



## Memory Strategies for Vocabulary Learning Employed by Saudi Undergraduate EFL Learners

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### Abstract.

Saudi EFL (English as a Foreign Language) learners have difficulty in chosen appropriate strategies for learning vocabulary and memorization during their undergraduate studies. Saudi undergraduate learners have the problem in remembering words at a point of need such as writing and speaking. In search of solution to this problem in Saudi Arabia, this study aims to examine the memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners in Saudi Arabia. Overall, 110 Saudi undergraduate learners participated in this study. The study employs quantitative approach using descriptive statistical analysis. This study used Oxford (2003) language learning strategies of memory strategies for vocabulary learning. The results revealed that the creating mental linkage (CML) is the common and the highly most used vocabulary learning strategy by Saudi undergraduate EFL learners in Saudi Arabia. Subsequently, reviewing well (RW) and applying images & sounds (AIS) learning strategies are the second and the third most highly used strategies among the students. The EA learning strategy is the least used among the undergraduate EFL learners. Further, the findings also indicated that the Saudi undergraduate EFL learners prefer CML strategy more than they use employing actions (EA) in their vocabulary learning and memorization. According to these results, CML and RW strategies were observed to be both at a high level of utilization, whereas AIS and EA categories were at the medium utilization level. Based on the results, high usage ranges from a mean of 4.0 or above, medium usage ranges from a mean of 2.5 to 3.9, and low usage ranges from a mean of 2.4 or lower. Therefore, CML and RW strategies appeared to be most appropriate choice for Saudi students in memorizing vocabularies. It is recommended that future study should focus on in-depth analysis of these two most used strategies to encompass the depth and breadth of the usage and memorization.

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Fulfilment of the Requirements for the Degree of Master of Applied Linguistics**

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**March 2020**

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**Faculty: Modern Languages and Communication**

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*Keywords:* Vocabulary, Vocabulary Learning Strategies, Memory Strategies, EFL Learners

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## **LIST OF ABBREVIATIONS**

APS	Applying Images & Sounds
CML	Creating Mental Linkage
EA	Employing Actions
EFL	English as Foreign Language
ESL	English as Second Language
RW	Reviewing Well
VLT	Vocabulary Level Test
VLSs	Vocabulary Learning Strategies
VLSQ	Vocabulary Learning Strategies Questionnaire

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

Vocabulary plays a vital role in acquiring knowledge for English language learners (Uchihara and Harada, 2018; Chen, Liu, and Huang, 2019). The development of learners' vocabulary is an important aspect of their overall language development (Farrokh and Sharifi, 2019). Several past and current academicians or educationists have considered the impact of vocabulary on language learners (Oxford, 1989, 2002, 2016; Khan, Radzuan, Shahbaz, Ibrahim, and Mustafa, 2018). The future of research into vocabulary learning using language strategies is currently in this direction (Pawlak and Oxford, 2018). Different learners employ different strategies in learning vocabulary, but every strategy depends on the needs, age, and cognitive strength of the learners (Azizi and Zamaniyan, 2013; Yazdi and Kafipour, 2014; Griffiths, 2015; Nisbet and Shucksmith, 2017).

Learners use Language learning strategies as techniques to enhance and improve their individual, including the Saudi undergraduate English as a Foreign Language learners (EFL) in Saudi Arabia (Alqarni, 2017). The nature of these strategies is imperative for learning since they are keys for dynamic self-reliant learning and development in the context of language learning. Saudi undergraduate EFL learners take more control of their self-learning processes, which is indispensable in developing academic capability (Onoda, 2011; Saengpakdeejit, 2014b; Alkahtani, 2016). Self-learning processes is a learning strategy or style that permits

learners to be control of their own learning practice or activity, which include identifying learning desires, aims, choosing learning approaches, assessing learning accomplishments and performance. Learners who employ proper language learning strategies produced better capability, self-regulation, and self-confidence (Oxford and Ehrman, 1995; Rose, Briggs, Boggs, Sergio, and Ivanova-Slavianskaia, 2018). Volume of literature on this issue had a similar view with an emphasis on the significance of having vocabulary learning strategies for effective and comprehensive learning among undergraduate EFL learners (Oxford and Nyikos, 1989; Kafipour, 2010; Kafipour and Naveh, 2011; Oxford and Amerstorfer, 2018; Azmimurad and Osman, 2019). Possessing knowledge about diverse forms of vocabulary learning strategies will assist undergraduate EFL learners to get educated effectively thereby accomplish their study processes. Vocabulary learning strategies (VLSs) are instinctively interesting to the undergraduate and teachers. It is a common research theme among researchers for decades to date (Al-Yaseen, 2019; Setyawan, 2019). Therefore, this research will examine memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners. The focus will be on the major, most, and least used memory strategies as employed by the Saudi learners in learning vocabulary.

## **1.2 Background of the Study**

Vocabulary is essential in learning English language; the more the vocabularies learned by an individual student the more the understanding and enlightenment the student gets in learning a module. Students need a wide variety of independent words in their academic learning (Lateh, 2018). This is not possible without employing learning strategies. VLS involves students actively thinking about the relationships between terms, the meaning of the term, and the application of terms in a variety of situations (Hyland and Tse, 2007; Alqarni, 2018).

There are various existing definitions of learning strategies, Chamot and Kupper (1989) define strategies as “techniques which students use to comprehend, store, and remember information and skills” (pp. 9). Schmitt and McCarthy (1997) describe a vocabulary strategy as special tool learning skills necessary for the learner to learn terms independently. Moreover, Language learning strategies are defined by Oxford (2003) as “specific actions, behaviors, steps, or techniques such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task -- used by students to enhance their own learning” (pp. 2). Acquiring English as a foreign language by learners involve different areas including learners’ motivation, need, language awareness, learning environment, and learning strategies (Saengpakdeejit, 2014a; Tanaka, 2017).

In recent years, there has been a growing recognition of the importance of vocabulary in language learning, because of its significance in learning the second/foreign language (Goundar, 2016; Leki, 2017; Suhaedi, 2018; Alqarni, 2019). Vocabulary is a critical component of language learning and the development of learning vocabulary is mostly deemed as a crucial aspect of language capability of both first and second language undergraduate learners (Ardasheva, Wang, Adesope, and Valentine, 2017). Since learning Vocabulary is highly important in the process of learning a language, various strategies in learning vocabulary are recognized by academicians in order to accelerate vocabulary learning.

For decades, memory strategies for vocabulary learning have been used in language learning. Oxford (1990) uncovered the ancient eras' mnemonic or memory tools used to help narrators remember their outlines or framework. Language learning strategies (LLSs) research began at

the elementary level in the 1960s (Muehl, 1960; Manzo and Sherk, 1971). Over the last three decades, there have been increasingly rapid advances in the field of EFL learning strategies (Chamot and Kupper, 1989; Oxford, 1989; Oxford, 1990) used by learners to memorize vocabulary (Chamot and Kupper, 1989; Oxford, 1989; Oxford, 1990). Vocabulary learning refers to the strategies used by second language learners to acquire new words in the second language (Goundar, 2016; Leki, 2017).

Vocabulary learning is class of LLSs (Mehrabian and Salehi, 2019). In this category, there are memory strategies, which are considered as very essential and effective strategies in learning vocabularies. Vocabulary learning is initially established by Oxford's (1990) language learning strategies in which the emphasis falls on memory strategies due to individual abilities (as university students) in learning language, since the vocabulary enhance the individual understanding of language use. Using memory strategies according to this author, age play essential role in the choice of a strategy rather than otherwise (Ibarra Santacruz and Martínez Ortega, 2018). The memory strategies are also called mnemonics, implying strategies of retaining new words using certain imaginings or grouping (Schmitt, Schmitt, and Clapham, 2001). In this regard, the learners link a new word with familiar words (Oxford, 1990; Oxford, 2003).

With respect to memory strategies, Oxford (2003, pp. 13) mentioned that, *“the use of memory strategies in a test-taking situation had a significant negative relationship to learners' test performance in grammar and vocabulary. The probable reason for this is that memory strategies are often used for memorizing vocabulary and structures in initial stages of language learning, but that learners need such strategies much less when their arsenal of vocabulary and*

*structures has become larger* (pp. 13).” Based on this, Oxford indicated that memory strategies are more employed by learners in vocabulary learning and memorizations, particularly in the initial phases of language learning.

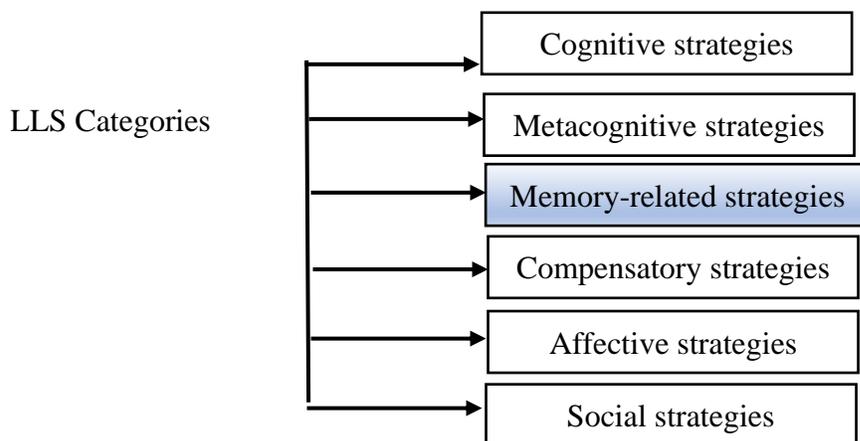
Learners utilize memory strategies to relate their learning of new words to psychological or mental processes by connecting their existing or prior information with the new words (Schmitt, 1997; Rosenthal and Ehri, 2011; Huang, Kerdphol, and Inthong, 2019). Oxford (1990) categorizes memory strategies by distinguishing between direct and indirect strategies. Direct strategies include "memory," "cognitive," and "compensation," while indirect strategies include "metacognitive," "affective," and "social." As a result, this study focuses on memory strategies for vocabulary learning that are commonly used by Saudi undergraduate students.

The memory strategies for vocabulary learning was recently reported by Al-Qaysi and Shabdin (2016) in their research, which consist of (1) Creating Mental linkages (CML), (2) Applying Images and Sounds (AIS), (3) Reviewing Well (RW), and (4) Employing Actions (EA). These four memory strategies for vocabulary learning have been previously indicated by many researchers such as Oxford (1990), Li (2004), Zare (2012), and Chilkwicz (2015). Table 1.1 displays the categories of memory strategies for vocabulary learning according to Oxford (1990) and Al-Qaysi and Shabdin (2016) along with their groups. All these memory strategies for vocabulary learning form the background for this current study.

**Table 1.1:** Memory Strategies for Vocabulary learning, according to Oxford (1990), Oxford (2003) and Al-Qaysi and Shabdin (2016)

Strategies	Grouping
Creating Mental linkages (CML) strategies	<p>(a) Incorporating unfamiliar vocabulary into context, primarily emphasizes on remembering a vocabulary and phrases by putting it into a full sentences, discussion, or narrative.</p> <p>(b) Grouping, which comprises categorizing and recategorizing language information into understandable micro.</p> <p>(c) Identifying and associating, which entail combining new and previously stored language information.</p>
Applying Images and Sounds (AIS) strategies	<p>a) The use of key words and phrases accomplished through the use of auditory or visual links to remember a new word.</p> <p>(b) Remembering new language information based on its sound by representing sounds in memory.</p> <p>(c) Using imagery, linking new linguistic information to notions in brain via visuals, either imagined or drawn out.</p> <p>(d) Lexical mapping: refers to representation process of vocabulary as an image or figure.</p>
Reviewing Well (RW) strategies	Learners choose to review the learned vocabulary again and again, at regular intervals.
Employing Actions (EA) strategies	<p>(a) Creating new words through mechanical means, such as taking notes in one small sheet of paper with its definition.</p> <p>(b) The learner uses experience or physical response to practice a new phrase or terms, such as opening the window.</p>

Oxford (2003) categories of LLSs are represented in Figure 1.1.



**Figure 1.1:** Oxford (2003) categories of LLSs

Oxford (2003) defines LLSs as follows:

*“1- Cognitive strategies enable the learner to navigate language material in straightforward ways, such as reasoning, analysis, note-taking, summarizing, synthesizing, outlining, reorganizing information to develop stronger schemas (knowledge structures), practicing in naturalistic situations, and formally practicing structures and sounds (Oxford, 2003, pp. 12)*

*2- Metacognitive strategies (for example, recognizing one's own learning style favorites and desires, making plans for a Language task, collecting and organizing information, organizing a study period and a schedule, observing mistakes and assessing task success, and evaluating the success of any type of learning strategy) are employed for handling overall learning process (Oxford, 2003, pp. 12).*

*3- Memory-related strategies help learners connect one Second - language element or concept with another, but they do not always imply deep understanding. Many such memory-related strategies allow learners to learn and recover information in a systematic sequence (e.g.,*

acronyms), whereas other methods create learning and retrieval through sounds (e.g., rhyming), images (e.g., a mental picture of the word itself or the meaning of the word), a combination of sounds and images (e.g., the keyword method), motion (e.g., total physical response), or a combination of sounds and images (e. (Oxford, 2003, pp. 13). The current study focuses on this category. It is further reorganized to form the four main categories (i.e. CML strategies, AIS strategies, RW strategies, and EA strategies) employed in this study.

4- Compensatory strategies (e.g., guessing from context in listening and reading; utilizing synonyms and “talking around” the missing term to aid speaking and writing; and, purely for speaking, employing motions or pause words) assist the learner in making up for lost knowledge (Oxford, 2003, pp. 13).

5- Affective strategies, including such identifying somebody's mood and anxiety level, talking about emotional needs, rewarding learners for good performance, and using deep breathing or positive self-talk have shown to be positively significant to second language proficiency in studies conducted by Dreyer and Oxford (1996) among South African EFL learners and Oxford and Ehrman (1995) among native English speakers learning foreign languages (Oxford, 2003, pp. 14).

6- Social strategies (such as trying to ask questions to obtain substantiation, requesting clarification of a confusing point, requesting assistance with a language task, conversing with a native-speaking conversation partner, and exploring cultural and social norms) assist the

*learner in working with others and understanding the target culture as well as the language (Oxford, 2003, pp. 14).”*

### **1.3 Problem Statement**

Vocabulary learning is a daily activity among undergraduate learners from various Saudi universities (Alhaisoni, 2012). Similar to other universities in all places, EFL learners face a lot of challenges in gathering required knowledge and volumes of vocabulary that will enable them to adequately comprehend the second/foreign language effectively in their various fields of endeavors (Al-Bidawi, 2018). Saudi undergraduate EFL learners struggle with vocabulary learning due to a lack of breadth and depth of vocabulary awareness, which is commonly associated with the frequency of vocabulary memorization and the pattern of strategy memorization (Al-Bidawi, 2018; Alqarni, 2019). As a result of these issues, Saudi undergraduate learners have problem in remembering the words at point of need, particularly for writing academic documents (e.g. Final Year Project, essays, paper, etc.) and speaking in public (Khan et al., 2018; Salem, 2019). These problems faced by the Saudi undergraduate EFL learners are associated with failure to employ the appropriate strategies in learning and recalling the vocabularies when needed (Alhaysony, 2017). Consequently, the content area vocabulary words frequently become obstacles within memory comprehension. Content area vocabulary words include words that are explicit to a given domain or subject area, seldom being found outside their specific subject matter. Hence, the students struggle with vocabulary day-in-day-out leading to problems in research writings and academic learning in these Saudi universities.

Inability to choose the right strategies by Saudi students is attributed to many problems faced by the students in memorizing vocabulary. This inability is due to memory retention problems

cause by lack of appropriate choice of strategies that fit the memory process of vocabulary recall and retention. Saudis with such complexity or problem with memory could have shortfalls in encrypting or processing information in memory, in loading or securing information in the retentive memory, or in repossessing or retrieving information from the retentive memory (Ibarra Santacruz and Martínez Ortega, 2018). To encode vocabulary in memory, it is necessary to first process, students who have shortfalls in their responsiveness in terms of vocabulary frequently have problems with this part of first memory processing (Cole and Segui, 1994), this is quite associated with inappropriate use of strategies. This problem can become manifested, when the students have issue remembering vocabularies within 24 hours of memorization, implies that when inappropriate strategies are employ in the learning, it will be difficulty to recall what has been memorized, this is typical situation among Saudi students. When inappropriate strategies are employed, the vocabulary information can be retained for a few moments (i.e. minutes or sometime seconds). When vocabularies must be retained for longer-time, a rehearsal strategy are commonly employed, once these strategies fail to work anyway, this leads to particular short-term memory issues affecting the recalling process (Komol and Sripetpun, 2014). Conversely, the difficulties seem to be as a result of poor strategy that in turn affect the memory. In addition to this, language or learning problems due to inadequate vocabulary are cause by the appropriate use of strategies.

Moreover, students regularly have “gaps” in their understanding of fundamental vocabulary skills of memorization. Students with this problem of gap in encrypting vocabulary in memory can have issue remembering what they have read in few hours, this a problem existing among the Saudi students, especially in terms of females and males’ receptive vocabulary size

(Alqarni, 2019). Furthermore, the Saudi students have problem remembering vocabulary used by the teachers during class sections and also what other students said during English discussions.

Many such studies have been carried out in order to investigate Oxford's (2003) language learning strategies in different capacities and in different countries such as China, Iran, Malaysia, Taiwan, and Turkey (Zhang, 2009; Çelik and Toptaş, 2010; Asgari and Mustapha, 2011; Yazdi and Kafipour, 2014; Varmaziyar and Sazvar, 2017; Abbassi, Hassaskhah, and Tahriri, 2018; Chen, Liu, and Huang, 2019). In terms of vocabulary learning, there have been very few studies that have looked into the suggestions made by Oxford (2003) on memory strategies for vocabulary learning.

With regards to aforementioned problems and memory strategies, these studies have not resolved these issues. Hence, there is a need to fill in these gaps in research in order to offer appropriate memory strategies for vocabulary learning in Saudi Arabia as employ by Saudi undergraduate students. By employing appropriate memory strategies in learning vocabulary, this will enable the learning process to become more effective and efficient, and the learners become more proficient in learning the foreign language (Mustapha, 2011). This will assist learners enhance their vocabulary abilities and become more aware of effective vocabulary learning and memorization strategies.

#### **1.4 Research Objectives**

This study aims to examine the memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners in Saudi Arabia. Therefore, the objectives of the study are:

1. To identify the most and the least frequent memory strategies for vocabulary learning employed by Saudi EFL learners.
2. To examine the linguistic patterns of memory strategies for vocabulary learning used by the Saudi EFL learners in Saudi Arabia

### **1.5 Research Questions**

Based on these objectives, this study will attempt to find answers to the following questions:

1. What are the most and the least frequent memory strategies for vocabulary learning employed by Saudi EFL learners in Saudi Arabia?
2. How the linguistic patterns of memory strategies influence the vocabulary memorization of the Saudi EFL learners?

### **1.6 Significance of Study**

Vocabulary is crucial to any learning done in languages because without adequate vocabulary students will have difficulty to understand and communicate their own ideas in public, school, and classroom, which can, in turn affect the overall academic performance of the students. This study will provide the required memory strategies to be used in vocabulary learning by Saudi students so that they can improve their academic performance.

It is crucial for Saudi undergraduate students to gain more practical vocabulary awareness and to develop their individual memory strategies for vocabulary learning as they develop higher eloquence and expression in English. Appropriate choice of memory strategies for vocabulary learning will help students to master language and perform academically.

Theoretically, the outcome of the present study will provide information on the appropriate use of memory strategies for vocabulary learning in Saudi Arabia. The findings will be useful to English teachers, policymakers, the Saudi Ministry of education, the Saudi government, and non-governmental organization in providing lessons and applications for memory strategies for vocabulary learning for effective learning outcomes for Saudis. It will provide additional information for other researchers who want to conduct further research on the related field. The findings can become one of the references for other researchers who conduct the same study but from different perspectives.

In practice, the findings of this study can be used as a research suggestion in highlighting the ability of students in memorizing vocabulary by employing more effective strategies in Saudi universities and other neighboring countries. It can help teachers to prepare suitable materials to learn vocabulary and enhance memorization.

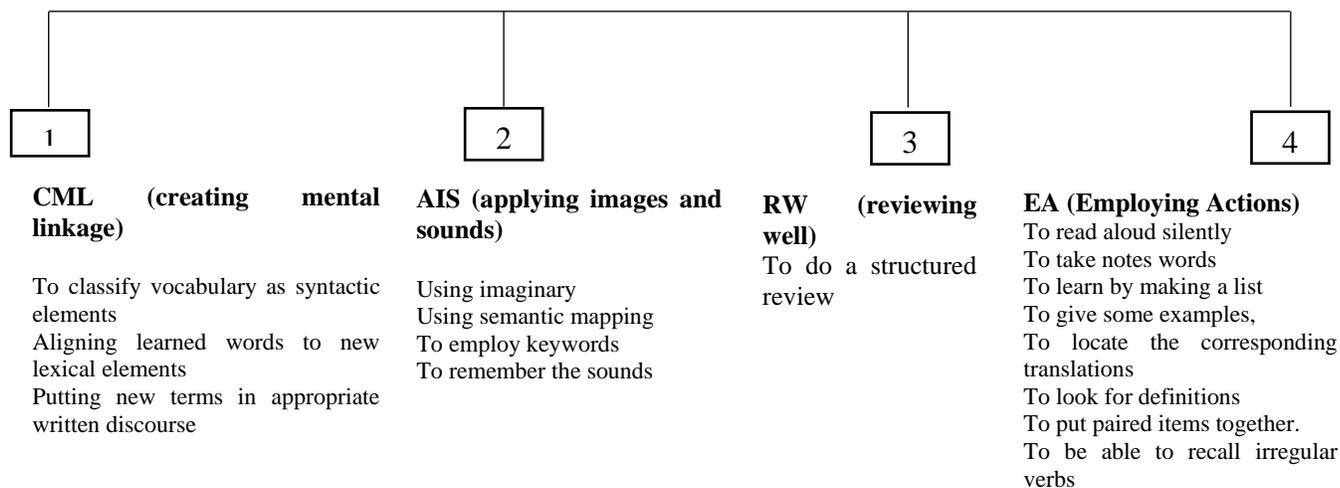
## **1.7 Theoretical Framework**

Many learning strategies have appeared in the context of language acquisition and vocabulary learning, particularly, Oxford's (1990, 2003, 2003, 2016), Gu and Johnson (1996), Schmitt and McCarthy (1997), and Goundar (2016) include different forms of strategies that fit learners' learning age, attitude, gender, motivation, styles, and personality. These learning strategies include memory strategies. This study employed memory strategies reported by Al-Qaysi and Shabdin (2016), which originally based on Oxford's (2003) LLSs. Oxford (2003) has earlier suggested that, "the use of memory strategies in a test-taking situation had a significant negative relationship to learners' test performance in grammar and vocabulary. The probable reason for

this is that memory strategies are often used for memorizing vocabulary and structures in initial stages of language learning, but that learners need such strategies much less when their arsenal of vocabulary and structures has become larger (pp. 13).” Based on this, Oxford indicated that memory strategies are commonly used by students for vocabulary learning and memorizing.

Memory strategies (also known as mnemonics) are strategies for memorizing new words that involve the use of imagery or grouping (Schmitt and McCarthy, 1997), and this allows the learners to link a new word with familiar words (Oxford, 1990). The Memory Strategies Model used by Al-Qaysi and Shabdin (2016), which the original is based on Oxford (2003), is adapted in this present study: “The model of memory strategies has four categories: (1) Creating Mental linkages (CML), Applying Images and Sounds (AIS), Reviewing Well (RW), and (4) Employing Actions (EA).” These memory strategies are further explicated to include the meaning of the image word, connect the word to a personal experience, connect the word to its coordinate (s), connect the word to its synonym (s) and antonym (s), highlight the first letter of the word(s), use new words in sentences, employ the keyword technique, group words together to learn them, use cognates, and engage in physical activity when studying words. Memory strategies are employed by EFL learners to enhance their vocabulary storage and retention over of time. The classifications of memory strategies for vocabulary learning are shown in Figure 1.2.

## Memory Strategy



**Figure 1.2:** Memory Strategies Model

The below descriptions of Memory Strategies are adopted from Al-Qaysi and Shabdin (2016), which the original is based on Oxford (2003):

1- **“Creating Mental Linkages (CML):** this category includes: (a) Grouping, which consists of classifying, and reclassifying language material into meaningful sub-units. (b) Associating/elaborating which mostly associate new language information to existing ones already stored in the memory. And (c) Placing new words into a context, which focuses on using a word or phrase in a meaningful sentence, the translation equivalents, conversation or story to remember it.

2- **Applying Images and Sounds (AIS):** this category includes use of imagery, which associates new language knowledge to concepts in memory through visual imagery, that is meaningful, either by depicting it in the mind or actual drawing; b) semantic mapping include arrangement of words into a picture or diagram; and c) use of keywords that is

*done through remembering a new word by use of auditory or visual links. While doing this, it is important to initially identify familiar words in one's own language that sounds like new words.*

3- **Reviewing Well (RW):** *this category involves reviewing the words learned carefully at regular intervals. For instance, a learner may choose to review words so far learned initially at 10 minutes interval after the time of learning the words, this can be increased to 20 minutes and hourly later and so on to assess the remembrance of the new target language words.*

4- **Employing Actions (EA):** *this category includes: (a) using sensation or physical response. While using physical response a learner acts out the new expression like going to the door. (b) involves the use of mechanical techniques by means of creative but still tangible techniques. A good example can be writing new words on cards with the new word written on one side and its definition on the other side.”*

Based upon Depth Processing Theory, the more efforts a learner exerts when manipulating information the better it is stored and remembered. Craik and Lockhart (1972) initially proposed the theory, where the concept is that memory is just anything that take place as a result of processing of information, and memory is the end-product of the deep information processing and the way information is processed. This occurs in the following ways; (1) shallow processing which involves rehearsal, i.e., maintenance repetition to aid the learners hold information in the temporary memory and cause fairly temporary retention. (2) Deep processing comprises an

elaboration rehearsal based on a more meaningful analysis of information that can be achieved through images, thinking and associating or linking words meaning to previous knowledge. The second one leads to long-term retention. The deep processing matches memory vocabulary learning in such a manner that deep and elaborate processing of word knowledge can lead to better retention and minimizes attrition. Therefore, based on the model and these theories, the research hypotheses are formulated as follow:

***H1:*** The use of memory strategies for vocabulary learning by Saudi undergraduate affect their learning ability as EFL learners

***H2:*** The most frequent memorization strategies used by the Saudi EFL learners is the difference from that of the least frequent memorization strategies.

***H3:*** The memory strategies for vocabulary learning used by the Saudi EFL learners affect their linguistic patterns of memorization.

### **1.8. The scope of Study**

This study examines the memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners in Saudi Arabia. The scope of this work is limited to 150 number of Saudi EFL learners majoring in English and nature of selection criteria. The study encompasses only female undergraduate students in the English Department of Hafr AlBatin University, Saudi Arabia. The focus of this study is based upon Oxford's (2003) language learning strategies of memory strategies for vocabulary learning. In addition, the study is restricted to the utmost and least frequent memorization strategies used by Saudi undergraduate

EFL learners. The study focuses on Oxford's (2003) strategies and related strategies, while other kinds of strategies are excluded from the study.

### **1.9. Organization of Study**

This study consists of five chapters. The current chapter has presented an overview of the study.

The current thesis consists of the following chapters;

Chapter One is the introduction to the study. This chapter consists of the background, problem statement, research questions, research objectives, the significance of the study, theoretical framework, the scope of the study and the organization of the study.

Chapter Two contains a review of the literature on memory strategies for vocabulary learning.

Chapter Three discusses the methodology of the study, which includes the research design, participants, instrument, procedure, and data analysis.

Chapter Four presents the findings obtained in this study and discussion of the findings

Chapter Five presents the study's conclusion, recommendations for future research, implications, and limitations.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

## **2.1 English Vocabulary in the Saudi Education System**

Education in Saudi Arabia, including English, is still dominated by the view that knowledge is a set of facts that must be memorized (Elyas and Picard, 2010). The teacher is a prominent source of knowledge in the teaching-learning process (Elyas, 2008). As a result, students may struggle to understand academic concepts because what they typically receive is something abstract. Many students can serve a high level of memorization of teaching material, but at the end of the teaching-learning process, they do not understand it at all (Al-Akloby, 2002; Ebad, 2014). Uchihara and Harada (2018) depicted humans as the creators of knowledge. Knowledge is not a collection of facts, ideas, or laws just waiting to be discovered. It is not something that exists apart from the knower. Humans create or construct knowledge as they try to make sense of their experiences; everything we know is made of meaning (Goundar, 2016). According to this viewpoint, a learning process that focuses on the teacher is no longer appropriate. Because our brain is constantly looking for meaning and saving meaningful cases, learning processes must include students in the search for meaning (Alqarni, 2017).

The teaching and learning processes increase the likelihood that students will understand the meaning of their learning material. Students, as the learning subject, are the primary point in teaching and learning, determining how the education and learning process is realized (Al-Bidawi, 2018).

Returning to English in the Saudi educational system, children are eligible to attend school at the age of seven for pre-school, six years of primary school, three years of intermediate (aged 13-15), and three years of high school (secondary; aged 16-18). Beginning in the fourth year of

primary school, English as a foreign language is included in the syllabus (age 9). Students are given four 45-minute English classes per week and must pass exams in all areas, including English, to advance to the next level. The more vocabulary learners have, regardless of their grammatical understanding, the better they learn; nevertheless, this is not to mean that grammar should be wholly ignored (Alharbi, 2019). All of these standards are for the Saudi school system's basic level.

## **2.2 Vocabulary**

Cambridge Advanced Learners Dictionary (2017) defines vocabulary as a person's entire set of words that they recognize and utilize. Oxford Dictionary (2018) defines vocabulary as the collection of words used in a specific language; the words used in a specific subject or sphere of activity or on a specific occasion; and a variety of artistic or stylistic forms, techniques, or movements. Collins English Dictionary (2017) defines vocabulary as the collection of words used or understood by a specific person, class, or profession; an interconnected group of nonverbal symbols, signs, and gestures used for communication or expression in a particular art or skill. According to Schwartz and Raphael (1985) and Trifonov (2011), the aggregate words in a language are referred to as vocabulary, and vocabulary is a list or collection of words with their meanings. From the above definitions, it is undoubtedly evident that in a language, vocabulary has an outstanding role in transferring the communication to share others successfully. Hence, vocabulary is indisputably the soul of a language.

It is fully agreed that vocabulary plays a fundamental role in helping students to communicate both in spoken and in written form. As stated by D'Anna, Zechmeister, and Hall (1991), a vocabulary size of between 8,000-9,000 words may be necessary for understanding written texts, and a vocabulary size of between 5,000-6,000 words is needed for oral comprehension.

### 2.3 Types of Vocabulary

Researchers frequently propose four types of vocabulary. Researchers such as Hu (2013) and Sims (1929) provide the following four types of vocabulary according to vocabulary learning in general language grouping;

**1. Listening Vocabulary:** This type of vocabulary refers to words that are heard and understood. When a fetus is sixteen weeks old, he or she can perceive sound (Stæhr, 2008). Furthermore, when babies are awake, they continue to listen to different words, and as a result, we grow up listening to different words, learning so many words throughout our lives. Most of us can identify and comprehend nearly 50000 words in our adulthood (McLean, Kramer, and Beglar, 2015). Deaf children are exposed to visual listening in the same way that they are exposed to sign language. However, the number of words developed in this case is far less than that of a typical child's secondary listening vocabulary (Stæhr, 2009).

**2. Speaking Vocabulary:** The words we say are referred to as speaking vocabulary. Our vocabulary is limited when we speak (Salem, 2019). The majority of adults communicate using between 5000 and 10,000 words (West, 1930). However, because of the level of familiarity in usage, the quantity of words used in this situation is significantly smaller than while listening to vocabulary.

**3. Reading Vocabulary:** This vocabulary refers to the terms that an individual recognizes when reading any text (Saragi, 1978; Nation and Coady, 1988). Although a person can read and understand a large number of words, he or she does not employ them in their speaking vocabulary. (Paribakht and Wesche, 1997). If a person is a reader, this type of vocabulary is the

second most common (Jones, LaRusso, Kim, Yeon Kim, Selman, Uccelli, and Snow, 2019). Needless to say, reading expands one's vocabulary.

**4. Writing Vocabulary:** This vocabulary type represents the words we rediscovered while writing in order to express ourselves. (Lee, 2008). It is quite easy to explain ourselves verbally by using facial expressions and voice modulation, but it is much more difficult to use the same words to communicate the same concept or thought-through writing (Webb, 2005). The words we can spell have a significant impact on our writing vocabulary. This is due to the fact that the English language evolved from Greek and Latin, Spanish, Anglo-Saxon English, French, and numerous other languages, and thus has a large vocabulary. There are approximately 450000 to 750000 words in the English vocabulary (Dabbagh and Janebi Enayat, 2019).

Experts (Harmer, 1991; Liu and Nesi, 1999) classify vocabulary into two types: active and passive. Harmer (1991) differentiates between the two kinds of vocabulary. The first type of vocabulary represents the one that the students have been taught and are likely to be able to use. In the meantime, the second type implies the words that students recognize when they come into contact but may not be able to pronounce. According to Liu and Nesi (1999), there are two categories of vocabulary: receptive and productive vocabulary.

#### **a. Receptive Vocabulary**

Receptive vocabulary refers to words identified by student and comprehends when they are used in situations where they cannot produce them. Here, learners identify vocabulary when they see or come in contact while reading text but do not utilize it in speaking and writing (Salem, 2019).

## **b. Productive Vocabulary**

The words that learners comprehend, can pronounce correctly, and use constructively in speaking and writing are referred to as productive vocabulary. It includes receptive vocabulary as well as the ability to speak or write at the appropriate time (Webb, 2005). learners may handle productive vocabulary as an active process since they can generate the words to convey their thoughts to others. (Uchihara and Saito, 2019).

## **2.4. Vocabulary Mastery**

Vocabulary is essential for the student to learn in order to comprehend the language. It is vital to have a strong vocabulary in order to articulate notions and understand what others are saying. Based on Djiwandono (2018), mastery implies (i) a. the authority of a master: control, b. competition; dominance, hegemony and (ii) a. ownership or superior ability or practice, b. ability or familiarity that makes one master subject statement. Mehrabian and Salehi (2019) describe mastery as comprehensive awareness or comprehensive skill.

The peculiarity of any entity's vocabulary understanding relies on the individual and his inspiration, requirements, and need for words (Uchihara and Harada, 2018). It also refers to individual accomplishment and control (Trifonov, 2011). Accordingly, the major obligation in increasing the understanding depends on the individual. The success in broadening the vocabulary mastery necessitates the enthusiasm and interest in the words use in language. Based on this, one might deduce that vocabulary mastery is a person's optimal proficiency in using words in language, which they acquire in accordance with their own desires and drive.

Vocabulary mastery is central to the four language skills and must be considered one of the required mechanisms of language.

## **2.5 Vocabulary Learning**

The development of a learner's vocabulary is a crucial part of their language development (Farrokh and Sharifi, 2019). Learning vocabulary is important not just for students, teachers, and administrators, but also for researchers in other fields. There is an urgent need for the researchers to enhance their vocabulary for the detailed study. A rich vocabulary is very much needed to employ in the research texts such as publication of articles, presentations, and thesis. Varatharajoo, Asmawi, and Abedalaziz (2018) stated that a lack of vocabulary knowledge is a major barrier to comprehension for readers. There are numerous materials and methods being used in vocabulary teaching and learning at the moment.

It is critical for students to have a sufficient vocabulary knowledge; however, it should be noted that having a sufficient vocabulary knowledge does not necessarily imply that everything will be easy, as vocabulary knowledge is only one component of language skills (Schmitt, 1997). Furthermore, it should be understood that possessing vocabulary knowledge implies that learners are also familiar with other types of vocabulary knowledge, such as knowledge of affixes, vocabulary size, and word association knowledge, all of which are thought to have a strong relationship (Schmitt et al., 2001; Schmitt and McCarthy, 1997; Masrai, 2019; Pacurucu Pacurucu, 2019). This means that a person's knowledge of affixes, for instance, would probably help to increase both his/her vocabulary size and word association knowledge. Weekes (2018) supports this by stating that knowing a word implies knowing a member of the word's family,

and that developing proficiency increases the number of members of this word family. It helps to determine how well a learner reads new words because affixes can be attached to a variety of words and change their meaning and part of speech in a systematic manner (Respati and Nur, 2019). Goundar (2016) describes the relationship between vocabulary understanding and linguistic use to be paired: knowledge of vocabulary empowers linguistic use, and language use, on the other hand, increases vocabulary understanding.

To be specific, Masrai (2019) indicated that for decades, there has been a significant increase in interest in memory strategies for vocabulary learning as part of language learning strategies (LLS). It is believed that vocabulary learning can be improved when learner's responsiveness is led to memory strategies (Oxford, 1990). Furthermore, memory strategies for vocabulary learning allow students to take more control of their own learning, allowing them to take more responsibility for their studies. However, a deep explanation of how memory strategies for vocabulary learning relate to vocabulary knowledge especially in its certain aspects such as learner's knowledge of affixes, vocabulary size, and word association has not been explored enough (Chamot and Kupper, 1989; Rahman, Yap, and Darmi, 2018).

It has been discovered that second language readers place a high value on vocabulary knowledge, and that lack of that knowledge is a key impediment for second language readers. (Khan et al., 2018). When one has a thought or idea that they want to express, they need a collection of words from which to choose. When a student is in transit or on a journey, he or she does not carry grammar books, but rather a dictionary to learn new words, not grammar (Komol and Sripetpun, 2014). Manzo and Sherk (1971) indicated that being able to generate grammatical sentences has less value when one has yet to realize the vocabulary required to

deliver what one wants to say. They went on to say that little can be communicated without grammar, and nothing can be communicated without vocabulary.

The ultimate single source of problems for L2 learners has been identified as vocabulary.

This implies that learners appear to be having difficulty with the open-ended vocabulary structure. Unlike phonology and syntax, vocabulary may not have clear paths for learners to follow in order to acquire and expand their knowledge (Bennett and Verney, 2019). Due to the tens of thousands of different connotations, Oxford (1990) argued that vocabulary is by far the most significant and insurmountable component in the learning of any language, whether foreign or native. In spite of these problems that learners encounter in L2 vocabulary, the students must deal with it in their exams, as vocabulary has always been one of the linguistic aspects tested in language tests (Ibarra Santacruz and Martínez Ortega, 2018).

The vocabulary size focusing on the relationship between EFL undergraduate and graduate students have been reported by Kalajahi and Pourshahian (2012) and Chiramanee (2014). These studies appeared to disclose the same finding, which indicated that certain classifications of memory strategies for vocabulary learning add considerably to the students' vocabulary size even with their different levels of importance. These empirical conclusions from these studies determined the correlation between students' memory strategies for vocabulary learning with their vocabulary size, and the investigator presumed that these strategies might possibly also add to the students' affixes knowledge. Research on vocabulary learning has capitulated perceptive outcome. Atsushi Mizumoto, Osamu Takeuchi (2009) conducted a study entitled "examined the effectiveness of explicit instruction of vocabulary learning strategies with

Japanese EFL university students”, It was observed that strategy training is beneficial for strategy selection and increases their frequency of use.

Stoffer (1995), Sanaoui (1995), Moir (1996), Lawson and Hogben (1996), Gu and Johnson (1996), Schmitt (1997), Porte (1988), Kojic-Sabo and Lightbown (1999), Kudo (1999), Lin (2001), Catalan (2003), Fan (2003) are some of the notable works completed in this domain since 1995. These studies have revealed information about the processes involved in learning of vocabulary as well as the strategies used by individuals. The studies are as follows:

Sanaoui (1995) distinguished two types of approaches used by adult learners when they learn vocabulary: some of them planned to follow a structured approach for vocabulary learning, while the others did not. Those who followed structured approach conducted self-study, participated in self-directed learning activities, recorded and reviewed some of the lexical items they were learning, and practiced applying the new words they learned in their real life (Bastanfar & Hashemi, 2010; Reinders and Benson, 2017). According to Sanaoui's research, structured learners outperformed those who did not follow the mentioned approach.

Furthermore, Gu and Johnson (1996) outlined six different sorts of strategies: “guessing, dictionary, note-taking, rehearsal, encoding, and activation”, as well as two extra factors: vocabulary learning beliefs and metacognitive regulation. Strategies for selective attention and self-initiation are part of metacognitive regulation. The latter uses a range of methods to make the meaning of vocabulary items explicit. Cognitive strategies include using dictionary, guessing, and taking notes strategies. Memory strategies include the categories of rehearsal and encoding. Rehearsal strategies include word lists and repetition. Word structure, association,

semantic, visual, aural, imagery, and contextual encoding, are examples of encoding strategies. Activation strategies are those that allow students to use new words in a variety of contexts (Bastanfar and Hashemi, 2010).

In addition, Schmitt (1997) reportedly developed his taxonomy in response to the limitations of a complete list of vocabulary learning strategies. He classified the eighty-five strategies into 5 categories: metacognitive, social, determination, cognitive, and memory. Oxford's (1990) inventory of general language acquisition processes influenced his categories, but he changed a few things. The metacognitive, social, determination, cognitive, and memory strategies of Oxford (1990) have thus been adopted. The distinction he made was between discovery and consolidation strategies. Determination strategies are employed when the learner discovers the meaning of a new term without reference to someone's experience (Schmitt, 1997; Mohammadi, 2011). Learners may, for example, use context, structural understanding of the language, and guides or recourses to predict the meaning of a new term. It is therefore possible to discover the definition of a word by seeking the help of others (Bastanfar and Hashemi, 2010).

Lastly, Goundar's (2016) theoretically oriented classification distinguishes components of vocabulary knowledge derived from vocabulary knowledge sources and processes of learning; thus, three different types of classes are defined: "planning," "sources," and "process," each of which covers a set of major strategies. The term 'planning' refers to deciding where and how to actually focus on a given vocabulary item, as well as strategies for picking words, selecting components of comprehensible input, as well as planned repetition. 'Sources' refers to obtaining

knowledge about a word from its context, form, reference source such as dictionaries and similarities and links with many other languages. Acquiring word knowledge entails retrieving, noticing, and developing strategies (Bastanfar and Hashemi, 2010).

Seventy-five undergraduate students were asked by Alyami (2016) to provide information on the strategies they employed. The findings revealed that the strategies that needed higher order thinking skills, such as "ordering terms by meaning group," were the least commonly used, while the most frequently used aspect was "causes for not adopting strategies," and the least frequently used aspect was "means of arranging notes collected." This technique linked memory strategies to higher-order cognitive skills, resulting in the grouping of words by meaning. This describes memory reasoning in terms of organizing meaning or notes.

## **2.6 Vocabulary Learning Strategies**

Vocabulary acquisition is regarded as an essential component of language learners' success, and this has sparked intense discussion in a number of studies. McCarthy (2001) indicated that learner who builds a range of learning strategies are the one likely become successful. Oxford (1986) stated that the importance of identifying effective learning strategies and teaching students is based on its usage.

Asgari and Mustapha (2011) examined the different types of vocabulary learning methodologies utilized by ESL students at the University Putra Malaysia. The findings revealed that vocabulary memorization strategies aid students in learning English in a way that is appropriate for their cultural and educational backgrounds. Yang and Dai (2012) investigated the preferred vocabulary learning strategy of Chinese university students. The study cites four vocabulary memorizing strategies (rote repetition, structural associations, semantic strategies,

and mnemonic keyword techniques), and understudies clearly prefer the second and third ones; however, repetition reiteration continues to engage some of them. Memory aids, for example, keyword strategy was fairly disagreeable to a large portion of the understudies since they would include the students in increasingly dynamic execution of the objective language. Research into the keyword technique has demonstrated that this strategy improves retention (Hulstijn, 2001). But at the same time, it has been considered to be too demanding in terms of efforts from the learners (Sternberg, 1987).

Çelik and Toptaş (2010) investigated Turkish EFL students' vocabulary-learning strategies, specifically determination strategies, memory strategies, cognitive strategies, and social strategies. The frequency and usefulness ratings of the strategy used by 95 Turkish EFL learners were specifically examined. The findings indicated that students used determination strategies very frequently, while learners perceived social strategies to be more useful than the other level learners.

Kafipour, Yazdi, Soori, and Shokrpour (2011) used random cluster sampling to select 238 participants-both male and female-from Semnan universities for their study on vocabulary learning strategies used by Iranian EFL learners. Data were gathered using Schmitt's vocabulary learning strategies questionnaire (VLSQ) and the Nation's vocabulary level test (VLT). Memory strategy was noticed to be the most frequently used strategy, while cognitive strategy was noticed to be the least frequently used strategy.

Juneon (2001) researched Korean EFL learners' vocabulary learning strategies. The findings show that utilizing a bilingual dictionary, guessing the meaning from context, and rote learning are the most common strategies employed by Korean EFL learners. They also recognize the effectiveness of these strategies in improving second language vocabulary knowledge.

Based on Oxford's (1990) vocabulary learning strategies, Gu and Johnson (1996) developed a questionnaire contains 108 items, making the list of vocabulary strategies highly broad.

Metacognitive strategies, vocabulary learning beliefs, and cognitive strategies were the three sections. Gu and Johnson (1996) distributed the questionnaire to 850 Beijing University sophomores with an average of 6 years of English learning experience. The study was interested in procedures with learners who were merged different strategies, and the choice of strategy combination was correlated with the size of the students' vocabulary and the choice of general language strategy. On a seven-point scale, from Extremely Untrue of Me (1) to Extremely True of Me (7), each statement was scored (7). The students were divided into five groups based on their strategy types and learning results. The students with the highest English exam scores (0.9 percent) stated that vocabulary should be learned by natural exposure (reading, guessing, contextual encoding) and thorough study, rather than memorizing. They actually pursued opportunities to use English outside of the classroom. The second-best group of participants (9.9 percent) believed in natural acquisition, the use of new words, and careful study, but they also thought that word memorizing was beneficial. They used every strategy, putting in a lot of time and effort to learn English. Gu and Johnson (1996) stated that they were successful as a result of their efforts, rather than any specific strategy. The majority of students in the study (87%) reported average use of various strategies, while the group with the lowest English test

scores (1.9%) strongly believed in the effectiveness of only a specific set and range of strategies: memorization and visual repetition. Hence, vocabulary learning strategies are clearly necessary. Students will be more likely to use these systems as a result of guided practice, as they will gain confidence in their ability to do so.

### **2.6.1 Memory Strategies**

According to Lockhart and Craik (1990), memory helps the individual to process information and store information in the form of words, verses, images, lyrics, and dreams. Memory strategies aid learners to support learning, contextual learning, and vocabulary recall (Atay and Ozbulgan, 2007). Working memory strategies have recently been shown to improve an individual's English vocabulary learning (Ibarra Santacruz and Martínez Ortega, 2018). Memory improves encoding effectively by linking between new and previous information, which previously present in one's mind (Lockhart, 2002; Rosenthal and Ehri, 2011). The memory role of executive functioning during study or observation appears to be influenced by aging as well as self-reported internal and external memory strategy use (Bouazzaoui, Isingrini, Fay, Angel, Vanneste, Clarys, and Taconnat, 2010). In accordance with this, Sastoque, Bouazzaoui, Burger, Froger, Isingrini, and Taconnat (2019) showed that the involvement of memory and internal strategy enhances language learning in learners of all ages. Rosenthal and Ehri (2011) discovered that pronouncing new words aloud while silently reading a text improves fifth-grade students' memory for vocabulary words and their spellings. Furthermore, Masrai (2019) investigates how individual differences in aural vocabulary knowledge, written vocabulary knowledge, and working memory capacity affect L2 learners' listening comprehension. According to the author, memory strategy is important in information retention and memorization.

Individuals acquire vocabulary through three memory strategies, according to Pérez and Alvira (2017): memory, cognitive, and metacognitive. The authors indicated that these strategies have been the most influential in individual learning. Pacurucu Pacurucu (2019) discovered that an individual's cognitive control and activation strategies are the most effective ways to acquire new English words. Additionally, significant differences were discovered among undergraduate students practicing and memorizing vocabulary learning strategies in English class (binti Suhaedi, 2018). Learning to improve one's lexical knowledge is more beneficial to students in other fields of study. Graduates frequently struggle to understand the practical language in their books. Wanpen, Sonkoontod, and Nonkukhetkhong (2013) examine engineering students' technical vocabulary proficiency and vocabulary-learning strategies. The finding of the study exhibited that these students used a medium number of strategies, with memory strategy being the most common and metacognitive strategy being the least common. The data revealed a substantial association between the students' competency level and their choice of memory categorization strategies for vocabulary learning.

Ardasheva et al. (2017) explored the connection between vocabulary size and language learning strategies and memory regulation outcomes. The findings showed that learners employ direct strategies, which have an impact on memory processing. Furthermore, metacognitive strategies are frequently employed. Learners with a larger vocabulary use strategies that take longer but result in more efficient learning (Kalajahi and Pourshahian, 2012).

## **2.7 Classification of Vocabulary Learning Strategies**

Language learners use vocabulary learning strategies (VLSs) to secure new English words.

The classifications of VLSs demonstrate that there are several ranges of different VLSs (Stoffer, 1995; Gu, 2003). Moreover, there is a comprehensive catalog of LLSs used in vocabulary learning developed by Oxford in 1990. Oxford (1990) classified these strategies into six groups or categories: “Cognitive”, “Metacognitive”, “Memory”, “Compensatory”, “Affective” and “Socio-affective” strategies. The author separated them into two categories: direct and indirect strategies. Memory, cognitive, and compensation strategies are direct strategies, whereas metacognitive, affective, and social strategies are indirect strategies. Some researchers have come up with lists of VLSs which include memory strategies, metacognitive, beliefs concerning vocabulary learning, conjecturing strategies, dictionary strategies, regulation, note-taking strategies, and motivation strategies (Kulikova, 2015; Mehrabian and Salehi, 2019; Nematollahi, Behjat, and Kargar, 2017). All these strategies can be group into two types or forms: Cognitive strategies (of responsiveness, practice, invention) and Metacognitive (of formation, supervising and appraising). In a similar manner, learning strategies are divided into three categories by O'Malley, Chamot, StewnerManzanares, Kupper, and Russo (1985): metacognitive, cognitive, and social/affective strategies. Moreover, Schmitt and Schmitt (1995) identified the commonality of cognitive, metacognitive, memory and social roles in VLSs modified from Oxford's (1990) categorization. Following that, these authors expanded on the aim of meaning strategies and divided vocabulary-learning strategies into two categories: strategies for encountering new word meaning and strategies for combining words once they've been discovered. As a result, Schmitt's classification of VLSs combines the direct (memory, cognitive, compensation) and indirect (metacognitive, social, affective) strategies established by Oxford (1990) and O'Malley et al (1985). Following the discovery of commonality in

Oxford's (1990) categorization, Schmitt's categorization of VLSs is more specific and all-inclusive.

As previously said, there are various taxonomies, with the Oxford approach being one of them. Oxford (1990) distinguishes and divides direct and indirect strategies into groups. Oxford (2003) used the same classification of LLSs that was used in 1990. Schmitt combined Oxford's social, memory, and metacognitive approaches to create a new class called “discovery approaches” (Schmitt, 1997). This class is utilized to learn the new word meaning without the assistance of others. As a result, learners attempt to comprehend meanings by utilizing lexical knowledge, context, and references (Zimmerman, 2001). Consolidation is the other significant category of strategies in this class, where a word is consolidated when the learner discovered it. Schmitt (1997) divides these two groups into the following five sub-categories, the below descriptions adopted from Schmitt (1997):

1) *“Determination strategies make it easier to learn a new lexical item. Learners may be able to determine the part of speech of the new words, which can aid in the guessing process. There are alternative techniques for implementing this strategy. Part of speech analysis, affixes and roots analysis, checking for an L1 cognate, analyzing pictures or gestures, guessing from textual context, using a bilingual or monolingual dictionary, using word lists or flashcards are some examples (Schmitt, 1997). According to the findings of various studies, different learners prefer different strategies, and by implementing them in their learning process, they have been able to promote their knowledge.”*

2) *“Social strategies are classified as either discovery or consolidation strategies. When the learner asks others for help in determining the meaning and receives an L1 translation,*

*synonym, paraphrasing, a sentence containing the new item, or any combination of these methods, he or she has discovered the meaning. Furthermore, it encourages active information processing as a consolidation strategy. Combining words in a social context would motivate students and prepare them for group projects outside of the classroom. Because teachers' roles are minimized in this method, students will be able to use and manipulate language in class (Schmitt, 1997). Asking the teacher for an L1 translation, paraphrasing or giving the synonym of the new word, a sentence containing the new word, asking classmates for the meaning, discovering new meaning through group work activity, studying and practicing meaning in a group, teachers checking the learners' flashcards or word lists for accuracy, and linking via native speakers are all examples of this type of strategy (Ahmed, 1989).”*

3) *“Memory or mnemonic strategies involve connecting students' learning of new words to mental processing by relating what they already know to the new words. This entails a variety of strategies, including the following: studying words with a graphic description of their meaning, drawing words functions, linking words to a life event, connecting words via coordinates, linking the word to its synonyms and antonyms, implementing semantic maps, utilizing scales for gradable adjectives, peg scheme, Loci approach, categorizing words to examine them, grouping words spatially on a page, using new words in a sentence, putting words together in a storyline, studying a word's spelling, studying its sound, pronouncing a word aloud while studying, imagining word form, underlining the first letter of a word, configuration, using keyword plan, paraphrasing the meaning, parts of speech, using cognates, learning the words of an idiom together, implementing physical action, and utilizing semantic characteristic grids (Schmitt, 1997).”*

4) *“Cognitive strategies are defined as tools that help a person achieve a specific goal (Rubin, 1987). Cognitive strategies allow the second language learner to “manipulate the language material in direct ways, such as reasoning, analysis, note-taking, summarizing, synthesizing, outlining, reorganizing information to develop stronger schemas (knowledge structures), practicing in naturalistic settings, and formally practicing structures and sounds” (Oxford, 2002). This category includes using mechanical means to study new words, such as vocabulary notebooks.”*

5) *“Metacognition is a type of cognition that deals with high-level thinking and management system over the learning process. When confronted with a new word in a variety of settings, advanced, successful learners are conscious of their learning and employ a variety of strategies.”*

Metacognitive techniques lead, monitor, and control how people learn. These policies cover topics such as learning manners, planning, monitoring, and evaluating learning (Rahimi, 2012).

## **2.8 Linguistic Patterns**

The scientific study of language is known as linguistics. It entails analysing the structure, meaning, and context of a language (Ramchand and Reiss, 2007). Linguists traditionally study human language by observing the interaction of sound and meaning, which leads to the formation of form (Heine and Narrog, 2015). Meaning and form are paired in linguistic constructions (Goldberg, 2006; Carter, 2012). Pattern is created when meaning and form are combined in a precise way (Hunston, 2002).

Linguistic patterns are grammatical rules that enable learners to communicate correctly in a common language (Hoffmann and Trousdale, 2013). A grammar, according to linguists, is more than just a set of rules; it is a set of patterns that guide speakers in producing comprehensible

and predictable vocabularies and sentences (Marvin, Beukelman, and Bilyeu, 1994). Linguistic patterns are defined as a set of rules that describe both the element(s) and the vocabulary used in sentences (Palmberg, 1987; Baker, 1998). In English, lexical forms are made up of patterns of separate words, such as call recp 'to phone.' Several languages forbid such elements or do not permit the same types of formal patterns. Languages and their variations are rule-governed structures, and thus grammatical (Lado, 1965). Alternatively, all languages include patterns that make sense of the structures that include words or vocabularies, sounds, and arbitrary symbols that comprise that language (Stanback, 1992). These structures are referred to as linguistic patterns, and they are represented textually by a variety of linguistic styles (McCarthy, 1988).

Linguistic patterns differ from the native language in form, meaning, and distribution, resulting in ease or difficulty in acquiring a foreign language's vocabulary (Lado, 1965; Palmberg, 1987; Carter, 2012). To demonstrate the linguistic patterns used in vocabulary utilization, Lado (1965) compared foreign language and native language vocabulary, resulting in “words that are (1) similar in form and meaning, (2) similar in form but distinct in meaning, (3) similar in meaning but different in form, (4) dissimilar in form and content, (5) dissimilar in construction type, (6) similar in fundamental meaning but different in connotation, and (7) similar in meaning but limited geographically (Lado, 1965, pp. 31-32).”

Because some of these groups of words overlap, some words fall into more than one group at the same time, causing the difficulty to vary slightly when considering the vocabulary in linguistic patterns (Lado, 1965; Marvin, Beukelman, and Bilyeu, 1994; Carter, 2012). Lado

(1965), on the other hand, predicts general levels of difficulty based on these classifications: “(1) easy, (2) normal, and (3) difficult” (pp. 32).

## **2.9 The Importance of Learning Vocabulary**

The knowledge of vocabulary is viewed as a critical tool for second language learners, due to a limited vocabulary in a second language that prevents successful communication, vocabulary knowledge is viewed as a key skill for second language learners. Schmitt (2000) highlights the importance of vocabulary learning, stating that lexical knowledge is essential for communicative competence and second language acquisition. The value of language is illustrated on a daily basis, both in and out of the classroom. Affix knowledge is regarded as a crucial feature of vocabulary knowledge since it aids learners in reading materials containing unknown words and expanding their vocabulary, particularly their understanding of derivatives. Given the importance of vocabulary knowledge for communication, researchers investigated the process of vocabulary acquisition and discovered that it is stimulated by a variety of factors, including not only explicit and implicit techniques or individual and group-based activities, but also motivation and memory strategies for vocabulary learning (Kafipour, 2010; Kumar and Dhanavel, 2018). Students must have an adequate vocabulary in the classroom in order to be successful in their academic activities.

Several researchers claim that vocabulary is one of the most essential, if not the most essential, components of learning a foreign language. Read (2004), Cain and Oakhill (2014), Alqahtani (2015), Goundar (2016), and others have recognized that vocabulary acquisition is important for effective second language use and plays an important role in the development of completely spoken and written forms. Learning vocabulary in English as a second language (ESL) or

English as a foreign language (EFL) is important for all language skills, including listening, reading, speaking, and writing (Goundar, 2016; Leki, 2017; Mokhtar, Rawian, Yahaya, Abdullah, and Mohamed, 2018). Huang et al. (2019) further claimed that learning suitable vocabulary is vital for efficient second language use since it will be difficult to employ the structures and functions learnt for understandable communication if there is no broad vocabulary realization. Language teachers and applied linguists have recognized the importance of vocabulary learning and are researching ways to promote it more effectively.

As previously stated, vocabulary training is a vital aspect of language that ESL/EFL learners must go through for acquiring proficiency and skill in their target language, because word power has been proven to enable eloquence in speaking and efficacy in writing (Wu, 2014; Szyszka, 2017). Furthermore, it has been established that vocabulary has the unique ability to inspire integrative language abilities such as listening, reading, speaking, and writing. According to Rosenthal and Ehri (2011), in order to successfully comprehend a text, learners must have sufficient word knowledge. The amount of words that learners memorize determines their level of language comprehension.

## **2.10 Conclusion**

A relevant literature in relation to the theme of this study i.e. memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners, have been reviewed. Different memory strategies commonly used has also been discussed in connection with vocabulary learning. The gap in the literature regarding the lack of studies in Saudi Arabia in link with theme of this study has been identified.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

A research methodology is a map that deals with the manners in which data are collected and analyzed in accordance with the study objectives. This chapter consists of research design, participants, instrument, procedure, and analysis of data. More specifically, the discussion of the research design offers a clear picture of data collection and how the study measures the variables. In addition, the discussion explained how the study has selected the appropriate techniques for statistical analysis taking into consideration the purpose of the study. The chapter ends with the summary.

#### **3.2 Research Design**

The aim of the present study is to examine the memory strategies for vocabulary learning employed by the Saudi undergraduate EFL learners and to discover the pattern the most and the least strategies frequency used. Hence, the design of a descriptive survey and quantitative approach are used in this study. The quantitative research design approach will help the researcher to determine the participants' opinions about the memory strategies for vocabulary learning employed in Saudi through the questionnaire. Survey study help researcher to determine individual respondent opinions (Agostini, Talamo, and Vecchione, 2010).

### **3.3 Participants**

Consistent with Creswell (2002) researchers do not always study an entire population because not every individual in the population can be identified or reached. Thus, a sample of target population is selected to form the participants of the study. Therefore, the participants of this study are Saudi learners majoring in English Language from the English department, Hafr AlBatin University, Saudi Arabia, 150 students as the total population for thus study. By using a simple random sampling technique, 110 learners participated in this study. Random sampling technique is a sampling procedure in which any item in the population has an even opportunity and probability of being selected in the sample (Creswell, 2002). All participants are female that speak Arabic as their native language. All these students have learned English from primary to university level, so they have good language exposure and a similar influence in vocabulary learning.

### **3.4 Instrument**

Vocabulary learning strategies questionnaire (appendix I) is adopted from Al-Qaysi and Shabdin (2016), which is primary based on Oxford (2003) and Li (2004) structures. The questionnaire is considered appropriate for this study as it was used in the context of EFL learners. Since this research is using adapted questionnaire to measure memory strategies for vocabulary learning, thus testing the reliability of the questionnaire items are paramount important. The internal reliability of the questionnaire items was tested using Cronbach Alpha. The reliability coefficient was 0.86, which were significant at p-values was  $< 0.001$  for the 25 items (25 questions). Based on this result, the test consistency was found to be relatively high (Al-Qaysi and Shabdin, 2016). The questionnaire included two parts. The first part consists of questions about the participants' demographic information such as age, gender, program of the

study and level of study. Whereas the second part included 25 questions about the memory strategies for vocabulary learning, 7 questions for the CML strategy, 9 questions for the AIS strategy, 4 questions for the RW strategy and 5 questions for the EA strategy. The estimated time to complete the questionnaire was 30 minutes including about 5 or 10 minutes' initial explanation done by this researcher.

### **3.5 Data Collection**

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic style that allows one to answer stated research questions, test hypotheses, and assess outcomes (Johnson and Turner, 2003). The researcher of this study embarks on data collection in order to answer stated research questions, test hypotheses, and assess outcomes of this study.

Before proceeding with data collection, the researcher obtained permission and approval letter for data collection from the Director of Hafer Albatin University (Approval Letter, appendix II) and from the Dean of the English Language Department, Hafer Albatin University. The participants were briefed in their respective classroom on the purpose and the nature of the research, then they were required to respond to the items in the questionnaire. The researcher encouraged the participants to seek clarification on any items they did not understand.

### **3.6 Data Analysis**

According to the literature on language and memory strategies for vocabulary learning, statistical analysis is a commonly used method in analyzing data. A statistical software Statistical Package for the Social Sciences (SPSS) which offers a convenient way of summarizing and interpreting the results will be used in this study. Hence, a descriptive

statistical analysis will be used to analyze data collected from the students' questionnaires in order to find the percentages and the frequencies of the strategies. Moreover, to ensure the reliability of the internal consistency, SPSS software will be used to compute the data.

### **3.7 Scoring System**

There are overall 25 items covering the four major categories (i.e. CML, RW, AIS, and EA) of memory strategies for vocabulary learning collected in this study. The study employed scoring system used by Oxford (2003) in classifying the language learning strategies. Based on this scoring system of Oxford (2003), any value that falls between 4.0 and 5.0 is categorized as a "high use strategy", implies strategies commonly used in memorization. The mean scores fall between 2.5 and 3.9 are categorized as a "medium use strategy", while those that fall between 1.0 and 2.4 are categorized as a "low use strategy", which implies to strategies those not commonly used.

### **3.8 Pilot Study**

A pilot study, also known as pilot experiment, pilot test, or pilot project, is a small-scale preliminary study carried out in order to assess feasibility, duration, cost, adverse effects, and enhance upon the study design prior to performance of a main study or full-scale project (Abu, Fracgp, Mmed, Fracgp, Hassan, Schattner, and Lumpur, 2006). It is one of the essential steps in a research project. A pilot study asks whether something can be done, should the researcher proceed with it, and if so, how (Junyong, 2017). Nevertheless, a pilot study also has a particular design characteristic; it is carried out on a smaller scale than the main or full-scale research. In

other words, it is essential for enhancing the quality and efficacy of the main study (Hazzi and Maldaon, 2015).

A pilot study was conducted to ascertain the feasibility of all adopted questionnaire items in Saudi Arabia. The adopted questionnaire from Al-Qaysi and Shabdin (2016) was used for Arab students in Malaysia. However, because of geographical difference, the pilot study was carried out with 28 students in summer (29 July, 2019) at Hafr Albatin University prior to the main study to determine the four (4) categories of the strategies used (i.e. CML, RW, AIS, and EA) in vocabulary memorization among undergraduate EFL learners in Saudi Arabia. All the items adopted were used without any modification. The questionnaires were distributed directly to the students in their respective classroom. After the overall of 28 responses collected from the participants, then, the data were analyzed using descriptive statistics, particularly the frequency and the mean of the different strategies used.

### **3.8 Summary**

This chapter has discussed the methodology used to collect the required data from respondents and the way the data were analyzed. The research design, which is a descriptive approach for analysis, was explained, followed by an explanation detailing the participants, instrument, procedure, and analysis of data. Finally, the pilot study as a test to determine the applicability and feasibility of the adopted questionnaire items on memory strategies for vocabulary learning formed the basis for the main study, which is discussed in the next chapter.

## CHAPTER 4

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the findings of the study. The results of pilot study are first presented, then followed by the results of the main study. Subsequently, analysis of categories based on the scoring system used by Oxford (2003) in classifying the language learning strategies is explicated. Secondly, the study tried to answer its first research question regarding the utmost and the least frequent memory strategies in vocabulary used by Saudi EFL learners. Finally, the second research question about the linguistic patterns of learning strategies as they influence the vocabulary memorization and learning of the Saudi EFL learners are explained.

**What are the most and the least frequent memory strategies for vocabulary learning employed by Saudi EFL learners?**

#### 4.2 Results of the pilot study

The results in Table 4.1 showed the existing of the four categories [i.e. creating mental linkage (CML), reviewing well (RW), applying images and sounds (AIS), and employing actions (EA)] of the memory strategies used in vocabulary learning among the Saudi undergraduate EFL learners. In order to determine the memory strategies utilized by the students, descriptive statistics such as the mean and standard deviations (S.D) of the four major categories were employed. This system is structured by the frequency of use by the participants under the five-

point Likert scale in the questionnaire (Table 4.1). Consistent with the scores system of Oxford (2003) for the mean categorization, the frequency of learners' strategies used are categorized into three viz. high, medium, and low.

The categorization is structured by the participant's frequency of options chosen from a five-point Likert scale in the survey questions provided. There are overall 25 items for the collection of four (i.e. CML, RW, AIS, and EA) major categories of memory strategies. Based on this scoring system of Oxford (2003), any value that falls between 4.0 and 5.0 is categorized as a "high use strategy", implies strategies commonly used in memorization. The mean scores fall between 2.4 and 3.9 are categorized as a "medium use strategy", while those that fall between 1.0 and 2.4 are categorized as a "low use strategy", which implies to strategies those not commonly used. The results in Table 4.2 revealed that the mean scores for the four categories ranging from 2.1 to 4.7 with the frequency scores range from low to high. With reference to Table 4.2, the category CML, RW, AIS, and EA had a frequency score of high use, medium use, medium use, and low use, respectively, with CML having the high ranking and the EA having the low ranking based on Oxford (2003) classification.

**Table 4.1:** The scoring system used in the current study according to Oxford (2003)

<b>Ranking</b>	<b>Mean Score</b>
Low used strategy	between 1.0 and 2.4
Medium used strategy	between 2.5 and 3.9
High used strategy	4.0 and above

**Table 4.2:** The result of pilot study for major categories

S/N	Category	N	Rank	Mean	S.D	Frequency Score
1	CML	28	1	4.79	0.90	High use
2	RW	28	2	3.73	0.81	Medium use
3	AIS	28	3	3.56	0.87	Medium use
4	EA	28	4	2.19	1.08	Low use

These four categories were further subcategorized into two groups, that is, the most used strategies and the least used strategies. The results of the most used strategies by Saudi learners are presented in Table 4.3. According to the results, the most used strategies are CML, EA, and RW strategies with the CML possessed the highest-ranking and mean, while RW strategy having the lowest classification in this subcategory.

**Table 4.3:** The Most Used Strategies by Saudi Learners (Pilot Study)

Categorization of the Responses	Rank	Mean	S.D
CML When I try to memorize a word, I repeat it aloud to myself	1	4.79	0.86
CML I connect a word to a personal experience	2	4.21	0.82
EA I pay attention to set phrases and collocations that go with a word	3	4.00	0.98
RW When I try to remember a word, I write it repeatedly	4	3.79	1.07

Table 4.4 displayed the results of the least used strategies by the learners of the pilot study. Among this subcategory, the resulted exhibited that AIS had the highest-ranking and mean

score, while the CML had the lowest used by the Saudi learners. The EA used strategy had a medium used among the learners.

**Table 4.4:** The Least Used Strategies by Saudi Learners (Pilot Study)

<b>Categorization of the Responses</b>	<b>Rank</b>	<b>Mean</b>	<b>S.D</b>
AIS I associate new words with words that sound similar in Arabic	1	3.07	1.02
EA write the new words on one side of a card and the definition on the other side	2	2.22	0.90
EA I make vocabulary cards and take them with me wherever I go	3	1.59	1.00
CML I make vocabulary lists of new words that I meet	4	1.38	0.92

Altogether, the results of the pilot study indicated that the four categories of strategies of Oxford's (2003) categorization system exist and commonly used among undergraduate EFL learners in Saudi Arabia. This suggests the applicability and feasibility of the adopted questionnaire items of memory strategies for vocabulary learning in Saudi Arabia.

**RQ 1: What are the most and the least frequent memory strategies for vocabulary learning employed by Saudi EFL learners?**

### **4.3 Results of the Main study**

#### **4.3.1 Overview of memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners**

Overall, the results showed that the CML is the common and the highly most used strategy by Saudi undergraduate EFL learners. This is followed by the RW and AIS learning strategies as the second and third most highly used ones among the students. The EA learning strategy is the least used among the undergraduate EFL learners. The findings showed that the Saudi undergraduate EFL learners prefer CML strategy more than they use EA in their vocabulary learning and memorization, may be because the CML is easier strategy to the learners. This indicated the role played by the strategies in learning and memorization of English vocabulary.

#### **4.4 The Main (General) Findings of the Study**

Before going ahead with the interpretation of the results, it is important to acknowledge that the unilateral (autonomous) system is being used in the study university environment (i.e. Hafr AlBatin) and the populations, where only female students present in all the university are undergraduates studying English as a major. The demographic description showed that the mean score for the entire study population is 4.0 with 0.72 standard deviations, as displayed in table 4.5. Table 4.5 depicted that 4.0 symbolize the overall mean score of the memory strategies utilized by the Saudi EFL learners. In line with Oxford's (2003) scoring, the learners were found generally as high strategy users in this study. This is contrary to the present study initial expectation (it was expected that the learners would likely fall under low to medium strategy users because their background as EFL learners and been Arabic as a native language). This is because even though they are found higher with 4.0 mean score, which is slight escape from the medium score (mean range from 2.5 to 3.9), suggesting more effort is needed to propel the learners to more high level (mean ranges from 4.0 to 5.0). It shows that the learners need more English vocabulary to enhance their English language eloquent, which enabling them to be successful in the university program (particularly studying English course), hence, the need for

more strategies in memorization of many vocabularies. The results reveal that it is essential for academicians or educators to teach vocabulary strategies more comprehensively and efficiently during their English lessons or course. Conversely, about the internal consistency, 0.789 is the alpha value for all categories of the reliability coefficient, which indicates that the results are very reliable in terms of this Oxford's (2003) scoring.

Moreover, the participants with age 21 years constituted the majority with the highest (Freq.=23, S.D=0.68) frequency, while those with 22 years constituted the least with the lowest (Freq.=17, S.D=0.84) frequency (table 4.4). The participants in their 19 and 20 years fall within these two age groups aforementioned, with medium frequencies of 23 (S.D=0.86) and 27 (S.D=0.79), respectively. Generally, these demographic results showing that the questionnaire samples are well represented in the study. Though age plays an important role in memory and internal strategy use, which has been past showed by Sastoque et al. (2019) that optimizing memory strategy use in young and older adults differs in terms of memory and internal strategy use. In addition to this, most of these learners were in their third year of study (Freq.=33, S.D=0.81), while the least were in their last year of study (Freq.=17, S.D=0.76). This suggesting that the most of the learners are those older students in the middle stage of their study that require more of vocabularies to write their final year projects and to pass courses, thus the need of more memory strategies for vocabulary learning to help them memorizing many words to expand their understanding of English language.

**Table 4.5:** Descriptive Statistics for the Memory Strategies Used

<b>Number of students</b>	<b>Mean score (Overall)</b>	<b>S.D</b>
110	4.0	0.72
<b>Demographic</b>		
<b>Age</b>		
19 years	23	0.86
20 years	27	0.79
21 years	33	0.68
22 years	17	0.84
<b>Year of the study</b>		
First year	23	0.77
Second year	27	0.73
Third year	33	0.81
Last year	17	0.76

Based on the scoring system of Oxford (2003) for mean categorization, the frequency of strategies used by learners are categorized as high, medium, and low, as confirmed by the preliminary study (results of pilot study presented above).

The most preferred strategies were CML strategies (Mean=4.82, S.D=0.71) with high utilization level, subsequently RW (Mean=4.24, S.D=0.84) at high utilization, and AIS strategies (Mean=3.86, S.D=0.69) at medium utilization. EA strategies (Mean=3.41, S.D=0.66) were the least preferred strategies out of four categories, which also at the medium utilization level. According to these results, CML and RW strategies were noted to be both at a high level of utilization, whereas AIS and EA categories were at the medium utilization level. However, the low strategy usage was non-existence among these four Oxford's (2003) categories of memory strategies. In a nutshell, there were 8 out of 25 responses (32%) noted as high utilization, 13 out of 25 responses (about 60%) noted as medium utilization, and 3 (12%) noted

as the low utilization. This implies that the majority of the learners fall within the medium utilization.

Al-Qaysi and Shabdin (2016) have earlier reported a similar finding, as observed in the current study. The authors establish that the RW category was among the most preferred and used memory strategies by the Arab learners, while the EA strategies were the least ranked with a medium utilization. Similarly, these current findings are in agreement with ranking and ranges previously reported by Oxford (2003), because all means of the four categories fall within the ranges reported by Oxford (2003). This may explicate the fact that there is a relationship between memory strategies in terms of memorization when considering breadth and depth of vocabulary knowledge required by each student of non-native English to succeed in their academic pursuance especially at the undergraduate level, as earlier indicated by Zhang and Lu (2015). Table 4.6 displays the overall mean scores of the four major categories of memory strategies used by Saudi learners in their vocabulary learning. The results revealed the existence of all categories of memory strategies used by Saudi undergraduate students.

**Table 4.6:** The Categories of Memory Strategies Used by Saudi Learners in Vocabulary Learning

S/N	Category	N	Rank	Mean	S.D	Frequency Score
1	CML	110	1	4.82	0.71	High use
2	RW	110	2	4.24	0.84	High use
3	AIS	110	3	3.86	0.69	Medium use
4	EA	110	4	3.41	0.66	Medium use

The subsequent section offers additional elaboration on learners' the most and least preferred strategies usage, as per learners' responses about strategies used in vocabulary memorization.

#### **4.5 The most and the least frequent memory strategies for vocabulary learning used by Saudi EFL learners**

The seven most used strategies by the 110 Saudi Students studying English courses at Hafr AlBatin University are presented in Table 4.7. The memory strategies used most often are enumerated in descending order by means and S.D realized from descriptive statistical analysis. The findings indicated that the mean score of most used strategies varied from 4.82 (high) to 3.41 (medium) utilization levels. In this subcategory, the CML strategy was highest most used strategies (mean=4.80, S.D=0.78), followed by RW (mean=4.34, S.D=0.80) then AIS (mean=4.20, S.D=0.79), and EA (mean=4.04, S.D=1.03). The AIS also revealed as the least most used strategy (mean=3.71, S.D=1.11) in this classification. Al-Qaysi and Shabdin (2016) have previously obtained similar results where they show that CML and RW the most used strategies by the students. Based on these results, there seem a connection between all the four memory strategies used, which can be interpreted as, when the learners try to memorize a word, they repeat it aloud to themselves in link with when the learners try to remember a word, they write it repeatedly, which connect with "I image the word meaning". This phenomenon in this pattern has somehow noted by Li (2004) in a similar pattern, who conducted analysis of Chinese EFL learners' beliefs about the role of rote learning in vocabulary learning strategies. The author showed that the pattern is as result of rote learning in vocabulary learning. Based on present study, it is also connected with the fact that the learner pays attention to set of phrases and collocations that go with a word. All these shows how the four strategies were used in

vocabulary memorization in a succession manner. In addition to this fact, these undergraduate students who are native to Arabic speaking nation, which at the same time EFL learners have developed a kind of linkage between the four strategies, which helped them in grabbing and memorizing the required vocabulary for their English language courses. These structured questions pave the way to clearly understand the strength of the students' vocabulary through their choice of the most common strategies. English language vocabulary profiles of undergraduate students at different proficiency levels have a common way in their pattern of memorization of vocabulary in connection to their choice appropriate strategies (Lateh, 2018).

**Table 4.7:** The Seven Most Used Strategies by the Saudi Students

<b>Categorization of the Responses</b>	<b>Rank</b>	<b>Mean</b>	<b>S.D</b>
CML When I try to memorize a word, I repeat it aloud to myself.	1	4.80	0.78
RW When I try to remember a word, I write it repeatedly	2	4.34	0.80
AIS I image the word meaning	3	4.20	0.79
EA I pay attention to set phrases and collocations that go with a word.	4	4.04	1.03
CML I connect a word to a personal experience	5	3.93	0.98
RW I focus my attention on completing vocabulary exercises repeatedly before exams	6	3.76	1.05
AIS I remember new words by combination sounds and images	7	3.71	1.11

Table 4.8 depicts the seven least used strategies by the Saudi students; the results show the least useful in the ascending order of utilization by the students. The CML strategy was the least most used (mean=1.97, S.D=1.17), followed by EA (mean=2.36, S.D=1.00) then RW (mean=2.68, S.D=1.20) and AIS (mean=2.85, S.D=1.18) strategies in ascending orderly

manner as the least used ones. Employing actions (EA) has appeared as the uncommonly and least used strategy among the four strategies because it seems more frequent in this subcategory. According to this subcategory, EA strategy appears four times (57%), followed by CML (14%), RW (14%), and AIS (14%). It seems that there was extra involvement in this group of strategies, in that the learners use “cards” or “friends” as a strategy in memorizing the vocabularies. In these subcategories in the current study, the CML, RW, and AIS strategies appear to be least utilized by the learners. Studies have reported these strategies as the least preferred strategies used by students (Hamza, Yasin, and Aladdin, 2015; Kulikova, 2015; binti Suhaedi, 2018). Furthermore, Goundar (2016) and Nematollahi et al. (2017) also reported this as a least preferred vocabulary learning strategies among English as a foreign language (EFL) learners. This implies that Saudi students have less preference for extra processing strategies in their undergraduate English studies.

**Table 4.8:** The Seven Least Used Strategies by the Saudi Students

<b>Categorization of the Responses</b>	<b>Rank</b>	<b>Mean</b>	<b>S.D</b>
CML I make vocabulary lists of new words that I meet.	1	1.97	1.17
EA I write the new words on one side of a card and the definition on the other side.	2	2.36	1.00
EA I make vocabulary cards and take them with me wherever I go.	3	2.54	1.23
EA I recall the words by pair checking with someone else.	4	2.61	1.19
RW I make a regular and structured reviews of new words I have memorized.	5	2.68	1.20
AIS I associate the sound of the word with the same sound of a similar word in English.	6	2.85	1.18
EA I do oral spelling exercises with my friends whose English level is at a similar level of mine.	7	3.03	0.99

The memory strategies for vocabulary learning used by Saudi students are shown in table 4.9. Following the rearrangement of the means and frequencies in the descending order to re-categorize the four strategies according to the participant responses to fully comprehend the usage of memory strategies used in vocabulary learning. There are overall 25 responses based on 25 questionnaire-structured items used. According to the results (Table 4.9), high usage ranges from a mean of 4.0 or above, medium usage ranges from a mean of 2.5 to 3.9, and low usage ranges from mean of 2.4 or lower. The four strategies appear to be well represented between the high and low usage except for low usage where only two strategies out of four appeared in the ranking system to be low. The results showed that 8 out of 25 items were found to be at high usage level (32%), 13 out of 25 items were found to be at medium usage level (60%), and 3 out of 25 items were found to be at low usage level (12%). According to these results, the first four items of high usage exhibited that CML strategy (mean=4.80, S.D=0.78, freq.=59) was the highest used, immediately followed by AIS (mean=4.34, S.D=0.80, freq.=55), then RW (mean=4.20, S.D=0.79, freq.=52), and EA (mean=4.04, S.D=1.03, freq.=51). The first four items of medium usage revealed that CML strategy (mean=3.55, S.D=0.89, freq.=41) was also used at medium level, subsequently AIS (mean=3.39, S.D=1.10, freq.=39), AIS (mean=3.32, S.D=1.11, freq.=38), and RW (mean=3.19, S.D=0.99, freq.=31). While the low usage showed that EA strategy was rarely used by the undergraduate students in Saudi Arabia, compared with CML, RW, and AIS strategies as the least used under this categorization.

The results, altogether, indicated that the CML strategy is the most used strategy at both high and medium levels for vocabulary memorization by the Saudi undergraduate learners. This fact

is in agreement with previous findings reported by different studies, where Panduangkaew (2018) analyzes vocabulary-learning strategies employed by Thai EFL Undergraduates via the use of a dictionary. The author indicated that the CML strategy is the most used strategy among Thai students. In the context of Arab students, Daaboulis et al. (2018) found a similar finding with regards to the high use of CML among EFL undergraduates while testing different vocabulary learning strategies at a University in Syria. In another study, the CML and AIS are the most used strategies in terms of oxford classification of memory strategies as reported by Mehrabian and Salehi (2019) when they reviewing the effects of using diverse vocabulary learning strategies on word mastery.

**Table 4.9:** Memory Strategies Used by the Saudi Students in Descending Order

<b>Categorization of the Responses</b>	<b>Frequency</b>	<b>Rank</b>	<b>Mean</b>	<b>S.D</b>
<b><i>High usage (Mean=4.0 or above)</i></b>				
CML When I try to memorize a word, I repeat it aloud to myself	(59)	1	4.80	0.78
AIS I image the word meaning	(55)	2	4.34	0.80
RW When I try to remember a word, I write it repeatedly	(52)	3	4.20	0.79
EA I pay attention to set phrases and collocations that go with a word	(51)	4	4.04	1.03
<b><i>Medium usage (Mean=2.5 to 3.9)</i></b>				
CML I connect a word to a personal experience	(50)	5	3.93	0.98
RW I focus my attention on completing vocabulary exercises repeatedly before exams	(46)	6	3.76	1.05
AIS I remember new words by combination sounds and images	(44)	7	3.71	1.01
AIS I can use words correctly and efficiently after memorizing them	(42)	8	3.63	1.11
CML I write both the English new words and their Arabic equivalents	(41)	9	3.55	0.89

AIS I memorize examples in some context when using the words	(39)	10	3.39	1.10
AIS When I meet a new word, I search in my memory and see if I have any synonyms	(38)	11	3.32	1.11
RW I review newly learned words	(31)	12	3.19	0.99
CML I break up the word into components	(30)	13	3.10	1.06
CML I keep the vocabulary lists of new words that I make	(29)	14	3.07	1.21
AIS I remember a group of new words that share similar letters in spelling	(27)	15	2.97	0.89
AIS I associate new words with words that sound similar in Arabic	(22)	16	2.70	1.22
AIS I use semantic mapping to enlarge vocabulary	(22)	17	2.70	0.93
<b><i>Low usage (Mean=2.4 or lower)</i></b>				
EA I do oral spelling exercises with my friends	(18)	18	2.44	1.00
AIS I associate the sound of the word with the same sound of a similar word in English	(17)	19	2.38	0.99
RW I make a regular and structured reviews of new words I have memorized	(16)	20	2.20	0.97
EA I recall the words by pair checking with someone else	(14)	21	2.17	1.11
EA I write the new words on one side of a card and the definition on the other side	(6)	23	2.0	1.22
EA I make vocabulary cards and take them with me wherever I go	(6)	24	2.0	1.31
CML I make vocabulary lists of new words that I meet	(2)	25	1.0	0.98

The open-ended question further elaborated and supported these results, as shown in table 4.10. Table 4.10 revealed seven of the most common strategies used by Saudi students. Many of the students indicated that they used to combine sounds and images "auditory and visual links" (mean=4.88, S.D=0.99), which was most highly ranked among the responses. Subsequently, the students showed that they used to place new words into sentences or contexts (mean=3.23,

S.D=1.06) and do oral repetitions (mean=3.23, S.D=0.87). The least used strategies by the students used vocabulary cards (mean=2.73, S.D=1.23) and by reading texts (mean=2.69, S.D=1.19), both were ranked 6 and 7 respectively. These results support the results of questionnaire items analysis where AIS and CML strategies were found as the most used strategies. This further elucidates the fact previously reported by Alhaisoni (2012) that combine sounds and images "auditory and visual links" is a usual language learning strategy use by Saudi EFL students in an intensive English learning.

**Table 4.10:** The Seven the Most Common Strategies Used based on Open-ended Question

<b>Categorization of Open-ended Question</b>	<b>Frequency</b>	<b>Rank</b>	<b>Mean</b>	<b>S.D</b>
Combine sounds and images "auditory and visual links"	(24)	1	4.88	0.99
Place the new words into sentences or contexts	(12)	2	3.23	1.06
Do oral repetition	(12)	3	3.23	0.87
Write words repeatedly to remember the words	(9)	4	2.87	1.03
Find Arabic equivalent of the new words	(9)	5	2.87	0.98
Use vocabulary cards	(8)	6	2.73	1.23
By reading texts	(7)	7	2.69	1.19

**RQ 2: How the linguistic pattern of memory strategies is influencing the vocabulary memorization among Saudi EFL learners?**

Linguistic structures are pairings of meaning and form (Goldberg, 2006; Carter, 2012). Any specific pairing of meaning and form is gives raise to pattern (Hunston, 2002). In order to demonstrate the linguistic patterns employ in vocabulary usage, the Lado (1965) association in

term of memory strategies produce “words that are (1) similar in form and meaning, (2) similar in form but different in meaning, (3) similar in meaning but different in form, (4) different in form and in meaning, (5) different in their type of construction, (6) similar in primary meaning but different in connotation, and (7) similar in meaning but with restrictions in geographical distribution (pp.31-32). The results of the linguistic pattern of memory strategies observed in this study are presented under the following heading.

#### **4.6 Linguistic Pattern of Memory Strategies**

The pattern of vocabulary learning is drive from Oxford's (2003) analysis based on the four Oxford categorizations: CML, RW, AIS, and EA. The linguistic pattern has been previously used as a tool used in oxford to classify grammar or language or vocabulary (Hoffmann and Trousdale, 2013). Heine and Narrog (2015) have used this pattern in their book title “the Oxford handbook of linguistic analysis.” The pattern of vocabulary learning is based on arrays of use of these strategies in vocabulary memorization (Carter, 2012; Sari and Arini, 2018). According to the results in Table 4.7 of the seven most used strategies by the Saudi Students, the pattern of memory strategies for vocabulary learning was in the following order

The students use CML > AIS > RW > EA > CML > RW > AIS

The pattern in order of preference

STEP 1: Each student responded “when I try to memorize a word, I repeat it aloud to myself”,  
as a sound

Then

STEP 2: “I image the word meaning”, as an image

Followed by

STEP 3: “when I try to remember a word, I write it repeatedly”, as a reviewing

Then

STEP 4: “I pay attention to set phrases and collocations that go with a word”, as action

Followed by

STEP 5: “I connect a word to a personal experience”, as a mental linkage

Then

STEP 6: “I focus my attention on completing vocabulary exercises repeatedly before exams”,  
as a reviewing

Followed by

STEP 7: “I remember new words by combination sounds and images”, as a sounds and images

According to the pattern above, the students used these tools in enhancing these strategies  
thereby memorizing any English vocabulary, these tools include

STEP 1 and STEP 2 link sound and image, which form strong bond pattern in vocabulary  
memorization.

STEP 3 and STEP 4 link reviewing and action, which form strong bond pattern in vocabulary  
memorization.

STEP 6 and STEP 7 link reviewing, sounds and images, which form very strong bond pattern  
in vocabulary memorization.

According to the results in table 4.4 of the seven least used strategies by the Saudi Students, the  
pattern of vocabulary learning strategies was in the following order

The students use CML > EA > EA > EA > RW > AIS > EA

The pattern in order of least used

STEP 1: Each student responded “I make vocabulary lists of new words that I meet”, as a mental linkage

Followed by

STEP 2: “I write the new words on one side of a card and the definition on the other side”, as action

Then

STEP 3: “I make vocabulary cards and take them with me wherever I go”, as action

Followed by

STEP 4: “I recall the words by pair checking with someone else”, as action

Then

STEP 5: “I make a regular and structured reviews of new words I have memorized”, as a reviewing

Followed by

STEP 6: “I associate the sound of the word with the same sound of a similar word in English”, as a sound

Then

STEP 7: “I do oral spelling exercises with my friends whose English level is at a similar level of mine”, as action

According to this least used pattern above, the students least used these tools in memorizing English vocabulary, these tools include

STEP 1 and STEP 2 link mental and action, which form weak bond pattern in vocabulary memorization

STEP 3 and STEP 4 link action and action, form weak bond pattern in vocabulary memorization

STEP 6 and STEP 7 link sounds and actions, which form a strong bond pattern in vocabulary memorization.

#### **4.7 Discussions**

This study found that Saudi undergraduate students are categorized as high strategy users in terms of memory strategies for vocabulary learning in general (based on the mean=4.0). The CML and RW were found to have high usage, while AIS and EA were found to have medium usage among Saudi learners. The mean scoring system used is well established as a reliable and consistent scoring system used by past studies (Hamza et al., 2015; Al-Qaysi and Shabdin, 2016; Panduangkaew, 2018). The findings reveal that the use of CML and RW could significantly enhance the memory strategies of vocabulary learning among the Saudi EFL undergraduate learners, because both CML and RW are most effectively used strategies by the learners. It appears that when CML and RW are combined in vocabulary learning strategies can enhance the pattern of the linguistic vocabulary learning process, because of the steps of the approach processes in CML and RW as illustrated by linguistic patterns of usage. Moreover, the findings show that it is vital for educators or academicians offering English courses to explain more about these two most used strategies more comprehensively for students to be well equipped for their EFL program in Saudi Arabia. It is also observed that Oxford's (2003) categorization of memory strategies has made it easy to fully understand their usage. It is discovered that in the undergraduate English course, the memory strategies are effective approaches used by EFL learners to improve the vocabulary learning process in the Saudi

university, especially in Hafr AlBatin University. This is ascertains by the choice of the most and least used strategies by the EFL learners, such as the use of CML and RW. Though, it is uncertain whether the choice of these strategies at Hafr AlBatin University is a gender-based choice since the Saudi education system only allows a unilateral system of education where female students are separately educated from male students. It is noted that EFL in their second to the third year of study and of older in age (21-22 years) have more inclination toward choice and use of memory strategies in the university.

The findings of the current study indicate that the memory strategies used are categorized into four different strategies (CML, RW, EA and AIS). According to the results, the Saudi students in their undergraduate English program used different categories of strategies as classified according to the Oxford's (2003) memory strategies. Besides the two most used memory strategies for vocabulary learning, the least used strategies include EA and AIS. The possible reasons for this may be ascribed to the nature of demand (in terms of language requirement levels) and requirement of the course of the study and nature of the instructional materials used in the English department. Another possible reason may be attributed to the nature of linguistic patterns in each strategy in learning with instructional materials used. The instructional materials when well structure could promote proper use of the EFL by increasing possibility of vocabulary learning by reinforce the remembering of meaning when needed. Ardasheva et al. (2017) investigated the role and moderators of language learning strategy instruction on second language, self-regulated learning outcomes, and discovered that linguistic patterns of instructional materials moderate self-regulated learning, suggesting that the effect observed in this study could be due to linguistic patterns. Similarly, Uchihara and Harada (2018)

investigated the effects of vocabulary knowledge for success in English medium instruction on Japanese undergraduates' self-perceptions and academic outcomes and discovered that instructional materials play a key role in vocabulary knowledge and learning, as they affect the proper choice of learning process when not properly structured. Furthermore, a possible reason for the least used of EA and AIS strategies among Saudi students might be because the Saudi learners are not well conversant with certain categories of memory strategies and their use, so they need to be taught regarding the usage and their contextual importance. Moreover, it also noted that the Saudi EFL learners commonly employed general strategies in vocabulary memorization as a link with the conventional approaches in English teaching and learning. Alqarni (2017) stated that because of various accent backgrounds, Saudi English major freshmen students had different vocabulary learning strategies. Hence, the finding of the present study considered the language background and learning culture among Saudi students since the education system is difference in term of structure (where female students are separately taught in different environment from male students) from other countries.

According to the subcategories, it is observed that Saudi learners search for easy strategies (based on most or least used assessment in this study) that assist them in memorization of vocabulary. One of the most used strategies is repetition in term of CML and RW categories (Table 4.9); the Saudi learners used different repetition strategies to assist them in memorizing the vocabulary. This seems the most preferred strategy because of their easy usage, without the need for much time and struggle. This happens to be the easiest strategies used by Saudi students in learning that require less intensive effort in learning new vocabulary. Consistent with Thorndike (1914) and Thuy (2013), repetitions help in recall during memorizing

vocabularies when using in the context of continual exercise and rest during difficult cognitive multiplication. Gupta and Woldemariam (2011) indicate that repetition is influenced by motivation and attitude among undergraduate EFL students. In the current study, the Saudi students use repetition strategies both quantitatively and qualitatively in keeping the memory of the new or difficult words or vocabularies learn. Oxford and Amerstorfer (2018) indicated that the advantage of repetition is that it contributes to the quality of understanding.

Furthermore, with respect to the least used strategies by the Saudi learners indicate that they have less preference for help from another students or colleagues because they do not prefer memorizing vocabulary with friends. They might be feeling uncomfortable memorizing vocabulary with someone else because they are scared of being mock when not uttering or writing the words appropriately. It is discovered that Saudi learners prefer CML When trying to memorize a word or connecting a word to a personal experience, or paying attention to set phrases and collocations that go with a word, in the process of vocabulary learning using memory strategies.

Altogether, the Saudi undergraduate learners in the English program in Hafr AlBatin University use different categories (i.e. Oxford, 2003) of memory strategies to help them combat the difficulty in learning and memorizing new words thereby improving their language usage in communication and writing.

## **CHAPTER 5**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter introduces the overview, implications of the study, limitations of the study, recommendations for the future study, and finally, conclusion of the study. All information provided are solely based on this study outcomes.

#### **5.2 Overview**

This study examines the memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners. To achieve this, four categories of memory strategies for vocabulary learning: (1) Creating Mental linkages (CML), Applying Images and Sounds (AIS), Reviewing Well (RW), and (4) Employing Actions (EA), according to Oxford (2003) were used in the study. The results showed that the CML is the common and the highly most used memory strategies for vocabulary learning by Saudi undergraduate EFL learners. Subsequently, RW and AIS strategies are the second and the third most highly used strategies among the students. The EA strategy is the least used among the undergraduate EFL learners.

#### **5.3 Implications of the Study**

The findings of this research have some implications for EFL undergraduate classes in the Saudi Arabia education system. The following implications are established according to the major findings of this study:

1. The findings of the most and least used strategies in this study show that Saudi EFL students were not well-versed in the four strategies provided. Therefore, they were not utilizing or taking advantage of appropriate strategies in vocabulary memorization. It is crucial for educators (i.e. lecturers) to teach the Saudi students these four strategy options obtainable in order to enhance their vocabulary learning. When the learners employ more strategy that is appropriate the more they can be motivated, which in turn, enhance their vocabulary learning.
2. The Saudi undergraduate learners undertaking English language courses were noted to be using diverse memory strategies, because they are not aware of the appropriate strategies to use. Hence, there is a need for learning strategies in vocabulary to be clearly taught in the English classroom. Therefore, as an implication, the HafrAlBatin University curriculum for English programs needs to integrate vocabulary learning and memory strategies.
3. As many educators have suggested, this strategic training should be included into the university's English language course curriculum (Schmitt et al., 2001; Oxford, 2003; Oxford and Amerstorfer, 2018). Learning schemes and materials ought to integrate a range of tasks and activities that target vocabulary-learning strategies, which are deemed crucial for success in learning EFL in Saudi Arabia.

4. As an implication, learners are urged to make use of more effective strategies that enable a simple learning task process for vocabulary memorization. These involve undertakings such as writing, listening, and speaking of the needed words couple with reading texts, with or without the aid of friends. Learners are also urged to put those learned words in practice through communication inside and outside the class with friends and colleagues.

#### **5.4 Limitations of the study**

It is well expected that the present research has provided useful information on the application of memory strategies for vocabulary learning appropriate for Saudi EFL students undertaking English program as a major, and has equally provided vital information on the implication and pedagogic suggestions for the future research. Conversely, the findings and pedagogic suggestions offered in this study should not be used without considering the following limitations, though these do not affect the validity of the findings:

1. In this study, the respondents are Saudi females undergraduate learners undertaking an English major. Therefore, undergraduate learners in the different courses were omitted. Moreover, because involvement was voluntary, results may be influenced by bias.
2. Since the information used in this study is based on self-reporting from the participants through questionnaire, it is likely that some participants to be somehow less accurate about the frequency of use of memory strategies in Saudi, but the effect is neutralizing by minimizing it in statistical errors analysis. So, this can constituted some limitation.

3. Saudi learners' use of memory strategies in their vocabulary learning was measured based on the mean of most and least used variables. Thus, this study did not consider all the potential factors that may influence vocabulary memorization usage.
4. The investigators found the four strategies utilized in the present study as the optimal obtainable methods to evaluate these factors. However, this was considered during the interpretation of the results of the collected information.

### **5.5 Recommendations for the Future Study**

The current study uncovered that memory strategies perform a crucial role in learning vocabulary among Saudi undergraduate EFL learners. Hence, according to the current findings, there are reasons that lead to the utilization of memory strategies. Consistent with Oxford (2003), there are eight factors affecting the choice of learning strategies: (1) age, (2) gender, (3) ethnic background, (4) learning style, (5) form of undertaking, (6) enthusiasm (inspiration or motive behind) (7) attitude and beliefs, and (8) tolerance to uncertainty. These eight factors aforementioned can be taken into consideration in the study of the vocabulary learning strategies employed by the Saudi undergraduate EFL students. The current study primarily focused on three of these factors, that is, gender (used only female participants), ethnic background (limited to Saudi students), and learning style (limited to vocabulary learning strategies). Hence, the remaining five factors influencing learning strategies among Saudi EFL students need to be examined by future studies to fully understand the use level of memory

strategies for vocabulary learning. The following are the enumeration of further suggestions for future studies to consider;

1. The current study recommends further studies to examine the preference of memory strategies for vocabulary learning among undergraduate of EFL students in other universities in Saudi Arabia to compare the findings to further ascertain the most and least prefer strategies.
2. The future researcher may consider a wide range of study using mixed methods to get in depth interview with the leaners. In line with this, the questionnaire items can be further expanded to include more demographic features of the respondents, such as economic status (income), race, ethnicity, level of English, family size, health, and disability status, etc., may possibly have some impact on the selection of learning strategies.
3. The current study used is a unilateral gender-based study, which consists of only female students. This is because of the education system used in Saudi Arabia. According to a gender-based study, it is indicated that female learners employ more broad strategies than their male counterpart in learning vocabulary, both female and male learners employ different strategies in learning (Alqarni, 2019). Since this study used female Saudi undergraduate learners, the future study may consider the use of male Saudi undergraduate learners majoring in English to fully understand the preference of students for strategies in vocabulary leaning.

## **5.6 Conclusion**

This study examines the memory strategies for vocabulary learning employed by Saudi undergraduate EFL learners to enhance the learners' vocabulary performance and realize better learning choice among undergraduate students. The results revealed that the Creating Mental linkages (CML) is the common and the highly most used memory strategies for vocabulary learning by Saudi undergraduate EFL learners. Subsequently, Reviewing Well (RW) and Applying Images and Sounds (AIS) strategies are the second and the third most highly used strategies among the students. The Employing Actions (EA) strategy is the least used among the undergraduate EFL learners. Further, the findings also indicated that the Saudi undergraduate EFL learners prefer CML strategy more than they use EA in their vocabulary learning and memorization. Based on the results, high usage ranges from a mean of 4.0 or above, medium usage ranges from a mean of 2.5 to 3.9, and low usage ranges from a mean of 2.4 or lower.

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## APPENDICE

### Appendix I

#### QUESTIONNAIRE: MEMORY STRATEGIES IN VOCABULARY LREARNING

##### Section A: Demographic Information

Age:  
Program of the study:

Gender:  
Study year:

##### Section B: Directions

Dear participant, on the following pages, you will find statements related to the acquisition of vocabulary items. Please read each statement carefully. You are required to rate each statement on five points scale by choosing one of the response to indicate your vocabulary learning strategy usage and what you actually do when you are dealing with English words. Please complete the questionnaire as seriously as possible. I would like to thank you very much for your co-operation.

1- I make vocabulary lists of new words that I meet.

Never  seldom  sometimes  usually  always

2- I remember new words by combination sounds and images.

Never  seldom  sometimes  usually  always

3- I keep the vocabulary lists of new words that I make.

Never  seldom  sometimes  usually  always

4- I use semantic mapping to enlarge vocabulary.

Never  seldom  sometimes  usually  always

5- I make a regular and structured reviews of new words I have memorized.

Never  seldom  sometimes  usually  always

6- When I try to memorize a word, I repeat it aloud to myself.

Never  seldom  sometimes  usually  always

7- When I try to remember a word, I write it repeatedly.

Never  seldom  sometimes  usually  always

8- I do oral spelling exercises with my friends whose English level is at a similar level of mine.

Never  seldom  sometimes  usually  always

9- I write both the English new words and their Arabic equivalents repeatedly in order to remember them.

Never  seldom  sometimes  usually  always

10- I image the word meaning

Never  seldom  sometimes  usually  always

11- I recall the words by pair checking with someone else.

Never  seldom  sometimes  usually  always

12- I connect a word to a personal experience.

Never  seldom  sometimes  usually  always

13- I memorize examples in some context when using the words.

Never  seldom  sometimes  usually  always

14- I remember a group of new words that share similar letters in spelling. (e.g. big, bag,bug).

Never  seldom  sometimes  usually  always

15- I associate the sound of the word with the same sound of a similar word in English.

Never  seldom  sometimes  usually  always

16- I associate new words with words that sound similar in Arabic.

Never  seldom  sometimes  usually  always

17- I break up the word into components (e.g.roots, prefixes).

Never  seldom  sometimes  usually  always

18- I group words into categories (e.g., animals, utensils, vegetables, etc.).

Never  seldom  sometimes  usually  always

19- I review newly learned words.

Never  seldom  sometimes  usually  always

20- I pay attention to set phrases and collocations that go with a word.

Never  seldom  sometimes  usually  always

21- I write the new words on one side of a card and the definition on the other side.

Never  seldom  sometimes  usually  always

22- I make vocabulary cards and take them with me wherever I go.

Never  seldom  sometimes  usually  always

23- I focus my attention on completing vocabulary exercises repeatedly before exams.

Never  seldom  sometimes  usually  always

24- I can use words correctly and efficiently after memorizing them.

Never  seldom  sometimes  usually  always

25- When I meet a new word, I search in my memory and see if I have any synonyms and antonyms in my memory stock.

Never  seldom  sometimes  usually  always

Please write any other strategies you have used that are not written above, if any.

.....

Thank you very much for your cooperation. I will use your answers as effectively as I can.

**Researcher: Mona Fahad Aljurbua**  
**University: Universiti Putra Malaysia**  
**Email: fahadmona91@gmail.com**

## Appendix II : Approval Letter from University of Hafr Albatin

MINISTRY OF EDUCATION | وزارة التعليم  
UNIVERSITY OF HAFR ALBATIN | جامعة حفر الباطن



جامعة حفر الباطن  
University of Hafr Al Batin

الموضوع: تسهيل مهمة الباحثة منى الجربوع

حفظه الله

سعادة وكيل الجامعة للدراسات العليا والبحث العلمي

السلام عليكم ورحمة الله وبركاته

إشارة إلى الطلب المقدم من الباحثة منى بنت فهد الجربوع المبتعثة لدراسة الماجستير في دولة ماليزيا ورغبتها إتمام بحثها والذي يهدف (لقياس الأساليب والاستراتيجيات في تعلم وحفظ مفردات ومعاني اللغة الإنجليزية عند الطالبات السعوديات) بالتطبيق على عينة من طالبات اللغة الإنجليزية بجامعة حفر الباطن. وانطلاقاً من دور عمادة البحث العلمي في دعم وتشجيع الباحثين وتسهيل تطبيق مهماتهم البحثية تجدون برفقة نسختين من الاستبيان (عربي - إنجليزي) وهو جاهز للتطبيق علماً أنه يمكن الإجابة عليه من خلال الرابط الإلكتروني التالي:

<https://forms.gle/nCymaGHvazN4E1Q46>

نأمل بعد الاطلاع توجيهه من يلزم بتسهيل مهمة الباحثة لتطبيق الاستبيان و تعميمه على طالبات اللغة الإنجليزية

والله يراكم ويسدد على الخير خطاكم.

عادل

عمادة عمادة الدراسات

مع لموافقة

شبكة الاستعراض مع أمان محافرات  
(مخاتبات)

وكيل عمادة البحث العلمي

د. عبد الله بن محمد العامري

المشفوظات:

التاريخ: ١٤٤١/٠١/٠٩

الرقم: ٤١/٠٥٧/٧٦١

## **BIODATA OF THE RESRECHER**

Aljurbua Mona Fahad was born in Saudi Arabia on June 10, 1994. She attended Hafr Al-Batin University in Saudi Arabia in 2016 from where she was conferred with the degree in English Language with honors. In 2018, she joined Universiti Putra Malaysia to pursue her Master degree in Applied Linguistics.