaire. These categories are also ranked from the most to the least frequently used strategies based on the high achievers' use.

Table 9 Ranks of categories and overall use of LLSs employed by high achievers

Strategies	Means	Percentage (%)	Degree	Rank
Meta-cognitive Strategies	4.15	83.05	High	1
Compensation Strategies	3.94	78.86	High	2
Cognitive Strategies	3.70	73.96	High	3
Others	3.61	72.17	High	4
Affective Strategies	3.45	68.95	High	5
Memory Strategies	3.35	67.05	Moderate	6
Social Strategies	3.31	66.19	Moderate	7
Total	3.64	72.89	High	-

As illustrated in Table 9, the high achievers use a high degree of LLSs with a mean of (3.64). Their use of LLSs ranges from moderate to high. The results of this table show that the high achievers use LLSs with different degrees. The strategies which are ranked first among the high achievers are meta-cognitive strategies scoring a mean of (4.15), a value indicating a high degree of use. Compensation strategies are found to be the second strategies employed by the high achievers scoring a mean of (3.94) which indicates a high degree of use. The third strategies used by the high achievers are cognitive strategies with a mean of (3.70), a value used to indicate a high degree of use. The fourth category is the category of the strategies entitled "Others", a mixture of

compensation, memory, cognitive, meta-cognitive and social strategies. Such strategies are rated high with a mean of (3.61). In the fifth rank come the affective strategies with a mean of (3.45), indicating a high degree of use. However, the use of other categories is moderate for the two remaining categories (memory and social) whose frequency means are (3.35 and 3.31) respectively and as shown in Table 9. In order to determine the most and the least frequently used strategies of the high achievers, the first three categories are considered the most frequently used and the last three ones are the least frequently used. However, the remaining category, the fourth one, is considered something in-between. Hence, the most frequently used strategies of the high achievers are meta-cognitive, compensation and cognitive strategies and the least frequently used strategies are affective, memory and social strategies.

4.3.Low Achievers' Overall Use of LLSs

This section presents the low achievers' overall use of LLSs including their use of the seven categories of LLSs reported in the questionnaire. These categories are also ranked from the most frequently used strategies to the least frequently used strategies based on the frequency means of LLSs among the low achievers.

Table 10 Ranks of categories and overall use of LLSs employed by the low achievers

Strategies	Means	Percentage (%)	Degree	Rank
Meta-Cognitive Strategies	3.61	72.19	High	1
Others	3.52	70.40	High	2
Affective Strategies	3.43	68.67	High	3
Compensation Strategies	3.41	68.29	High	4
Cognitive Strategies	3.41	68.16	High	5
Social Strategies	3.39	67.81	Moderate	6
Memory Strategies	3.37	67.30	Moderate	7
Total	3.45	68.97	High	-

As illustrated in Table 10, the low achievers use a high degree of LLSs with a mean of (3.45). Their use of LLSs ranges from "moderate" to "high". The results of this table show that the low achievers use LLSs with different degrees. The strategies which are ranked first among the low achievers are meta-cognitive strategies scoring a mean of (3.61), a value indicating a high degree of use. The Strategies entitled "Others" in the questionnaire are the second strategies employed by the low achievers scoring a mean of (3.52) which indicates a high degree of use. The third strategies used by the low achievers are affective strategies with a mean of (3.43), a value used to indicate a high degree of use. The fourth category is the category of compensation strategies. Such strategies are rated high with a mean of (3.41). In the fifth rank come the cognitive strategies with a mean of (3.41), indicating a high degree of use. However, the use of other categories is moderate for the two remaining categories (memory and social) whose means are (3.37 and 3.39) respectively and as shown in Table (10). In order to determine the most and the least frequently used strategies of the low achievers, the first three categories are considered the most frequently used and the last three ones are the least frequently used. Consequently, the most frequently used strategies of the low achievers are meta-cognitive, the strategies entitled "Others" and affective strategies and the least frequently used strategies are cognitive, social and memory strategies.

4.4.Comparison of Means of LLSs of High and Low Achievers

This section is meant to present and discuss the differences between high and low achievers in using LLSs. To find the difference between high and low achievers, Independent T. test was used. The purpose of conducting the Independent T- test was to identify any existence of a statistically significant difference in using (LLSs) between high and low achievers, both in the use of each category of LLSs and the overall use of LLSs. Table 11 displays the means of (LLSs) according to

achievement and the results of Independent T. test.

Table 11 Comparison of Means of LLSs of High and Low Achievers

Strategies	High Achievers		Low Achievers		T. value	P. value	Comment
	Mean	SD	Mean	SD			
Memory	3.35	0.54	3.37	0.48	- 0.10	0.92	Not significant
Cognitive	3.70	0.54	3.41	0.50	2.35	0.02	Significant
Compensation	3.94	0.52	3.41	0.50	4.36	0.00	Significant
Meta-cognitive	4.15	0.50	3.61	0.54	4.34	0.00	Significant
Affective	3.45	0.51	3.43	0.53	0.11	0.91	Not significant
Social	3.31	0.55	3.39	0.53	- 0.53	0.60	Not significant
Others	3.61	0.51	3.52	0.39	0.81	0.42	Not significant
Total	3.64	0.32	3.45	0.34	2.64	0.01	Significant

Table 11 demonstrates that there are statistically significant differences at ($\alpha = 0.05$) between high and low achievers in favor of high achievers on some LLSs categories whereas there were no statistically significant differences on the other categories of LLSs and as follows:

1. The results illustrated in Table 11 demonstrate that there was no statistically significant difference at ($\alpha = 0.05$) between high and low achievers in using Memory Strategies, Affective Strategies, Social Strategies and the Strategies entitled "Others" in the questionnaire.
2. Moreover, the results presented in Table 11 show that there was a statistically significant difference at ($\alpha = 0.05$) between high and low achievers in using Meta-cognitive Strategies, Compensation Strategies and Cognitive Strategies in favor of high achievers.
3. More importantly, the results illustrated in Table 11 demonstrate that there was a statistically significant difference at ($\alpha = 0.05$) between high and low achievers in the overall use of LLSs in favor of high achievers.

4.5.Correlation between LLSs Use and Achievement

This section is intended to shed light on the relationship between LLSs and achievement among fourth level students. In order to identify the correlation between LLSs use and achievement, Pearson Correlation Coefficient was employed to analyze the data at hand. The rationale behind using Pearson Correlation Coefficient is simply because the sample size exceeds 20 participants and thus it is recommended for such a kind of study. Table 12 demonstrates the relationship between the use of each LLSs category and the overall use of LLSs and the students' academic achievement.

Table 12 Correlation between LLSs and achievement

LLSs	Achievement		Comment
Memory	Pearson correlation	.026	No relationship
	Sig. (2-tailed)	.828	
Cognitive	Pearson correlation	.227	No relationship
	Sig. (2-tailed)	.059	
Compensation	Pearson correlation	.395**	Significant positive relationship
	Sig. (2-tailed)	.001	
Metacognitive	Pearson correlation	.407**	Significant positive relationship
	Sig. (2-tailed)	.000	
Affective	Pearson correlation	- .016	No relationship
	Sig. (2-tailed)	.892	
Social	Pearson correlation	- .097	No relationship
	Sig. (2-tailed)	.425	
Others	Pearson correlation	.080	No relationship
	Sig. (2-tailed)	.512	
Total	Pearson correlation	.255*	Significant positive relationship
	Sig. (2-tailed)	.033	

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

As illustrated in Table 12, only the use of two categories of LLSs positively correlates with the students' academic achievement. Most importantly, the students' overall strategy use also positively correlates with their academic achievement as follows:

1. The use of Meta-cognitive Strategies was found to positively correlate with the students' academic achievement at the p<.01 level. This positive correlation was estimated at (.41**) according to Pearson's correlation coefficient and was above .30 level. Such results demonstrate the fact that the high achievers used Meta-cognitive Strategies more than that of the low achievers. Accordingly, it can be realized that the use of such strategies has something to do with the students' academic achievement.
2. The use of Compensation Strategies was found to correlate with the students' academic achievement at the p<.01 level. This positive correlation was estimated at (.40**) according to Pearson's correlation coefficient and was above .30 level. To better understand, those strategies were more frequently used by the high achievers in comparison to that of low achievers and this might account for the students' high achievement which could be influenced by using such strategies.
3. The overall use of LLSs was found to positively correlate with the students' academic achievement at the p<.05 level. This positive correlation was estimated at (.26*) according to Pearson's correlation coefficient. Though positive, such a correlation was low and was under the .30 level.
4. The other categories of SILL including Memory, Affective, Social and the strategies entitled "Others" were not found to have any correlation with the students' academic achievement. To clear up this statement, the use of these strategies has nothing to do with the learners' achievement as illustrated in Table 12.

4.6.Correlations among the Seven Categories of LLSs

Table 13 presents the correlations that exist among the seven categories of LLSs. Such

correlations indicate that some categories of LLSs are predictors of others.

Table 13 Correlations among the Seven Categories of LLSs

		Memory	Cognitive	Compensa-tion	Metacogni-tive	Affec-tive	Social	Others	Total
Memory	Pearson correlation		.154	.011-	.086	.169	.149	.139	.379**
	Sig. (2-tailed)		.203	.926	.480	.162	.219	.252	.001
Cogni-tive	Pearson correlation			.520**	.495**	.402**	.431**	.398**	.835**
	Sig. (2-tailed)			.000	.000	.001	.000	.001	.000
Com-pensa-tion	Pearson correlation				.308**	.118	.118	.123	.496**
	Sig. (2-tailed)				.010	.329	.331	.309	.000
Meta-cogni-tive	Pearson correlation					.290*	.448**	.445**	.728**
	Sig. (2-tailed)					.015	.000	.000	.000
Affec-tive	Pearson correlation						.308**	.273*	.554**
	Sig. (2-tailed)						.010	.022	.000
Social	Pearson correlation							.418**	.654**
	Sig. (2-tailed)							.000	.000
Others	Pearson correla-tion								.647**
	Sig. (2-tailed)								.000

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

As illustrated in Table 13, there were correlations among the seven categories of LLSs as follows:

1. Memory and overall use of LLSs

It was found that the use of memory strategies only correlate with the overall use of LLSs at the level of p<.01. Such a relationship was positive and the value of (r) was estimated at (.38**). There was no correlation between memory strategies and the individual categories of LLSs.

2. Cognitive and other categories

Cognitive strategies were found to positively correlate with compensation, meta-cognitive, affective, social strategies and the strategies entitled "Others" at level of p<.01. The (r) values were (.52**), (.50**), (.40**), (.43**) and (.40**) respectively. Such results reveal the fact that the students who used more cognitive strategies employed more compensation, meta-cognitive, affective, social strategies and the strategies entitled "Others" in the questionnaire. It was also found that cognitive strategies positively correlate with the overall use of strategies at level of p<.01. The value of (r) is estimated at (.84**). That is to say, the students who used more cognitive strategies employed more language learning strategies in general.

3. Compensation and other categories

Compensation strategies were found to positively correlate with cognitive, meta-cognitive and the overall use of strategies at level of p<.01. The (r) values were (.52**), (.31**) and (.50**) respectively. In other words, the students who used more compensation strategies employed more cognitive and meta-cognitive strategies. It was also found that the students who used more compensation strategies employed more language learning strategies in general.

4. Meta-cognitive and other categories

Meta-cognitive strategies were found to positively correlate with compensation, cognitive, social and the strategies entitled "Other" at level of p<.01. The values of (r) were (.50**), (.31**) and (.45**) respectively. That is, the students who used more meta-cognitive strategies employed more compensation, cognitive, social strategies and the strategies entitled "Other". Moreover, it was revealed that meta-cognitive strategies positively correlate with affective strategies at the level of p<.05. The value of (r) was estimated at (.29*). Though positive, such a correlation was considered low and was below the .30 level. It was also found that meta-cognitive strategies positively correlate with the overall use of strategies at level of p<.01. The value of (r) was (.79**). Such a result reveals the fact that the students who used more meta-cognitive strategies used more language learning strategies in general.

5. Affective and other categories

Affective strategies were found to positively correlate with cognitive, social and the overall use of strategies at level of p<.01. The values of (r) were (.40**), (.31**) and (.56**) respectively. Such results indicate that the students who used more affective strategies used more cognitive, social and language learning strategies, as well. Furthermore, affective strategies positively correlated with meta-cognitive and the strategies entitled "Others" in the SILL questionnaire at the level of p<.05. The values of (r) were (.29*) and (.27*) respectively. Though positive, such correlations were low and were below the .30 level.

6. Social and other categories

Social strategies were found to positively correlate with cognitive, meta-cognitive, affective, the strategies entitled "Others" in the SILL questionnaire and the overall use of strategies at level of p<.01. The values of (r) were (.43**), (.49**), (.37**), (.49**) and (.65**) respectively. Such results indicate that the students who used more social strategies used more cognitive, meta-cognitive, affective strategies and the strategies entitled "Others". It was also found that the students who used more social strategies used more language learning strategies in general.

7. Strategies entitled "others" and other categories

The strategies entitled "Others" in the SILL questionnaire were found to positively correlate with cognitive, meta-cognitive, social and the overall use of strategies at the level of p<.01. The values of (r) were (.40**), (.45**) and (.65**) respectively. Furthermore, the strategies entitled "Others" in the SILL questionnaire positively correlated with affective strategies at the level of p<.05 and the value of (r) was (.27*). Though positive, such a correlation was considered low and was below the .30 level. In other words, the students who used more strategies from the ones entitled "Others" used more cognitive, meta-cognitive and social strategies. It was also found that those who used more strategies from the strategies entitled "Others" used more LLSs in general.

8. The overall use of strategies and individual categories of LLSs

The overall use of strategies was found to positively correlate with the individual seven categories of SILL at the level of p<.01. The values of (r) were as follows:

- The overall use of strategies and memory strategies (.38**),
- The overall use of strategies and cognitive strategies (.84**),
- The overall use of strategies and compensation strategies (.50**),
- The overall use of strategies and meta-cognitive strategies (.73**),
- The overall use of strategies and affective strategies (.55**),
- The overall use of strategies and social strategies (.65**) and
- The overall use of strategies and the strategies entitled "Others" (.65**).

As illustrated above, the highest correlations were found between cognitive and meta-cognitive strategies and the overall use of LLSs. Such correlations indicate that the students who used more cognitive and meta-cognitive strategies used more LLSs in general. In other words, these two categories are predictors of the overall use of LLSs.

5.Discussion and Conclusion

The analysis of the results reveals that there was a positive relationship between the overall use of LLSs and achievement at the $p<.05$ level. Furthermore, it was found that a positive relationship exists between two categories of LLSs, namely, meta-cognitive and compensation strategies and the learners' academic achievement at $p<.01$ level. Such findings are inconsistent with that of Abu Shmais (2003) who found that there is no relationship between language learning strategies and achievement among EFL Palestinian learners. On the contrary, the findings of the study are similar to that of Cohen and Macaro (2011) who found a positive relationship between language learning strategies and achievement. Moreover, the findings of this study indicate that there were statistically significant differences between high and low achievers in the overall use of LLSs and also in the use of the three categories of LLSs, namely, meta-cognitive, compensation and cognitive Strategies.

The analysis of the data reveals that the most frequently used strategies of the high achievers were meta-cognitive, compensation and cognitive strategies and the least frequently used strategies were affective, memory and social strategies. Besides, it was found that the most frequently used strategies of the low achievers were meta-cognitive strategies, the strategies entitled "Others" and affective strategies and the least frequently used strategies were cognitive, social and memory strategies. It is also crucial to indicate that the analysis of the data reveals that both high and low achievers were found to be meta-cognitively oriented since both high and low achievers used meta-cognitive strategies with the highest preference and with the means of (4.15) and (3.61) respectively. This is consistent with the existing literature of (Abu Shmias, 2003; Al-Buainain, 2010; Saricoban and Saricaoglu, 2008; Simsek & Balaban, 2010; Tajareh and Tahririan, 2003). The high use of meta-cognitive strategies among Yemeni students is similar to that observed among students from Asian countries like Japan, China, Korea and Taiwan as reported in some of the studies on Asian students (e.g. Sheorey, 1998).

Since the ultimate aim of the study was to highlight the strategies that are common, frequent and salient to high achievers, it is of vital importance to shed some light on the high achievers' use of such strategies. The findings of the study revealed that the individual meta-cognitive strategies that were more frequently used by the high achievers were "*I notice my English mistakes and use that information to help me do better (4.40)*", "*I pay attention when someone is speaking English (4.69)*", *"I try to find out how to be a better learner of English (4.63)*" and "*I think about my progress in learning English (4.71)"*. This means that high achievers can employ more executive control on their EFL learning to improve their academic achievement. This finding is actually inconsistent with that of Al-Buainian (2010) who found that students with good and fair university averages tended to use meta-cognitive strategies more than excellent and very good students.

Compensation strategies, which were ranked the second by high achievers (3.94) are the strategies that enable students to make up for missing knowledge in the process of comprehending or producing the target language. However, the high-achieving students showed a high preference for compensation strategies and the highest individual compensation strategies were "*If I can't think of an English word, I use a word or phrase that means the same thing*" and "*To understand unfamiliar words, I make guesses"* with the means of (4.40) and (4.17). This might be attributed to the repertoire of English vocabulary and structures the high achievers know and can use. Another explanation of compensation strategies preference of high achievers is that when the high achievers encounter a difficulty in speaking and/or writing, they struggle to overcome that issue by many ways including the use of synonyms and antonyms, paraphrasing or circumlocution. The high achievers were also found to make use of the strategy of guessing the meaning of new words from the context.

The cognitive strategies scored the third highest rank of use among high achievers with a mean of (3.70). The individual strategies most frequently used were "*I try to talk like native speakers (4.06)",*

"I first skim an English passage (read over the passage quickly) then go back and read carefully (4.03)", "*I say or write new English words several times (3.94)", "I watch English language TV shows spoken in English or go to movies spoken in English (3.89)*" and "*I write notes, messages, letters, or reports in English (3.86)"*. The other categories of LLSs including the affective, memory and social strategies were the least frequently used strategies of the high achievers and with means of (3.45), (3.35) and (3.31) respectively.

Therefore, this study recommends that learners in general and low achievers in particular need to be trained in the language learning strategies. Since the meta-cognitive, cognitive and compensations strategies are common among the high achievers, the study recommends that such strategies can form the core of a program of classroom strategy instruction. Moreover, the language teachers are advised to integrate the language strategies in their language teaching. They should also engage the language learners in a variety of activities which involve the language learning strategies to make the language learners more autonomous learners. In terms of future research, there is a need for more comprehensive research on many variables affecting the use of LLSs, to mention but a few, cultural background, age, gender, beliefs, motivation, proficiency and so forth.

The first limitation of this study is the classification of learning strategies. In this study, all strategies were categorized based on the Oxford's (1990) taxonomy. Another limitation of this study relates to the size of the sample of the study which is a small representation of all EFL Yemeni learners. The study only involved 40% of the EFL fourth level students, at the English Department, Faculty of Education, Sana'a University. However, the results of the study might be generalized to all EFL university learners in Yemen. The last limitation of this study is its questionnaire the SILL, the Strategy Inventory for Language Learning which was first devised by (Oxford, 1990).

References

Abu Shmais, W. (2003). Language learning strategy use in Palestine. An-Najah National University, Palestine. *TESOL-EJ*, 7 (2), 1-17.

Al-Buainain, H. (2010). Language learning strategies employed by English majors at Qatar University: Questions and Queries. *ASIATIC*, 2 (4), 92-120.

Chamot A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching*. *1* (1), 12-25.

Website: www.e-flt.nus.edu.sg

Cohen, A. D. & Macaro, E. (2011). *Language learner strategies.* New York. Oxford University Press.

Ellis, R. (1994). *The study of second language acquisition*. Oxford, England: Oxford University Press.

O' Malley, J. M. & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge, England: Cambridge University Press.

https://doi.org/10.1017/CBO9781139524490

Oxford, R. L. (1990). *Language Learning Strategies: What every teacher should know*. New York: Newbury House.

Oxford, R. L. (1996). Employing a questionnaire to assess the use of language learning strategies. *Applied Language Learning, 71*(2), 25-45.

Oxford, R. L. & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the strategy inventory for language learning (SILL), *System 23*(1), 1-23.

https://doi.org/10.1016/0346-251X(94)00047-A

Rubin, J. (1975). What the 'good language learner' can teach us. *TESOL Quarterly 9*(1), 41-51.

https://doi.org/10.2307/3586011

Rubin, J. (1981). Study of cognitive processes in second language learning. *Applied Linguistics* 11(9), 117-31.

https://doi.org/10.1093/applin/II.2.117

Saricoban, A. & Saricaoglu, A. (2008). The effect of the relationship between learning and teaching strategies on academic achievement. *Novitas- Royal 2*(2), 162-175.

Sheorey, R. (1998). The state of English and English language teaching in India. *TESOL Matters* 8 (4), 1-19.

Simsek, A. & Balaban, J. (2010). learning strategies of successful and unsuccessful university students. *Contemporary Educational Technology,* 1(1), 36-45.

Tajareh, A. & Tahririan, M. H. (2003): College EFL learners' achievement and their language learning strategies. J. *Humanities, 10* (2), 1-12.

Appendix

The SILL Questionnaire*

Memory Strategies	
1	I think of relationships between what I already know and new things I learn in English.
2	I use new English words in a sentence so I can remember them.
3	I connect the sound of a new English word and an image or picture of the word to help me remember the word.
4	I remember a new English word by making a mental picture of a situation in which the word might be used.
5	I use rhymes to remember new English words.
6	I use flashcards to remember new English words.
7	I physically act out new English words.
8	I review English lessons often.
9	I remember new English words or phrases by remembering their location on the page, on the board, or on a street sign.
Cognitive Strategies	
10	I say or write new English words several times.
11	I try to talk like native English speakers.
12	I practice the sounds of English.
13	I use the English words I know in different ways.
14	I start conversations in English.
15	I watch English language TV shows spoken in English or go to movies spoken in English.
16	I read for pleasure in English.
17	I write notes, messages, letters, or reports in English.
18	I first skim an English passage (read over the passage quickly) then go back and read carefully.
19	I look for words in my own language that are similar to new words in English.
20	I try to find patterns in English.
21	I find the meaning of an English word by dividing it into parts that I understand.
22	I try not to translate word-for-word.
23	I make summaries of information that I hear or read in English
Compensation Strategies	
24	To understand unfamiliar words, I make guesses.
25	When I can't think of a word during a conversation in English, I use gestures.
26	I make up new words if I don't know the right ones in English.
27	I read English without looking up every new word.
28	I try to guess what the other person will say next in English.
29	If I can't think of an English word, I use a word or phrase that means the same thing.
Meta-Cognitive Strategies	
30	I try to find as many ways as I can to use my English.
31	I notice my English mistakes and use that information to help me do better.
32	I pay attention when someone is speaking English.
33	I try to find out how to be a better learner of English.
34	I plan my schedule so I will have enough time to study English.

35	I look for people I can talk to in English.
36	I look for opportunities to read as much as possible in English.
37	I have clear goals for improving my English skills.
38	I think about my progress in learning English.
Affective Strategies	
39	I try to relax whenever I feel afraid of using English.
40	I encourage myself to speak English even when I am afraid of making mistakes.
41	I give myself a reward or treat when I do well in English.
42	I notice if I am tense or nervous when I am studying or using English.
43	I write down my feelings in a language learning diary.
44	I talk to someone else about how I feel when I am learning English.
Social Strategies	
45	If I don't understand something in English, I ask the other person to slow down or say it again.
46	I ask English speakers to correct me when I talk.
47	I practice English with other students.
48	I ask for help from English speakers.
49	I ask questions in English.
50	I try to learn about the culture of English speakers.
Others	
51	I don't use a dictionary to understand unfamiliar words.
52	I memorize meaning of words in a list form (out of context).
53	I respond in English if asked a question in English.
54	I memorize English grammar rules in order to apply them.
55	I give self tests to prepare for exams.
56	I rehearse silently in English before speaking in English.
57	I ask others to test me on what I memorized in English.
58	I try to think in English.
59	I memorize new English words by grouping them.
60	I repeat what I read to enhance my comprehension.

* SILL is a questionnaire designed by Rebbeca Oxford (1990) to identify the language learning strategies used by EFL learners.