Gender Differences Determining Language Learning Strategies of ESL/EFL Learners

Abdulaziz Alshahrani[a]* iD

*aDepartment of Foreign Languages, Faculty of Arts and Humanities, Al-Baha University.
Email: a.shahrani@bu.edu.sa*

Abstract

Language learning strategies in second language or foreign language learning rank highest among students' personal development plans. Various factors are supposed to affect the choice of a language learning strategy such as gender, age, cultural origins, motivation and language proficiency level. This study aimed to identify the different types of language learning strategies are employed by university students, whether there exists any difference in the choice of strategies based on gender or level of study such as freshmen, sophomores, juniors, and seniors. By using a quantitative research design through a classification approach, this study collected data from a sample of 200 students (108 males and 92 females) in the age group of 18-21 years, identified through random sampling method from Al-Baha university, Saudi Arabia. All the participants were undergraduate students at different academic levels, with at least 12 years of experience of learning English in a formal context in Saudi Arabia. A written questionnaire and Strategy Inventory for Language Learning (SILL) developed by Oxford (1990) was used to collect data, and Mean, Standard Deviations, t-test value, and ANOVA were measured to analyze the findings. The findings revealed that compensation strategies were dominant among Al-Baha University students; there were also no gender or academic level differences in their selection of language learning strategy. The study also concluded that a language learning strategy should be used only to determine the best communication tool. This study provides a subtle signal for curriculum designers and material developers to pay attention to language learning strategies.

Keywords: Language Learning Strategies, Baha University, Gender, EFL/ ESL.

Introduction

Foreign language learning ranks high among individuals' personal development plans. Nowadays, foreign language learning is based on various reasons. Regardless of the reason, learning a foreign language has become one of the important goals today. To achieve this goal, people spend serious money, effort and time (Gu, 2018). Therefore, not being able to reach the goal in foreign language learning or reaching it late will cause despair in individuals. It is believed that foreign language learning should be carried out with some strategies, methods and techniques in order to avoid disappointments in this regard. Within this framework, language learning strategies have been developed (Bıyıklı, 2023; Teng & Huang, 2019).

In the classroom environment, teachers are expected to have goals related to learning processes as well as goals related to learning products. What is meant here are the techniques and strategies that students can use to achieve learning. Oxford (1993) examined the factors affecting language learning strategy and revealed that gender, age, cultural origins, motivation and language proficiency level are important determinants of

the choice of language learning strategy by college students. Learning strategies can be defined as students making the necessary efforts to give meaning to and appropriate the information presented to them through their mental processes during the learning-teaching process or in their individual preparations (Albayrak & Serin, 2022). Several studies in this context have been carried out to investigate the type of language learning strategies of English language learners (Aziz & Shah, 2020; Chanderan & Hashim, 2022; Sukying, 2021). This shows that understanding of learners' strategy is of great significance for academic practitioners, as it could yield fruitful information about the language acquisition process and the role of learning strategies in language development, particularly in EFL/ ESL contexts.

The current study aimed to investigate the role played by gender in adopting language learning strategy among EFL/ESL students at the college level. In the Arab world, there is an apparent paucity of studies investigating the role played by gender in adopting language learning strategy among EFL/ESL students at the college level (Radwan, 2011). Therefore, there is a dire need to conduct a study to contribute to the domain of language learning strategy. Specifically, this study framed the following three research questions:

1. What are the types of language learning strategy among university students?
2. Do male and female students differ while choosing language learning strategy?
3. Does the academic grade (freshmen, sophomores, juniors, and seniors) differ in their choice of language learning strategy?

In this study, gender referred to the roles and expectations attributed to males and females in a given society, roles which change over time, place, and life stage (Doğanülkü & Yavuzer, 2023; Kaufman, Eschliman, & Karver, 2023). Language learning strategies were contextualized as "steps taken by students to enhance their own learning and tools for active self-directed involvement in learning, which is essential for developing communicative competence" (Oxford, 1990). English as a Second Language (ESL) is a traditional term for the use or study of the English language by non-native speakers in an English-speaking environment, also often known as English for speakers of other languages, ESOL (Nordquist, 2019).

Literature Review

- *Language Learning Strategies and Teaching-Learning Process*

Lessard-Clouston (1997) mentioned four basic features of language learning strategies. First, language learning strategies are generated by the learner. The learner determines the steps in the learning process himself and does not need external support for these steps. Second, these strategies contribute to the improvement of language proficiency through the development of basic skills in the second language. Third, strategies can be visible practices, such as behavior, steps, or techniques, or they can be intangible, such as thoughts and mental processes. Finally, language learning strategies require knowledge and memory. Oxford (1990) made additions to the features mentioned above, and argued that language learning strategies facilitate the teaching-learning process. These strategies make the available data more understandable during the learning process or at the end of the learning process. Owing to the positive impact of these strategies, students are more self-directed; they increase the responsibilities of language teachers; they focus on problem solving; they involve many aspects beyond the cognitive; they are teachable; and they are flexible and affected by a wide variety of factors. During the learning process, students perform some actions in their minds, knowingly or unconsciously. Mental actions such as making generalizations, making analyses, drawing conclusions, and establishing relationships can be described as learning strategies used by the individual. With these mental actions, students aim to increase their own learning and make their learning permanent (Baysal, 2019).

A common misconception about learning strategies is that they are the same as communication strategies. However, communication strategies are the strategies used by individuals who speak the language to cope with difficulties in communication. In other words, communication strategies are just some methods used to ensure mutual understanding at the time of communication. Language learning strategies are the strategies used during communication as well as the processing, storage and retrieval of information in the mind techniques for calling. To be more precise, communication strategies are a part of language learning strategies, but language learning strategies are more diverse and comprehensive. Based on this, we can say that the primary benefit of language learning strategies is the development of communication skills (Griffiths, 2020).

This is consistent with Oxford (1990), who considered the main purpose of language learning as communicative competence and defined learning strategies as "the steps taken by the learner to make learning easier, faster, fun, self-controlled, effective and adaptable to new situations." In another study Oxford (2017) stated that language learning strategies are not just a formal structure of strategies, and that this classification includes "internal phenomena such as thoughts, cognition, what the learner thinks, actions such as what the learner does, techniques, tools, and methods such as what the learner uses." It states that behaviors such as how the learner behaves also include the general tendencies of the learner. From this

perspective, he brought a multifaceted flow perspective to his strategy classification. Again, with this definition, he tried to emphasize that strategies should not be viewed only formally or terminologically, but that their functionality is much more important.

- *Direct and Indirect Language Learning Strategies*

Oxford (1990) classified language learning strategies in two different dimensions: direct and indirect. Direct learning strategies address newly learned language directly and work with a variety of language learning tasks activities and situations in a classroom. Direct strategies may be classified into three types: memory strategies, which include tasks such as remembering and organizing new information; cognitive strategies, which include tasks such as understanding and producing new things; and compensatory strategies, which enable the use of language despite knowledge gaps.

Memory strategies, also called memory enhancement strategies (Faruk Ipek & Yesilbursa, 2017), have been used since ancient times when, in order to remember long speeches, orators would connect different parts of their speech to different rooms of a house or temple and then walk from room to room to remember them (Gu, 2018). As literacy spread, people used memory strategies to remember farming, weather forecasts, or birth and death dates. In language learning, memory strategies involve very simple principles such as sequencing, associating, and repetition, which help learners store verbal material and recall it when necessary, during the communication process (Azzam & Easteal, 2021; Kancharla, Kanagaraj, & Gopal, 2023; Niroula & Niroula, 2020). Memory strategies also help the information progress from the real level to the skill level through structured repetitions. In other words, information that was initially more procedural and automatic, becomes easily remembered and not immediately forgotten (Oxford, 1990).

Cognitive strategies, being very popular among foreign language learners, help learn a new language, either though creative measures or manipulation of the target language (Balci & Ügüten, 2018; Habók & Magyar, 2020). Cognitive strategies develop many skills such as understanding, producing, organizing, analysis and reasoning (to create a structure in the target language), to develop a model that can help learners improve their mistakes especially by transferring a rule from their native language to the new language (Azzam & Easteal, 2021; Oxford & Gkonou, 2018; Rubin, 1981). It is, therefore, important for learners learning a target language to analyze learning activities and know such cognitive strategies that directly affect effective learning in the classroom. These cognitive strategies include the use of the rules of the target language, create meaningful sentences by using the newly learned words in newly learned structures, be able to say the words he/she hears and learns in the target language, and form a meaningful meaning by placing a word in a sentence (Masitoh et al., 2023; Oxford, 1990). Cognitive strategies help learners to perform mental operations such as forming sentences, associating newly learned structures with previously learned structures, using previously learned structures to use a newly learned subject more easily, with less effort and energy by using foreign language strategies (Wood, 2020).

Compensatory strategies enable learners to comprehend the new language despite limitations in both language comprehension and knowledge. It comes into play especially where there is insufficient grammar or vocabulary skills (Habók & Magyar, 2020). There can be multiple compensatory strategies to learn language e.g., through picture boards, communication books and devices, that can help to increase verbal and written communication. compensatory strategies are also known to compensate or make up for learners' impairments or a specific weakness or deficit. Compensatory strategies may, therefore, be recommended especially when people face problems in concentrating, remembering, or making decisions. Thus, compensatory strategies often require the use of cognitive functions. For example, in a noisy environment, it is difficult to focus on reading; or it is hard to sleep when loud music is played nearby. Compensatory strategies help learners adjust their attention, to block these distractions, and focus on the task at hand.

Compensatory strategies allow people to find new ways to do things with which they struggle. They can include changes in behavior and changes to the environment that help resolve. In language learning, compensatory strategies cover up deficits or reduce the negative consequences of poor memory, or communication challenges. A learner is able to adopt a compensatory behavior in response to a perceived problem, that requires changes in behavior and in the environment (Oxford, 1990).

Indirect strategies are classified as metacognitive, affective and social strategies. Metacognitive strategies enable learners to control their own cognition; affective strategies provide control of emotions, motivation and attitudes; social strategies are the type of strategies that enable learning by communicating with others (Oxford, 1990). These strategies contribute to learning by indirectly affecting the language learning process (Teng, 2023).

Metacognitive strategies allow learners to coordinate their own learning processes (Bıyıklı, 2023; Kancharla et al., 2023; Yurt, 2022). Oxford (2017) focused heavily on metacognitive strategies, especially in the domain of language learning strategies. In particular, while strategies such as analysis and synthesis can be classified as cognitive strategies, planning, observation and evaluation are considered metacognitive strategies. When language learning strategies are viewed from a metacognitive perspective, students who

learn and apply language learning strategies will have an idea about their own learning and will have the chance to regulate their own learning (Coşkun, 2021; Drigas & Mitsea, 2020; Duruk, 2021). Students who learn and use metacognitive strategies coordinate their own learning processes (Godfrey et al., 2023). Such students are able to organize their thoughts and rules regarding the structures they learn; they are careful about which learning activities they will take part in; they develop the ability to understand the opportunities that will help their own learning; and they can organize their current situation accordingly (Kancharla et al., 2023). Metacognitive strategies also help them plan the elements, determine their level in the language learning process and self-evaluate.

Affective strategies relate to emotions, attitudes, motivations and values. The emotional side of the student is perhaps one of the biggest factors affecting the success or failure of language learning. Good language learners are generally people who can control their own emotions and attitudes about learning. Negative emotions stop progress; positive emotions make language learning more effective and fun (Shao, Pekrun, & Nicholson, 2019). Students may exhibit negative emotions such as anxiety, excitement, fear and stress while learning a foreign language. This situation slows down the learning speed of the students and sometimes even causes the student not to continue the learning activity. However, this situation can be overcome by applying the affective strategies. Learners who apply affective strategies in the process of learning a foreign language face fewer affective difficulties and they can easily overcome possible disappointments. Application of affective strategies help foreign language learners to curb negative emotions and progress more confidently in their learning. They develop positive emotions such as self-esteem, self-motivation and a sense of competence in foreign languages and self-expression. Several factors affect the student's language learning process including self-esteem, sense of competence, anxiety level, and tolerance for uncertainty. Self-esteem is a person's self-judgment about his or her self-worth. High levels of self-esteem ensure good language learning development. The sense of competence affects student's motivation, where self-motivation strategies are effective. A certain level of anxiety allows students to improve their performance, e.g., detrimental anxiety brings with it doubt, helplessness, self-doubt, disappointment, insecurity, fear and some physical symptoms. In such situations, self-encouragement with positive words can affect a person's feelings and attitudes to change and reduce anxiety levels. Tolerance for uncertainty is about accepting confusing situations and perhaps being willing to take risks. A moderate level of tolerance for uncertainty is desirable. In this way, students become more open-minded and can cope with complex situations and events while learning a new language (Oxford, 1990).

The third type, social strategies, also play an important role in the language learning process. One of the most basic social communication tools is 'asking questions'. Asking questions allows students to better understand what is being said and allows the conversation to continue and gain more input in the target language. Strategies for asking questions for clarification or correction are also useful in the classroom. Collaborative work is a must for language students. Many studies have shown that working together results in increased self-confidence, self-esteem, enjoyment, rapid development, progress, greater respect for teachers, and greater use of cognitive strategies. Feeling empathy is a necessary feature for successful communication in any language. Cultural awareness, understanding the feelings and thoughts of others can be increased through empathy and the use of social strategies (Oxford, 1990). Communicative and social strategies, which are indirect strategies, are strategies that can be used outside the classroom for students to practice and socialize a foreign language, as well as in tasks, activities and exercises in the classroom. These are strategies that students should use both in and out of the classroom.

- *Gender Differences*

Gender differences is a strong factor affecting language learning strategies. It is a subject of research by several researchers (Aydoğan & Akbarov, 2014; Azizmohammadi & Barjesteh, 2020; Tam, 2013), all of whom accepted significant differences in the use of language learning strategies between both genders. All these studies unanimously concluded that females use language learning strategies more frequently than males in one or other aspects of language (Božinović & Sindik, 2011; Ehrman & Oxford, 1989; Tam, 2013). For instance, Montero-SaizAja (2021) found female learners better than males in vocabulary acquisition; Oxford (2011) concluded that female students were better than male students in language tasks related to listening comprehension and speaking skills; Bacon (1992) stated that male and female students use language learning strategies for reading comprehension in different ways, with female learners gaining an extra edge over the male learners. However, male students used translation strategies better than female students, and female students tend to use compensatory strategies. In addition, female students use dialogue inference strategies more than male students and focus on learning language in social interaction. As a general result of his study, Bacon (1992) observed that female students used much more strategies than male students. However, Aydoğan & Akbarov (2014) disagreed and argued that there were no significant differences in language learning strategy preferences between males and females.

Oxford (1989) opine that gender shapes the choice of language learning strategy in a co-educational environment, because female students are more self-motivated; they use social strategies more intensively compared to male students; and they resort to different methods in order to have an impact on people and events. Moreover, it was also argued that female learners are more willing to comply with traditional norms than male learners. In addition, it has been understood that while male learners can have more influence in

the public sphere, females are more effective in the private sphere (Oxford, 1989). Studies have been conducted which conclude that female students use more strategies (Aslan, 2009; Goh & Foong, 1997; Green & Oxford, 1995; Oxford, 1994; Oxford, 1989). The general use of strategies does not vary depending on the level at which the foreign language is taught (Green & Oxford, 1995). However, when looking at gender differences, the use of strategies between male and female students varies depending on whether they receive elementary or upper-level education.

Theoretical Framework

The current study aimed to identify the role played by gender in adopting language learning strategies by the ESL/EFL students at college level. The   study focused on the types of language learning strategies, the gender differences in the application of these strategies and whether grades or academic level affected such language learning preferences by the university students. theoretically, there is no complete agreement on how many strategies there should be, how they be defined or categorized, and whether there existed any scientific hierarchy of strategies (Teng & Huang, 2019). Some language learning strategies are quite broad and possibly cover many activities, while others are narrow in scope, like a keyword technique. Vygotsky's (1987) social cultural theory suggests that language learning strategies require internalization of mental processes through social interaction, through interaction with books or other resources, or through interaction with the environment. Face-to-face dialogues are more effective than others, and social strategies play an important role. Examples of these include asking questions, asking for help, and collaborating with others.

This study was based on a broad premise which suggest that most students face the challenge of learning grammar and vocabulary as they show no interest in language rules nor do they have the innovative approach to learn a second or a foreign language. In such a case, these students regain their attention with strategies such as paying attention and connecting with familiar material (Saks & Leijen, 2018a, 2018b). Learners may often not act realistically in detecting language errors nor may not agree to accept their own low level of language proficiency (Drigas, Mitsea, & Skianis, 2022). These problems are overcome by using self-observation, control and self-evaluation strategies (Oxford, 1990). In other words, a need is felt to adopt a suitable strategy to learn a language. Macaro (2006) believed that "strategies are mental, all strategies occur in the mind and are managed by the mind," and that these learning strategies are located in working memory. Similarly, O'malley et al. (1985) stated that language learning strategies are linked to cognitive learning theories and further emphasized the importance of language learning strategies as they enrich information retention, learning and perception.

This debate is given a new dimension by behaviorist (Cohen, 2014), who stated that most language learning strategies are behavioral and thus observable. For instance, "asking questions to clarify" is an observable action, and a learning strategy as well. This can be understood by a simple principle that strategies occurring in mind are stored as schemas or mental structures, which are observable (Macaro 2006). However, Oxford (2017) disagrees with Macaro (2006) and emphasized that, addition to the mental forms of strategies, the implementation of the characteristics of certain strategies must be in the form of observable actions. In other words, strategies always work mentally or are guided mentally, but sometimes strategies must also have observable properties. Being observable does not reduce the mental basis of strategies, since some strategies, such as "rephrasing with examples," are both mental and behavioral but are not easily observable, and strategies such as "making mental translations to make it clear while reading" are merely mental. For this reason, it is difficult to classify all strategies, there are no clear lines, strategies can transition into different categories.

In accordance with these theoretical opinions and views, and to find a solution to this debate, this study adopted Oxford's (1990) classification of language learning strategies into two types: direct and indirect. Direct learning strategies, which address newly learned language directly through language learning tasks and exercises, are classified into three types: memory strategies, requiring a learner to remember and organize new information; cognitive strategies, requiring a learner to understand and produce new things; and compensatory strategies, requiring innovative and remedial tasks to reduce knowledge gaps. Indirect strategies, which contribute to learning indirectly and affect the language learning process, are classified as metacognitive, affective and social strategies. Metacognitive strategies help learners control their mind (cognition); affective strategies provide control of emotions, motivation and attitudes; and social strategies enable learning by social interaction and communication (Oxford, 1990).

These theoretical underpinnings were implemented in this study to understand the types of language learning strategies, the gender differences in the application of these strategies and whether grades or academic level affected such language learning preferences by the university student. The choice of these theoretical concepts further show that Oxford (1990) developed the most comprehensive, detailed and systematic taxonomy of strategies. While the direct strategies required mental processing of the language, the indirect strategies provided indirect support for language learning through focusing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy and other means.

Methodology

- *Research Design*

The study adopted a quantitative research design through a classification approach. The study adopted the theoretical approach recommended by Oxford (1990) to investigate the language learning strategy in determining the gender differences and whether there are factors that affect the choice of language learning strategies at the university level.

- *Sampling*

A sample of 200 students was identified through random sampling method from Baha university, Saudi Arabia. All the participants were undergraduate students: freshmen (100), sophomores (40), juniors (30), and seniors (30). The eligibility criteria for the selection was that each participant should have completed an average of 12 years of experience of learning English in a formal context in Saudi Arabia. The participants comprised 108 (54%) males and 92 (46%) females. Their age group was 18–21 years, with average age of 19.5 years; SD = 5.3.

- *Instrument*

The data was collected through a written questionnaire containing items related to language learning. The participants completed this pencil and paper-based questionnaire during their class hours under the supervision of their instructors. Strategy Inventory for Language Learning (SILL), an instrument developed by Oxford (1990) was used. It contained 50 items, geared to students of English as a SL/FL and took about 30 minutes to complete, depending on the skill level of the learners. The SILL is a five-point scale ranging from 'never or almost never' to 'always or almost always'. The data collection took place in the academic year of 2022/2023. Permission was obtained from the respective colleges and departments which the participants belonged to.

- *Data Analysis*

All the responses to the items in the inventory were analyzed using statistical descriptive analysis by conducting Mean, Standard Deviations, and t-test value, and ANOVA.

Results and Findings

The findings of this study relate to the arguments raised in the theoretical framework designed for the current study and are shaped as per the discourse on language learning strategies, direct and indirect. These findings are also in accordance with the research questions of the study. This section presents the findings accordingly. Right at the outset, the Cronbach's Alpha Coefficient was obtained, which ranged from 0.892 to 0.902, indicating excellent reliability of the instrument, as shown in Table 2.

Table 2: *The Cronbach's Alpha Coefficients.*

Cronbach's Alpha	
Total	0.901
Memory	0.892
Cognitive	0.901
Compensation	0.902
Metacognitive	0.901
Affective	0.895
Social	0.903

In order to respond to the *first* research question regarding the types of language learning strategies among university students, the mean of each type of strategy was measured. Table 3 shows that compensation strategy had the highest mean; followed by memory strategy, cognitive strategy, social strategy, affective strategy, and metacognitive with the lowest mean. This suggests that compensation strategies are dominant among Baha University students.

Table 3: *Mean of Each Strategy Type.*

Strategy type	Learners (n)	Total Score	Mean	SD
Memory	200	5007	3.2	1.2
Cognitive	200	5020	3.3	1.0
Compensation	200	5060	3.5	1.1
Metacognitive	200	4003	2.4	1.6
Affective	200	4180	2.7	1.4
Social	200	4290	2.8	1.3

To find a response to the *second* research question regarding gender differences in employing the language learning strategies, a t-test was used in concurrence with Strategy Inventory for Language Learning (SILL). Table 4 shows that all t- values are not significant (P>0.05). Therefore, males and females showed no differences in their SILL.

Table 4: *Mean, Standard Deviations, and T-Test Value for The Difference Between Males and Females.*

Strategies	Males		Females		T	P
	Mean	SD	Mean	SD	.788	0.81
Memory	3.21	0.88	3.25	0.95	.775	0.88
Cognitive	3.27	0.75	3.33	0.78	.725	0.85
Compensation	3.53	0.73	3.50	0.89	.718	0.86
Metacognitive	2.88	0.70	2.89	0.79	.764	0.89
Affective	2.62	0.89	2.68	0.89	.754	0.93
Social	2.81	0.74	2.79	0.74	.766	0.83
Total	3.52	0.71	3.50	0.92	.738	0.79

To respond to the *third* research question related to differences in grade level in language learning preferences of participants. ANOVA was performed considering grade level (i.e. freshmen, sophomores, juniors, and seniors) as the independent variable and SILL as the dependent variable. The result of the ANOVA, as in Table 5, shows that the F-value (for using SILL according to the gender variable was greater than the alpha level P = 0,433 > 0.05. Therefore, there is any difference due to grade level (i.e. freshmen, sophomores, juniors, and seniors) in language learning preferences.

Table 5: *ANOVA For SILL According to Grade Level.*

	Sum of Squares	df	Mean Square	F.	Sig.
Between Groups	1.765	4	0.61		
Within Groups	21.501	195	0,344	1.824	0. 433 not sig.
Total	25.605	199			

Discussion

Oxford's (1990) classification of language learning strategies into two types: direct and indirect, guided this study. Direct learning strategies were further classified into three types: memory strategies, cognitive strategies, and compensatory strategies. Similarly, indirect strategies had three types: metacognitive, affective and social strategies. The study of these strategies revealed that all were interrelated. For example, students who learned social strategies in learning a foreign language could put into practice what they have learned through cognitive and metacognitive strategies and would also help develop the communication skills underlying foreign language learning (Cesur & Rashad, 2008). The common goal of all these strategies was to improve communicative competence. With these strategies, students could contribute to the development of communication skills in the target language. Students could take part in their own learning processes and become self-directed individuals.

In each of these strategies, the roles of both the teacher and the student within and outside the lesson would increase and both would be active in the process. It was made evident that the conscious use of each of these language learning strategies has a positive effect on language achievement and language level. This is consistent with many studies which have shown that students with high language academic success employ more strategies (Aslan, 2009). It is evident in past studies that successful students in learning English as a foreign language use strategies harmoniously and choose those that are suitable for their language activities and their own learning methods, but different from those preferred by their unsuccessful peers. As an example, Gerami & Baighlou (2011) found out that successful students often used metacognitive strategies, while unsuccessful students used more cognitive strategies; Stracke (2016) found that primary school students used metacognitive and social strategies to a large degree, and in contrast, they used cognitive strategies to a moderate degree. Studies have also revealed that strategy use is related to various factors other than competence, such as gender (Stracke, 2016), and learning styles (Jie & Xiaoqing, 2006). Hence, it is important that students should be exposed to various strategies in the teaching-learning environment and the teaching of these strategies should be included.

The findings of the current study support previous results showing that learners adopted a range of strategies to learn English, but they used these strategies to differing degrees (Sukying, 2021). For instance, cognitive strategies in the past studies were found to be most frequently used in learning English as a foreign language (Al-Qahtani, 2013; Charoento, 2017; Chen, 2009); while others (Khamkhien, 2011; Kunasaraphan, 2015; Tieocharoen & Rimkeeratikul, 2019) showed that memory strategies were used the least.

Regarding the issue of gender differences raised in this study, Okio (2023) discovered that there existed

a contextual and methodological gap in examining the effect of gender differences on foreign language learning. Findings drawn from the current study indicate that gender does not have a significant effect on language learning strategies, and that both males and females at Baha university use almost similar strategies. This finding is consistent with that of Sumarni & Rachmawaty (2019) which also proved that both males and females emphasize on learning equally and that the variety in their use of language learning strategies aimed at improvement of their learning. Likewise, Bremner (1999) studied language learning strategies of Hong Kong students and found that males and females did not differ in their use of learning strategies; however, they preferred compensation and metacognitive strategies the most. This finding is also in line with that of Ahsanah (2020) and Viriya & Sapsirin (2014), who also showed that there was no significant difference between male and female students in language learning strategies preferences. However, this result contradicts with studies (Biabani & Izadpanah, 2019; Teh et al., 2009), which stated that there existed gender differences in the preference of language learning strategies, but not significant.

Hamid, Link, & Mukim Gadong (2020) explored gender differences in language learning, levels of literacy, and language difficulties using a qualitative research design. The findings showed that the cultural interest in Brunei tends to affect both genders as early as in their formative school period. However, findings showed that through various activities, females increased their literacy abilities and skills in learning English in drawing and using computer devices in completing take-home assignments. while the male students engaged themselves in more physical activities, more computer games, and fewer assignment activities. Mehmood (2020) examined the differences in the learning styles of both genders at the university level and explored how language teachers used different teaching techniques to respond to such discrepancies in the language comprehension and learning of their male and female students, along with their perspectives of these learning styles. The study found that gender differences were positively influenced by the preferred learning style.

The statistical findings of the current study are evident of these results. It was found that compensation strategies had has the highest mean; memory strategy comes next, followed by cognitive strategies, social strategies, affective strategies, and finally metacognitive strategies with the lowest mean. This means that compensation strategies are dominant among Baha University students, though difference between each strategy was not that large since all participants reflected the same pattern and order of strategy use. The result of the ANOVA, shows that the F-value (for using language learning strategies) according to the gender variable was greater than the alpha level (P = 0,433 > 0.05). There was also no difference due to grade level (i.e. freshmen, sophomores, juniors, and seniors) in language learning strategies preferences. This result is incongruent with other findings (Chen, 2014; Sepasdar & Soori, 2014), which reported that there was a significant difference between younger and older language learners in employing language learning strategies. However, it varied in the current study because participants had gained an average of 12 years of experience learning English in a formal context in Saudi Arabia.

Oxford (2017) recommends strategy categories should not be rigid, but rather flexible and permeable. The function or role of a given strategy depends on the given task, the physical context, and the learner's internal context, such as self-efficacy beliefs. No strategy classification, typology, or taxonomy should directly reflect how strategies actually work because strategies are complex and have multiple roles. A strategy may be defined as the basic category of a given strategy, but it must serve other purposes in addition to what is implied by the category it belongs to. Although studies have argued that a strategy classified as cognitive, for example, cannot serve different roles (Oxford, 1990, 2011); hence, a clear difference is emphasized in their categories.

Conclusion

Based on the findings and discussion of the current study, a few conclusions could be drawn. First, the results of the study show no difference in employing language learning strategies by male and female students, as both genders used strategies in the same frequency. Secondly, the choice of an appropriate learning strategy for students' needs becomes the most important factor to ensure that the language learning process is successful. Third, this study also proved that age is not significant in determining the type of learning strategy, since older learners can employ language learning strategies in a much better way than the younger ones and vice versa.

The study also concluded that classifications of language learning strategies should be used to determine the best communication tool. One cannot talk about strategies well without general strategy terminology. There is nothing wrong with these categorical structures as long as these classifications are not seen as scientific fact or a divinely prescribed structure. Strategy categories may seem like a suggested taxonomy to label each strategy, but strategies operate much more fluidly than these categories. Any strategy system should not be allowed to dictate or become mandatory. Although formal categories about strategies are needed, it is quite good to think of strategies as permeable. For example, "analyzing" may be a cognitive strategy, but it can also be used to regulate emotions.

One notable limitation of the study was that all subjects included in the study were from Baha university.

As such, caution must be used in generalizing the results. Secondly, the data collection and analysis mostly relied on a self-reported questionnaire. Interviewing the learners would make the data richer and would provide more information, in future studies. Thirdly, the data analysis was confined to closed ended questions; so it would be better to use open-ended questions to give an opportunity to students to provide more details about their thoughts and attitudes towards language learning strategies. This study provides a subtle signal for curriculum designers and material developers to pay attention to language learning strategies. In addition, the curricula, materials, tasks and activities that require not only the development of learning strategies but also provide the opportunity to teach good language learning strategies. In this case, instructor can also help learners maintain motivation, self-learning, and psychological confidence and try to achieve the goal of learning ESL/EFL.

Conflicts of Interest: The author declares no conflicts of interest

Institutional Review Board Statement: Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of the Al-Baha University.

Data Availability Statement: Data will be available from the first author upon reasonable request.

References

Ahsanah, F. (2020). Gender and Age Differences in the Use of Language Learning Strategies by Junior and Senior High School Students. *Journal of English Teaching, 6*(1), 50-59. doi: https://dx.doi.org/10.33541/jet.v6i1.1405

Al-Qahtani, M. F. (2013). Relationship between English Language, Learning Strategies, Attitudes, Motivation, and Students' Academic Achievement. *Education in Medicine Journal, 5*(3), e19-e29. doi: https://doi.org/10.5959/eimj.v5i3.124

Albayrak, F., & Serin, N. (2022). The Effect of Task-Based Out-Of-Class Activities on Language Learning Processes to Create a Natural Language Environment in Teaching Turkish to Foreigners. *Psycho-Educational Research Reviews, 11*(1), 404-423. doi: https://doi.org/10.52963/PERR_Biruni_V11.N1.26

Aslan, O. (2009). *The role of gender and language learning strategies in learning English* (Master's thesis, Middle East Technical University). Retrieved from https://open.metu.edu.tr/handle/11511/18929

Aydoğan, H., & Akbarov, A. A. (2014). The role of gender, age, academic achievement, LLS and learning styles at tertiary level in EFL classes in Turkey. *Journal of Second and Multiple Language Acquisition, 2*(2), 11-24. Retrieved from https://www.researchgate.net/publication/262566061

Aziz, S. N. S. M., & Shah, P. M. (2020). Language learning strategy (LLS) for English language learners in polytechnic. *Journal of Personalized Learning, 3*(1), 71-78. Retrieved from https://spaj.ukm.my/jplearning/index.php/jplearning/article/view/121

Azizmohammadi, F., & Barjesteh, H. (2020). On the relationship between efl learners' grammar learning strategy use and their grammar performance: Learners' gender in focus. *Journal of Language Teaching and Research, 11*(4), 583-592. doi: https://doi.org/10.17507/jltr.1104.08

Azzam, M. B., & Easteal, R. A. (2021). Pedagogical Strategies for the Enhancement of Medical Education. *Medical Science Educator, 31*(6), 2041-2048. doi: https://doi.org/10.1007/s40670-021-01385-w

Bacon, S. M. (1992). The relationship between gender, comprehension, processing strategies, and cognitive and affective response in foreign language listening. *The Modern Language Journal, 76*(2), 160-178. doi: https://doi.org/10.2307/329769

Balci, Ö., & Ügüten, S. D. (2018). The Relationship between EFL Learners' Language Learning Strategy Use and Achievement. *International Education Studies, 11*(2), 1-12. doi: https://doi.org/10.5539/ies.v11n2p1

Baysal, E. (2019). How to Teach Language Learning Strategies? *International Journal of Science and Education, 2*(2), 72-98. Retrieved from https://10.1080/09751122.2017.1311622

Biabani, M., & Izadpanah, S. (2019). The Study of Relationship between Kolb's Learning Styles, Gender and Learning American Slang by Iranian EFL Students. *International Journal of Instruction, 12*(2), 517-538. doi: https://doi.org/10.29333/iji.2019.12233a

Bıyıklı, C. (2023). Predictive Roles of Language Learning Strategies, Academic Self-concept, Gender and Grade Level in English Language Learning Achievement. *Psycho-Educational Research Reviews, 12*(1), 249-272. doi: https://doi.org/10.52963/PERR_Biruni_V12.N1.16

Božinović, N., & Sindik, J. (2011). Gender differences in the use of learning strategies in adult foreign language learners. *Metodički obzori: časopis za odgojno-obrazovnu teoriju i praksu, 6*(11), 5-20. doi: https://doi.org/10.32728/mo.06.1.2011.01

Bremner, S. (1999). Language learning strategies and language proficiency: Investigating the relationship in Hong Kong. *Canadian Modern Language Review, 55*(4), 490-514. doi: https://doi.org/10.3138/cmlr.55.4.490

Cesur, R., & Rashad, I. (2008). *High birth weight and cognitive outcomes*. National Bureau of Economic Research. doi: https://doi.org/10.3386/w14524

Chanderan, V., & Hashim, H. (2022). Language learning strategies used by ESL undergraduate students. *Creative Education, 13*(3), 768-779. doi: https://doi.org/10.4236/ce.2022.133049

Charoento, M. (2017). Individual learner differences and language learning strategies. *Contemporary Educational Research Journal, 7*(2), 57-72. doi: https://doi.org/10.18844/cerj.v7i2.875

Chen, M.-L. (2009). Influence of grade level on perceptual learning style preferences and language learning strategies of Taiwanese English as a foreign language learners. *Learning and Individual Differences, 19*(2), 304-308. doi: https://doi.org/10.1016/j.lindif.2009.02.004

Chen, M.-L. (2014). Age Differences in the Use of Language Learning Strategies. *English Language Teaching, 7*(2), 144-151. doi: https://doi.org/10.5539/elt.v7n2p144

Cohen, A. D. (2014). *Strategies in learning and using a second language*. Routledge. doi: https://doi.org/10.4324/9781315833200

Coşkun, A. (2021). Microteaching lesson study for prospective English language teachers: Designing a research lesson. *Psycho-Educational Research Reviews, 10*(3), 362-376. doi: https://doi.org/10.52963/PERR_Biruni_V10.N3.23

Doğanülkü, H. A., & Yavuzer, Y. (2023). Aggression and Life Goals in Adolescents: Mediating Effect of Visions About the Future and Moderating Effect of Gender. *Psycho-Educational Research Reviews, 12*(2), 409-421. doi: https://doi.org/10.52963/PERR_Biruni_V12.N2.04

Drigas, A., & Mitsea, E. (2020). The 8 pillars of metacognition. *International Journal of Emerging Technologies in Learning (iJET), 15*(21), 162-178. doi: https://doi.org/10.3991/ijet.v15i21.14907

Drigas, A., Mitsea, E., & Skianis, C. (2022). Metamemory: Metacognitive strategies for improved memory operations and the role of VR and mobiles. *Behavioral Sciences, 12*(11), 450. doi: https://doi.org/10.3390/bs12110450

Duruk, E. (2021). A CEFR based evaluation of B1+ level preparatory program at a Turkish state university: The application of the foreign language skills scale. *Psycho-Educational Research Reviews, 10*(3), 426-438. doi: https://doi.org/10.52963/PERR_Biruni_V10.N3.27

Ehrman, M., & Oxford, R. (1989). Effects of Sex Differences, Career Choice, and Psychological Type on Adult Language Learning Strategies. *The Modern Language Journal, 73*(1), 1-13. doi: https://doi.org/10.2307/327261

Faruk Ipek, Ö., & Yesilbursa, A. A. (2017). Language learning strategy use of university preparatory school students. *International Journal of Educational Sciences, 16*(1-3), 60-66. doi: https://doi.org/10.1080/09751122.2017.1311622

Gerami, M. H., & Baighlou, S. M. G. (2011). Language learning strategies used by successful and unsuccessful Iranian EFL students. *Procedia-Social and Behavioral Sciences, 29*, 1567-1576. doi: https://doi.org/10.1016/j.sbspro.2011.11.399

Godfrey, M., Casnar, C., Stolz, E., Ailion, A., Moore, T., & Gioia, G. (2023). A review of procedural and declarative metamemory development across childhood. *Child Neuropsychology, 29*(2), 183-212. doi: https://doi.org/10.1080/09297049.2022.2055751

Goh, C., & Foong, K. P. (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. *Hong Kong Journal of Applied Linguistics, 2*(1), 39-53. Retrieved from https://www.researchgate.net/publication/234763053

Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly, 29*(2), 261-297. doi: https://doi.org/10.2307/3587625

Griffiths, C. (2020). Language learning strategies: Is the baby still in the bathwater? *Applied Linguistics, 41*(4), 607-611. doi: https://doi.org/10.1093/applin/amy024

Gu, P. Y. (2018). Validation of an online questionnaire of vocabulary learning strategies for ESL learners. *Studies in Second Language Learning and Teaching, 8*(2), 325-350. doi: https://doi.org/10.14746/ssllt.2018.8.2.7

Habók, A., & Magyar, A. (2020). The role of students' approaches in foreign language learning. *Cogent Education, 7*(1), 1770921. doi: https://doi.org/10.1080/2331186X.2020.1770921

Hamid, M. Z. S. A., Link, J. T., & Mukim Gadong, B. E. (2020). Gender Differences in Learning English as a Second Language among Primary Students in Brunei Darussalam. *International Journal of English Language Education, 8*(2), 16-28. doi: https://doi.org/10.5296/ijele.v8i2.16882

Jie, L., & Xiaoqing, Q. (2006). Language learning styles and learning strategies of tertiary-level English learners in China. *RELC Journal, 37*(1), 67-90. doi: https://doi.org/10.1177/0033688206063475

Kancharla, K., Kanagaraj, S., & Gopal, C. N. R. (2023). Metamemory functioning and memory strategies used among medical students. *Journal of Education and Health Promotion, 12*(1), 26. doi: https://doi.org/10.4103/jehp.jehp_230_22

Kaufman, M. R., Eschliman, E. L., & Karver, T. S. (2023). Differentiating sex and gender in health research to achieve gender equity. *Bulletin of the World Health Organization, 101*(10), 666-671. doi: https://doi.org/10.2471/BLT.22.289310

Khamkhien, A. (2011). Language learning strategies used by Thai and Vietnamese university students. *Manusya: Journal of Humanities, 14*(2), 1-23. doi: https://doi.org/10.1163/26659077-01402001

Kunasaraphan, K. (2015). English learning strategy and proficiency level of the first year students. *Procedia-Social and Behavioral Sciences, 197*, 1853-1858. doi: https://doi.org/10.1016/j.sbspro.2015.07.246

Lessard-Clouston, M. (1997). Language learning strategies: An overview for L2 teachers. *The Internet TESL Journal, 3*(12), 69-80. Retrieved from http://iteslj.org/Articles/Lessard-Clouston-Strategy.html

Macaro, E. (2006). Strategies for language learning and for language use: Revising the theoretical framework. The modern language journal, 90(3), 320-337. doi: 10.1111/j.1540-4781.2006.00425.x

Masitoh, S., Arifa, Z., Ifawati, N. I., & Sholihah, D. N. (2023). Language learning strategies and the importance of cultural awareness in Indonesian second language learners. *Journal of Language Teaching and Research, 14*(2), 436-445. doi: https://doi.org/10.17507/jltr.1402.20

Mehmood, T. (2020). Teachers Perceptions of Gender Differences in Learning Styles in Pakistan. *International Journal of Linguistics and Translation Studies, 1*(3), 35-46. doi: https://doi.org/10.36892/ijlts.v1i3.57

Montero-SaizAja, A. (2021). Gender-based differences in EFL learners' language learning strategies and productive vocabulary. *Theory and Practice of Second Language Acquisition, 2*(7), 83-107. doi: https://doi.org/10.31261/TAPSLA.8594

Niroula, S., & Niroula, A. (2020). Effective way of studying and learning in medical school. *JNMA: Journal of the Nepal Medical Association, 58*(231), 954-956. doi: https://doi.org/10.31729/jnma.5258

Nordquist, R. (2019). *Definition of English as a Second Language (ESL)*. Retrieved from https://www.thoughtco.com/english-as-a-second-language-esl-1690599

O'malley, J. M., Chamot, A. U., Stewner-manzanares, G., Russo, R. P., & Küpper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly, 19*(3), 557-584. doi: https://doi.org/10.2307/3586278

Okio, P. (2023). The Effect of Gender Differences on Foreign Language Learning. *International Journal of Linguistics, 4*(2), 28-39. doi: https://doi.org/10.47604/ijl.1872

Oxford, R. (1994). *Language learning strategies: An update. ERIC Clearinghouse on Languages and Linguistics*. Center for Applied Linguistics. Retrieved from https://files.eric.ed.gov/fulltext/ED376707.pdf

Oxford, R. L. (1989). Use of language learning strategies: A synthesis of studies with implications for strategy training. *System, 17*(2), 235-247. doi: https://10.1111/j.1540-4781.1989.tb06367.x

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.

Oxford, R. L. (1993). Instructional Implications of Gender Differences in Second/Foreign Language (L2) Learning Styles and Strategies. *Applied Language Learning, 4*, 65-94. Retrieved from https://eric.ed.gov/?id=EJ477799

Oxford, R. L. (2011). *Teaching and Researching Language Learning Strategies*. Harlow: Pearson Longman.

Oxford, R. L. (2017). *Teaching and Researching Language Learning Strategies: Self-Regulation in Context* (2nd ed.). New York: Routledge. doi: https://doi.org/10.4324/9781315719146

Oxford, R. L., & Gkonou, C. (2018). Interwoven: Culture, language, and learning strategies. *Studies in Second Language Learning and Teaching, 8*(2), 403-426. doi: https://doi.org/10.14746/ssllt.2018.8.2.10

Radwan, A. A. (2011). Effects of L2 proficiency and gender on choice of language learning strategies by university students majoring in English. *Asian EFL Journal, 13*(1), 114-162. Retrieved from https://www.asian-efl-journal.com/PDF/March-2011-aar.pdf

Rubin, J. (1981). Study of Cognitive Processes in Second Language Learning. *Applied Linguistics, 2*(2), 117-131. doi: https://doi.org/10.1093/applin/II.2.117

Saks, K., & Leijen, Ä. (2018a). Adapting the SILL to measure Estonian learners' language learning strategies: the development of an alternative model. *The Language Learning Journal, 46*(5), 634-646. doi: https://doi.org/10.1080/09571736.2016.1191169

Saks, K., & Leijen, Ä. (2018b). Cognitive and metacognitive strategies as predictors of language learning outcomes. *Psihologija, 51*(4), 488-505. doi: https://doi.org/10.2298/PSI180121025S

Sepasdar, M., & Soori, A. (2014). The Impact of Age on Using Language Learning Strategies. *International Journal of Education and Literacy Studies, 2*(3), 26-31. doi: https://doi.org/10.7575/aiac.ijels.v.2n.3p.26

Shao, K., Pekrun, R., & Nicholson, L. J. (2019). Emotions in classroom language learning: What can we learn from achievement emotion research? *System, 86*, 102121. doi: https://doi.org/10.1016/j.system.2019.102121

Stracke, E. (2016). Language learning strategies of Indonesian primary school students: In relation to self-efficacy beliefs. *System, 60*, 1-10. doi: https://doi.org/10.1016/j.system.2016.05.001

Sukying, A. (2021). Choices of Language Learning Strategies and English Proficiency of EFL University Learners. *LEARN Journal: Language Education and Acquisition Research Network, 14*(2), 59-87. Retrieved from https://so04.tci-thaijo.org/index.php/LEARN/article/view/253261

Sumarni, S., & Rachmawaty, N. (2019). Gender differences in language learning strategies. *Ethical Lingua: Journal of Language Teaching and Literature, 6*(1), 13-22. doi: https://doi.org/10.30605/ethicallingua.v6i1.1169

Tam, K. C.-H. (2013). A study on language learning strategies (LLSs) of university students in Hong Kong. *Taiwan Journal of Linguistics, 11*(2), 1-42. doi: https://doi.org/10.6519/TJL.2013.11(2).1

Teh, K. S. M., Embi, M. A., Yusoff, N., & Mahamod, Z. (2009). A closer look at gender and Arabic language learning strategies use. *European Journal of Social Sciences, 9*(3), 399-407. Retrieved from http://eprints.unisza.edu.my/id/eprint/2766

Teng, F. (2023). Language Learning Strategies. In Z. Wen, R. Sparks, A. Biedroń, & F. Teng (Eds.), *Cognitive Individual Differences in Second Language Acquisition: Theories, Assessment, and Pedagogy* (pp. 147-173). Berlin: De Gruyter. doi: https://doi.org/10.1515/9781614514749-008

Teng, F., & Huang, J. (2019). Predictive effects of writing strategies for self-regulated learning on secondary school learners' EFL writing proficiency. *Tesol Quarterly, 53*(1), 232-247. Retrieved from https://www.jstor.org/stable/45214917

Tieocharoen, W., & Rimkeeratikul, S. (2019). Learning Strategies and Teaching Methods in Thai and Vietnamese Universities. *Arab World English Journal, 10*(3), 99-112. doi: https://dx.doi.org/10.24093/awej/vol10no3.7

Viriya, C., & Sapsirin, S. (2014). Gender differences in language learning style and language learning strategies. *Indonesian Journal of Applied Linguistics, 3*(2), 77-88. doi: https://doi.org/10.17509/ijal.v3i2.270

Vygotsky, L. S. (1987). *The collected works of LS Vygotsky: The fundamentals of defectology* (Vol. 2). Springer Science & Business Media.

Wood, J. C. (2020). A closer look at language learning strategies. *Japan Association for Language Teaching Postconference Publication*, 100-105. doi: https://doi.org/10.37546/JALTPCP2019-13

Yurt, E. (2022). The mediating role of metacognitive strategies in the relationship between gender and mathematical reasoning performance. *Psycho-Educational Research Reviews, 11*(2), 98-120.