Productive and Receptive Knowledge and Avoidance of Phrasal Verbs: The Case of Saudi Learners of English

Volume I of II

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List of abbreviations

Corpora and Dictionaries

BNC	British National Corpus
COCA	Corpus of Contemporary American English
ICLE	International Corpus of Learner English
LGSWE	Longman Grammar of Spoken and Written English
LINDSEI	Louvain International Database of Spoken English Interlanguage
LOCNESS	Louvain Corpus of Native English Essays
SLEC	Saudi Learners of English Corpus

Other abbreviations

CA	Contrastive Analysis
CEA	Computer-aided Error Analysis
CEFR	Common European Framework of Reference
CIA	Contrastive Interlanguage Analysis
CQL	Corpus Query Language
EA	Error Analysis
EFL	English as a foreign language
ELT	English language teaching
ESL	English as a second language
IL	Interlanguage
L1	Learner's first language
L2	Learner's second language
LP	Language Proficiency
MWU	Multi-word unit
NL	Native language
NNS	Nonnative speaker
NS	Native speaker
OQPT	Oxford Quick Placement Test
PV	Phrasal verb
PVs	Phrasal verbs
SLA	Second language acquisition
TL	Target language
TOEFL	Test of English as a foreign language

Productive and Receptive Knowledge and Avoidance of Phrasal Verbs: The Case of
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Abstract

The present study examines productive and receptive knowledge of PVs among Saudi undergraduates learning English as a Foreign Language (EFL). It uses a mixed-methods approach to elicit two kinds of data: Firstly, 195 Saudi undergraduates in Saudi universities were asked to complete three multiple-choice (MC) tasks designed to assess their productive and receptive skills, and to measure their PV avoidance behavior. The design of the MC tasks was informed by an analysis of a specially-constructed corpus of Saudi EFL textbooks, and taking into account the most frequent PVs in Liu's (2011) corpus-based study, to maximize the likelihood that students were only presented with familiar PVs – those that they have been introduced to as well as 'high-frequency PVs', which many learners at this stage of learning (i.e. undergraduate students) are likely to have encountered, and which they might then either use or avoid. Secondly, data are drawn from a self-built corpus of written compositions, the Saudi Learners of English Corpus (SLEC), comprising over 175,000 words written by 741 Saudi undergraduate EFL students. In both cases, the research attempts to trace the influence of the following variables on learners' use (or avoidance or underuse) of PVs: students' proficiency level (beginner vs. lower intermediate); students' gender; and the semantic type (literal vs. figurative) of the PV in question. In addition, the analysis of the SLEC data investigates the impact of text genre (argumentative vs. narrative vs. descriptive) on learners' use of PVs.

With respect to overall PV frequency, the results of the corpus analysis indicated that there was a relatively low use of PVs in the learners' English production. Furthermore, the results from the MC tasks support those of earlier studies, particularly at the production level. Participants showed better receptive than productive knowledge with an average percentage of correct answers of 72% for the receptive task and 59% for the productive task. In addition, the results for both MC tasks and corpus analysis further suggest that proficiency level, PV type, and text genre play a significant role in Saudi learners' use of PVs, while gender is found to be significant only in the corpus analysis. Meanwhile, proficiency level and PV type had a significant effect on the frequency of PV avoidance.

Chapter 1: INTRODUCTION

1.1   Introduction

This thesis reports on a study of learners' knowledge and use of English phrasal verbs (hereafter PVs), with special reference to Saudi undergraduate learners of English who study English in a foreign language context (EFL). Key questions to be investigated relate to students' productive and receptive knowledge of PVs, the difficulty that PVs pose for Saudi undergraduates, and students' potential employment of the avoidance strategy. In addition, the thesis investigates factors that may influence the Saudi learners' use of PVs, namely their proficiency level and gender, and the text genre and the semantic nature of PVs (literal-figurative), to determine to what extent these four variables can affect students' knowledge and any possible avoidance (in the experimental data) or underuse (in the corpus data) of PVs. These questions are presented in detail in Section 1.3. To my knowledge, this study is significant as it is the first study conducted in Saudi Arabia to examine learners' knowledge and their actual use of this significant language feature in an EFL context, in both productive and receptive tasks, and to investigate possible reasons behind underuse or overuse of PVs and as well as potential avoidance of PVs. This study is also the first to include beginner level students in an investigation study on PVs in Saudi Arabia. (See Section 3.5.2)

The study uses two different tools to gather data. To be more specific, the methodology used in this study includes, firstly, the analysis of corpus data. Two corpora are created: one is made up of the writings (narrative, descriptive and argumentative essays) of Saudi undergraduate learners of English. It is used to analyze students' actual use of PVs. The second corpus is made up of the English textbooks which learners had to use in their public schools before becoming undergraduates. It is used to establish a basic set of PVs with

which Saudi learners might be expected to be familiar as they have encountered them in the years of their learning. As exposure and knowledge are not the same thing, I am using probable exposure to a form as a kind proxy for probable knowledge of that form, but this equation is not foolproof. The second method is based on a series of tests designed to elicit experimental data on Saudi undergraduate learners' competence with PVs, and their potential employment of avoidance.

PVs form part of a larger class of verbs usually referred to as 'multi-word verbs' or 'phraseological units', which are combinations of two-word items consisting of lexical verbs and prepositional or adverbial particles sometimes associated with figurative meanings, for example, 'find out' [discover], 'keep up' [maintain]. PVs are discussed in detail in Chapter 2. The main reason for choosing this specific vocabulary type for this study is that PVs constitute a learning difficulty for English language learners (Gardner and Davies 2007; Garnier and Schmitt 2015, 2016; Liao and Fukuya 2004; Liu 2011; Schmitt and Redwood 2011), not only in the Saudi context, but in general, despite their confirmed significance and high productivity in English. Researchers have pointed out different reasons as to why PVs are considered to be problematic for language learners including the peculiarity of PVs to a certain language family, the idiomaticity of some PVs, collocational association of the same verbal head with different particles and the polysemous nature of these verbs leading many learners to perceive them as unnatural, and sometimes illogical (Cornell 1985).

This first Chapter provides the background to the study, stressing the importance of phraseological units and the problems learners face with these units in Section 1.1, and describing the Saudi context in Section 1.2. The objectives and the significance of this study

are discussed in sections 1.3 and 1.4. The overall structure of this thesis is outlined in Section 1.5.

1.2 Background to the study: Lexis and Phraseology

Historically, grammar and lexis were dealt with as two separate components of linguistic studies. Grammar dominated linguistics for a long period of time. Grammar, as a 'closed' system, was considered as systematic and regular, therefore analysable as a set of generalisations and rules, or what Sinclair (1966: 411) views as "the precise and uncompromising machinery of grammar". Lexis, on the other hand, was thought of as "an inherently messy part of our linguistic competence" (Meara 1984: 230), as it is an 'open' system where new items can join at any time, and it was regarded as random, and not organisable in terms of a rule-governed system analogous to grammar. As such, it used to be treated as "an appendix of the grammar, a list of basic irregularities" (Bloomfield 1933: 274), and "a repository of idiosyncrasies" (Atkins et al. 1994: 18), and thus received less attention.

However, by the second half of the twentieth century, with studies in second language acquisition (SLA) pointing out the significance of vocabulary and multiword expressions in language learning, the attention of a considerable body of linguistic research started to shift from grammar to the neglected areas of the lexicon and multi-word expressions. Laufer (1997: 140) emphasizes this perspective shift by pointing out that "after decades of neglect, lexis is now recognized as central to language acquisition process, native or non-native". The study of lexis has since been of great influence in SLA as it is "the basis of accurate and fluent communication" (Rudzka-Ostyn 2003: v). Many studies have shown that lexical problems occur more often than grammatical ones in SLA (e.g. Dechert 1984; Schlue 1977). Also, second or foreign language learners "themselves readily admit that they experience

considerable difficulty with vocabulary, and once they have got over the initial stages of acquiring their second language, most learners identify the acquisition of vocabulary as the greatest single source of problems" (Meara 1980: 221).

Like their counterparts in SLA studies (e.g. McCarthy 1990), researchers in the field of lexicology came to believe that there was no separability between lexis and grammar. For example, Halliday's (1961) concept of 'lexico-grammar' is based on the interdependence of lexis and grammar and was influenced by Firth's (1957; 1968) contextual theory of meaning, according to which "the complete meaning of a word is always contextual, and no study of meaning apart from a complete context can be taken seriously" (Firth 1968: 7). Similarly following Firth, Sinclair (1991) also believes that language should be learned in context and that language studies should be based on actual, authentic examples instead of intuition or invented sentences. He argues that "however plausible an invented example might be, it cannot be offered as a genuine instance of language in use" (Sinclair 1991: 4). Sinclair began to discover patterns underlying the lexicon. He believed that "each word meaning can be associated with a distinctive formal patterning" (p. 6). Likewise, in the lexical approach of Michal Lewis (1993), lexis is seen as the basis of language because "language consists of grammaticalised lexis, not lexicalised grammar". This approach argues that language consists of meaningful chunks and focuses on students' improvement on lexis and word combinations such as collocations and expressions that include institutionalized utterances and sentence frames and heads. Lewis states that "instead of words, we consciously try to think of collocations, and to present these in expressions. Rather than trying to break things into ever smaller pieces, there is a conscious effort to see things in larger, more holistic, ways" (1997: 204) and that "these chunks become the raw data by which learners perceive patterns of

language traditionally thought of as grammar" (Lewis 1993: 95). The need to study the lexicon in more detail was thus recognized and the shift from a Chomskyan focus on competence to a performance-based approach to language associated with the advances of computer technology has provided more motivation to the study of the lexicon. The use of computers offers the possibility to process large amounts of data, and both more frequently and less frequently occurring lexical patterns and features can be investigated easily by the employment of nowadays machine-readable corpora. Indeed, Sinclair (1991) emphasizes the need to investigate a large collection of texts by the integration of computer technology so that analysis can be carried out in a more systematic way.

Phraseology, which is "the study of the structure, meaning, and use of word-combinations" (Cowie 1994: 3168), has received much attention in lexical research into the English language, on the basis, in Bolinger's words, that "the amount of language that comes ready-made is vastly greater than supposed" (1971: xiv), and "our language does not expect us to build everything starting with lumber, nails, and blueprint" (1979: 96). In recent years, the study of phraseology has grown along with recognition of its significance in applied linguistics in general and SLA in particular (Granger and Meunier 2008; Gries 2008).

Sinclair (1991) suggests two principles to explain the way in which the meaning of a text is interpreted: the 'open choice principle' and the 'idiom principle'. The 'open choice principle' (also referred to as the 'slot-and-filler' model) is "a way of seeing language text as the result of a very large number of complex choices" (1991: 109 and 1987: 320) in which texts are seen as a series of slots and any word can occur and fill in the slots as long as it fulfills the requirements of grammatical constraints; this approach places emphasis on individual words. The 'idiom principle' (also referred to as the 'phraseological tendency' of

language), on the other hand, states "that a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, even though they might appear to be analyzable into segments" (1991: 110); words do not occur randomly in a text, instead they "go together and make meanings by their combinations" (Sinclair 2004: 29) since certain constraints, e.g. register, control the selection of words. The idiom principle thus relates to phrases and pre-fabricated units. Sinclair (1991: 110) points out that "the open choice principle does not provide for substantial enough restraints on consecutive choices. We would not produce normal text simply by operating the open choice principle" and he suggests that there is a need for the idiom principle because the open choice principle is not adequate to explain the construction of meaning in language. Sinclair (2008) emphasizes the idiom principle by confirming that "we have to concede that the normal primary carrier of meaning is the phrase not the word" (p. 409). He stated that many words and phrases attract other words in strong collocation such as 'hard luck' and 'hard evidence' (Sinclair 1991: 112).

Computers have proven to be an essential tool for linguistic analysis, as the corpus-based approach is ideal for the search for lexical patterns and the analysis of recurrent word sequences, i.e. those phraseological units that occur several times in a corpus (e.g. Altenberg 1998; Cortes 2002; Kjellmer 1987; Moon 1998; Sinclair 1991). It can be noted that Sinclair's finding of extended lexical units was possibly due to the advances of computer technology, which allowed him to manage large electronic collections of real language data, so-called 'corpora'. So, one significant finding of corpus linguistic research is that language is highly patterned and electronic corpora have helped researchers to identify and classify phraseological units, including PVs (Hunston 2002; Moon 1998; Stubbs 2001).

1.2.1 The importance of phraseological units

Lexis studies have recently witnessed an increasing interest in the area of phraseology and phraseological units. This interest has come about as a result of recurrent evidence that different types of word combinations occupy a large part of the native speaker's discourse, and that phraseological competence is a crucial component of nativelike, fluent, and idiomatic language use (Hoey 2005; Pawley and Syder 1983; Wray and Perkins 2000). Studies have shown that these linguistic structures are essential in language use and learning (Biber and Conrad 1999; Biber, Conrad and Cortes 2004; Meunier and Granger 2008; Schmitt 2004; Simpson-Vlach and Ellis 2010; Sinclair 1987; Wray 2008). Indeed, being familiar with these phraseological units is often a good criterion to measure language proficiency (Howarth 1998). Likewise, Ellis (2008: 5) notes that "phraseology binds words, grammar, semantics, and social usage". Thus, the use of phraseological units such as collocations, idioms, compounds, and PVs may impact positively or negatively on the three aspects of language proficiency—complexity, accuracy, and fluency (Housen and Kuiken 2009). In addition, there has been a great deal of research into phraseology and phraseological units by researchers in different fields such as psycholinguistics and SLA (e.g. Meara 1982, 1984; Ellis 1996); in cognitive linguistics (Kövecses and Szabó 1996; Rudzka-Ostyn 2003), where scholars study phraseology in relation to how our minds work in learning and producing a language; in language teaching (e.g. Nattinger and DeCarrico 1992; Lewis 1993), where they are more interested in pedagogical approaches with respect to phraseological units; and in the field of corpus linguistics where there has been a great deal of research studying different types of phraseological units such as collocations (Granger 1998; Nesselhauf 2003; Bernardini 2007; Hardie 2007), fixed expressions and idioms (Moon

1998, 1998; Verstraten 1992; Simpson and Mendis 2003; Fellbaum et al. 2006), and PVs (Gardner and Davies 2007; Waibel 2007; Akbari 2009).

Although there are no definitive answers as to how many phraseological units are used in speech and writing, it is estimated that these units account for 58.6 per cent of spoken English and 52.3 per cent of written English (Erman and Warren 2000). Willis (2003), for instance, observes that "much of the language we produce is made up not of individual words, but of strings of words which we carry around with us as fixed phrases" (p.43). Pawley and Syder (1983) believe that the number of phraseological expressions stored in an adult speaker's brain is several hundreds of thousands. Altenberg (1998) assumes that adult native speakers' lexicons may include up to 80 per cent of such units. Besides, phraseological expressions are omnipresent in different registers. Biber et al. (1999: 989) have found out a large number of what they call 'lexical bundles', i.e. "bundles of words that show a statistical tendency to co-occur", in both academic writing and conversation. It has also become evident among psycholinguists and cognitive linguists (e.g. Newell 1990; Skehan 1992) that our mental lexicon operates through the principles of chunking and memorization of lexical units, and that these processes influence our mental lexicons during language acquisition. In addition, being able to 'chunk' skillfully develops communicative competence as the retrieval of ready-made units during language processing saves planning time and helps the process of language comprehension and production to be rapid and fluent. Skehan comments that:

> The user...operates with a more lexical unit of analysis and achieves communication in real time not by the complexities of producing utterances on the basis of a rule system, constructing anew each time, but instead draws on ready-made elements and

chunks, without the need to construct each chunk independently and to lose time planning internal organisation. (1992: 186)

However, "phraseology is a field bedevilled by the proliferation of terms and by conflicting uses of the same term" (Cowie 1998: 210). Wray (2002) lists more than 50 different terms used by linguists to refer to many different kinds of formulaic sequence. For instance, Altenberg (1998) prefers to use the term 'recurrent word-combinations' in investigating word patterns typically recurring in spoken English. Biber and Conrad (1999: 183) prefer the term 'lexical bundles' to describe the patterns of "words that show a statistical tendency to co-occur". Erman and Warren (2000: 31) describe prefabricated language (i.e. formulaic language) as "combinations of at least two words favored by native speakers in preference to an alternative combination which could have been equivalent had there been no conventionalization". Wray (2002: 9) defines a 'formulaic sequence' as "a sequence, continuous or discontinuous, of words or other elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar."

The variety of terms used in phraseology, such a 'prefabs', 'chunks', 'collocations', 'lexical bundles', 'lexical phrases', or 'formulaic sequences', to name just a few, reflects the 'fuzziness' of the area, despite the vast recognition it has gained. Altenberg (1998) notes that "phraseology is a fuzzy part of language involving various kinds of composite units and 'pre-patterned' expressions such as idioms, fixed phrases and collocations. We find it difficult to delimit the area and classify the different types involved" (p. 101) as language involves chunks more than isolated words. Howarth (1996), in his explanation of this terminological inconsistency, argues that linguists' interests and foci are different, and each language-related

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field has viewed and studied these phraseological units from "only a part of the whole spectrum" (p. 6), the part which is specific to that particular linguistic field (e.g. cognitive linguistics, applied linguistics, corpus linguistics, lexicography). In the present study, the term 'phraseology' is used to refer to the overall phenomenon, and 'phraseological unit' or 'phraseological expression' are used to refer to the individual items of phraseology, as these terms are used for more general contexts and they do not refer to any specific theoretical framework, making them suitable for this study.

Regardless of this inconsistency in terms, linguists generally agree on some main criteria to identify what phraseological units are. According to several researchers, the most commonly studied characteristics of phraseological units are as follows:

1- **Number of elements**: a phraseological unit consists of at least two words, as, for example, in idioms (e.g. 'kick the bucket', 'spill the beans'), collocations (e.g. 'strong coffee', 'by and large') and PVs (e.g. 'put on', 'break up'). PVs, which are the focus of this study, are made of two linguistic elements: a lexical verb (LV) and a particle (Prt). However, phraseological units can extend to entire sentences exhibiting a complex syntactic structure (e.g. in proverbs).

2- **Institutionalization**: is "the process by which a string or formulation becomes recognized and accepted as a lexical item of the language" (Moon 1998: 7). It thus behaves like a single "big word" (Ellis 1996: 111) and is stored as a whole in the lexicon. Pawley and Syder (1983) point out that a lexical item is regarded as 'institutionalized' if "the expression is a conventional label for a conventional concept, a culturally standardized designation (term) for a socially recognized conceptual category" (p. 191). They further argue that only when units are used and

accepted by more than one member of the speech community "the usage bears the authority of regular and accepted use by members of the speech community" (Pawley and Syder 1983: 209). PVs are considered as institutionalized as they are frequently used and widely accepted in native speakers' discourse.

3- **Non-compositionality or idiomaticity**: suggests that "the meaning arising from word-by-word interpretation of the string does not yield the institutionalized, accepted, unitary meaning of the string" (Moon 1998: 8). Thus, knowing the meaning of each individual word in an expression like 'put off' does not yield the meaning of the whole expression [to postpone]. However, as Wray (1999: 215) points out, not all phraseological units are fully non-compositional in meaning; so, this criterion is by no means a defining one. For instance, literal PVs are semantically compositional, and meanings can be understood by combining the regular meaning of each word in the combination (e.g. 'get out', 'sit down').

4- **Lexicogrammatical fixedness**: "implies some degree of lexicogrammatical defectiveness in units, for example with preferred lexical realizations and often restrictions on aspect, mood, or voice. Classic examples are, 'call the shots', 'kith and kin', and 'shoot the breeze'" (Moon 1998:7). Thus, the lexical elements in an expression cannot be deleted or replaced, or the structure cannot be changed or undergo any kind of transformation as the idiomatic meaning will be lost, as most idioms and collocations are generally fixed lexically and syntactically to at least some degree. For example, while 'perform an experiment' and 'conduct an experiment' are both possible, '*perform a survey' is not acceptable for no apparent semantic reason, in contrast to 'conduct a survey' (cf. Cowie 1994: 3169).

Based on all these criteria, most linguists (e.g. Aisenstadt 1981; Cowie 1981; Howarth 1998) agree that semantic non-compositionality and lexicogrammatical fixedness is a continuum, with the highest degree of non-compositionality and fixedness (e.g. idioms) at one end and others that are the least non-compositional and fixed (e.g. literal PVs, collocation) at the other.

A number of linguists have attempted to categorize phraseological units based on different linguistic purposes, be they lexicographic (e.g. Cowie 1988; Moon 1998), pedagogical (e.g. Nattinger and DeCarrico 1992; Lewis 1993), or psycholinguistic (e.g. Wray and Perkins 2000; Wray 2002). Generally, the most frequent criteria used by linguists in their classification of the phraseological units are structural, functional, and pragmatic (e.g. Nattinger and DeCarrico 1992; Cowie 1988). Alexander (1984), for example, subdivides his 'fixed expression' into five major groups according to structural and pragmatic criteria: idioms (including PVs, 'tournures' like 'kick the bucket' or 'take the bull by the horn', and irreversible binominals like 'cash and carry' and 'safe and sound'); discourse structuring devices (greetings and formulae like 'long time no see', and connectives and gambits like 'for a kick off'); proverbs and proverbial idioms; catchphrases (clichés and slogans); and quotations and allusions. Similarly, Carter (1998: 67), drawing on Alexander, subdivides a range of fixed expressions according to syntactic, semantic and discourse criteria, which include idioms (irreversible binomials, full idioms, and semi-idioms), proverbs, stock phrases, catchphrases, allusions/quotations, idiomatic similes, and discoursal expressions. Gläser (1998) uses a more detailed classification system. She uses the term 'phraseology' and 'phraseological units' and divides them into two major categories: 'nominations' and 'propositions' (p. 126). Nominations serve as the center of the phraseological system and

include restricted collocations and idioms that function like the regular parts of speech and have a purely denotative function. Propositions are divided into proverbs, commonplace, slogans, routine formulae, maxims and commandments, and quotations and winged words. They have a pragmatic, speech-act function and "designate a whole state of affairs in the outside world" (Gläser 1998: 126).

1.2.2   Learners' problems with phraseological units

Despite the importance of the phraseological units in language learning, it has been recognized that phraseological units present a great difficulty for second language (L2) learners for different reasons (Moon 1992; Yorio 1980 1989; De Cock 2005). The fact that there are so many different phraseological units that need to be acquired makes them very difficult to master (Celce-Murcia and Larsen Freeman 1999; Darwin and Gray 1999; Gardner and Davies 2007; Moon 1997). In addition, many phraseological units have multiple meanings (causing semantic difficulty): Gardner and Davies (2007), for example, found that the 100 most frequent PVs in the British National Corpus (BNC) have 559 potential senses. As a result, learners may find learning phraseological units complicated, especially when we consider that many phraseological units have non-literal (idiomatic) meanings, which can be very confusing to learners.

In addition, the influence of learners' first language (L1) on learning the phraseological unit (a cross-linguistic factor) is another problem causing difficulty for L2 learners (e.g. Granger 1998; Wolter 2006; Aertselaer 2008; Paquot 2008). The structural differences between L1 and L2 may influence learners' learning and the acquisition of the L2, and it is responsible for a large proportion of EFL learners' inappropriate collocations. Nesselhauf (2005) investigated all the incorrect verb-noun collocations produced by German

learners and found out that about 50 percent of them were probably influenced by German L1 phraseology. Many studies show that the non-existence of similar structures in learners' L1s may affect their understanding (Dagut and Laufer 1985; Laufer and Eliasson 1993; Liao and Fukuya 2004). This supports the hypothesis that "the absence of a structural feature in the L1 may have as much impact on the L2 as the presence of a different feature" (Ellis 1994: 311). However, some researchers have emphasized that the structural similarities between L1 and L2 (i.e. Dutch using PVs) could also be a possible cause of avoidance, as argued by Hulstijn and Marchena (1989), for details see 2.4.2.

Another problem faced by learners stems from their lack of awareness of common collocates, regular patterns and usage (Howarth 1998; Wray 2000). According to De Cock (2000), learners lack awareness of "the more common, less salient and frequently used L2 multi-word building blocks". Granger (1998) also points out that learners have "an underdeveloped sense of salience" and are unaware "of what constitutes a significant collocation" (1998: 152). Learners should be aware of which lexical units native speakers use and which ones they do not, or, as Pawley and Syder (1983) call it "the puzzle of native-like selection". To overcome this problem, Nesselhauf (2003) points out that explicit teaching and learning of phraseological units helps to increase learners' awareness of the language form. However, Granger (1998) and Irujo (1986) believe that it is fundamental that teachers in the first place are aware of the phraseological mechanism of the language in order to be able to teach phraseological units explicitly in the classroom with the goal of increasing learners' awareness of these linguistic patterns.

Other important issues that are commonly mentioned when discussing phraseological units are fluency and comprehension. Phraseological units are as important for the non-native

as for the native speaker with regard to fluency and comprehension (Nesselhauf 2005: 2). However, despite the significance of phraseological units, many studies have shown that this area has been found to be a challenge to foreign language learners. The effect of phraseological units on speech production and comprehension is a main research topic for scholars today due to its great importance especially for ESL/EFL learners. Wood (2009) investigates how the degree of formulaicity affects speech fluency and found out that the increased use of formulaic language facilitates the production of fluent speech. Lindstromberg et al. (2016), based on the work of Boers and Lindstromberg (2012), Henriksen (2013), and Schmitt and Carter (2004), point out that mastering a large number of formulaic sequences as a non-native speaker is a main facilitator of fluent comprehension and production. In other words, it helps learners to develop a native like language proficiency through better comprehension and fluent speech.

Even though phraseological units are considered important for learners, research in SLA has already shown that foreign language learners have deficient phraseological competence. In comparison to their grammatical and lexical knowledge, they have less phraseological knowledge. Due to a number of factors, the language of foreign language learners is frequently referred to as non-formulaic. It has been discovered that learners tend to underuse specific phraseological units when compared to native speakers. For example, stereotyped adverb + adjective combinations (Granger 1998: 150), or lexical bundles (Chen and Baker 2010: 30). Additionally, the learners frequently tend to overuse the limited number of formulaic sequences they have available to them (Granger 1998; Men 2015), often display lack of awareness of stylistic connotations and of register restrictions (Waibel 2007; Chen 2013) and make use of deviant lexical combinations (Granger 1998; Nesselhauf 2005). There

are numerous claims made in the literature that language learners have deficient knowledge of how to employ phraseological units in both their speaking and writing. Siyanova and Schmitt (2008) also found that although advanced learners may be able to produce a lot of target-like formulaic sequences (in this case, adjective-noun collocations), their assessments of collocational frequency are less precise than those made by natives. Additionally, when compared to native speakers, they process frequent and infrequent collocations more slowly and have poorer intuitions about typical collocations.

1.3   English in Saudi Arabia

It is important to understand the status of the English language in Saudi Arabia before embarking of a study of Saudi undergraduate students' knowledge and use of PVs. Arabic is the official language of Saudi Arabia, and it is the medium of instruction up to university level. However, English is considered the most important foreign languages in Saudi Arabia. It is introduced as a compulsory subject from grade 4 for 10 year-old students, which means each learner will have at least nine years of language learning at school level. A small number of private schools have a whole English curriculum which is taught through English from grade 1 for 6 year-old students and onward. For each grade, the student is taught from two to six hours per week. Intermediate and secondary students are taught English over four 45-minute periods per week, while elementary students receive two 90-minute class periods per week (Al-Seghayer 2014). In the past, hardly any emphasis was put on acquiring proficiency in English; instead, students regarded English as a subject to pass in the exam rather than on focusing actual learning (Alrabai 2017). However, the importance of English has grown rapidly, and English is now considered as one of the major subjects in the education system of Saudi Arabia. Rahman and Alhaisoni (2013) commented on the present status of English

in the Kingdom of Saudi Arabia (KSA) stating that English is currently becoming the medium of instruction in technical education, medicine, and many other majors and students now recognize that English is no longer a language they need simply to pass examinations, but rather an important subject in higher education, international communication and business, and trade. According to (Elyas and Badawood 2016: 74) the current objective of teaching and learning English in KSA is made clear in the official guidelines of the Ministry of Education manual for teaching English, which state that:

> The aim of teaching English in the secondary schools is to have the public attain a standard which will permit him [sic] to make ready use of desired materials in English and which will enable him [sic] to communicate satisfactorily, according to his [sic] needs, in both spoken and written forms. (Ministry of Education 2002)

All Saudi schools use the same textbooks, and they are assigned and distributed by the Ministry of Education (Rahman and Al-Haisoni 2013). The Ministry of Education is responsible for revising English textbooks, evaluating them and approving changes in them. These textbooks are the main teaching materials on which the students and teachers rely. The language textbooks which were published and used in Saudi Arabia over the three decades from 1982 to 2012, such as 'Saudi Arabian Schools' English' and 'English for Saudi Arabia' were produced by the Ministry of Education and King Fahd University of Petroleum and Minerals. During this time, English was taught using the audio-lingual method (ALM) and the grammar translation method (GTM), which were the center of English teaching in Saudi classes (Al-Seghayer 2014). According to Al-Seghayer, teachers tended to rely on the use of extensive drills of grammar rules and new words, to ask students to memorize different vocabularies and grammar structures, and to translate given texts in class. Since 2012, the

Saudi English Language Development Program (SELDP) – with the assistance of major British and American EFL/ESL textbook publishers such as Oxford University Press, Pearson Longman, Macmillan, and McGraw Hill – has been developing and publishing 'custom made' EFL textbooks. A new curriculum was introduced in 2013, which was based on communicative principles, i.e. on the basis that a language is a system for communication. Consequently, various new textbooks have been produced by H. Q. Mitchell and Marileni Malkogianni, published by Tatweer Company for Educational Services (2015) and adopted in Saudi schools. These include the *Smart Class* textbook series for primary students, the *Full Blast* textbook series for intermediate students and the *Traveller* textbook series for high school students. Allehyani, Burnapp and Wilson (2017) point out that the *Traveller* series, for example, is characterized by useful new features covering English receptive and productive skills and implementing communicative language teaching (CLT) approaches, and that it shifts learners from memorizing vocabulary and grammatical rules to practicing in the classroom by implementing communicative tasks.

However, despite the great attention given to the language by the Ministry of Education, unfortunately some challenges remain in English learning and teaching in Saudi Arabia; most students finish high school with poor proficiency in English, and they are not able to construct a full sentence in English even after a long time learning the language (Rahman and Alhaisoni 2013). Classroom instruction is largely dominated by teachers. Students' responses are very few in English classes. Teachers focus on the development of grammatical competency, rather than lexical aspects, communicative competency and discourse, which are equally important for learners to gain fluency in the target language (Al-Seghayer 2014). This means that vocabulary receives less attention in the language

classrooms. PVs, for example, are overlooked or mentioned only in passing in the English language textbooks which are used to teach Saudi students (Aldahesh 2009). In most textbooks used in schools in Saudi Arabia, PVs are introduced under the vocabulary section as part of general spoken language and not as part of academic writing with no explanation provided of their use, their collocations, or role in academic language (Alangari 2019).

With respect to Saudi teachers, they typically do not have any advantage over their students. They have been taught in the same EFL circumstances as their students in public schools. When they were at university level, they had to learn how to speak and teach English in a period of only four years. From the perspective of university departments, candidate English language students qualify for entry according to their secondary school grades, regardless of their English language proficiency (Abbad 1988). Graduates of these university departments go on to become English teachers. As a result, poor teaching can affect student learning in a negative way; therefore, the vocabulary of students is also affected negatively as the teacher, besides textbooks, is the only source of English help in the schools, so it is reasonable for the learners to be dependent solely on the teacher. It is reasonable to think that if teachers are not confident about their own English, they are likely to avoid discussions in class and focus instead on grammar (Saadi 2012). As mentioned earlier, Granger (1998) and Irujo (1986) believe that it is fundamental that teachers in the first place are aware of the phraseological mechanism of the language in order to be able to teach phraseological units explicitly in the classroom, with the goal of increasing learners' awareness of these linguistic patterns.

In addition to the empirical evidence in other contexts, my own experience and observation as a language teacher in Saudi Arabia, teaching learners at different institutions

of language learning (i.e. public schools and college), I noted that learners hardly use PVs or they use them inappropriately in their written or spoken discourse. It is thus very disappointing that learners are not able to use PVs appropriately when it is obvious how significant they are in daily conversations and in different types of written text, such as academic essays, reports, newspapers and magazines. Thus, this study was designed to either confirm or refute my hypotheses which are based on my personal observations and experience concerning the use and knowledge of PVs in English and the problems associated with them in the Saudi EFL context. In addition, I wished to fill a gap in the literature, as, to my knowledge, there is no study conducted in Saudi Arabia to investigate learners' productive use and receptive knowledge of PVs.

1.4 Objectives of the study

Given the structural, semantic, and contrastive difficulties of PVs (see 2.1), PVs have proven to pose problems to learners of English both in their learning and active usage. Taking its cue from previous studies, corpus-based studies and non-corpus-based studies, on the use of English PVs by foreign learners of various L1 backgrounds (e.g. Garnier and Schmitt 2015, 2016; Liao and Fukuya 2004; Liu 2011; Schmitt and Redwood 2011; Abdul Rahman and Abid 2014; Kamarudin 2013; Aldukhayel 2014; El-Dakhs 2016; Waibel 2007; Mazaherylaghab 2013; Chen 2013, 2017; Badem and Şimşek 2021; Fadanelli 2012; Garbatovič and Grigaliūnienė 2020), the present study focuses on Saudi learners of English and attempts a detailed, descriptive investigation of English PVs usage and knowledge. In other words, the study investigates productive and receptive knowledge of PVs as well as avoidance behavior among Saudi learners of English. The terms "underuse" or "overuse" in this study refer to the fact that learners use specific PVs less or more frequently than native

speakers. They are not intended to convey any concept of the inappropriateness or wrongness of learners using a PV less often or more than native speakers; rather, they will be used neutrally to highlight distinctions between learners and native speakers. "Avoidance", meanwhile, is defined as a strategy in which L2 learners choose to use one language form or structure over another because they find the avoided form or structure difficult or because there is no item that corresponds to the avoided form or structure in the student's L1. This strategy is used in order to avoid producing an error, see Section 2.4.

One particularly innovative aspect of this thesis is that it relies on a mixed-methods approach, an approach which has recently been strongly advocated in applied linguistics (Dörnyei 2007; Hashemi 2012) but has as yet rarely been put into practice. According to Leech and Onwuegbuzie (2009) a mixed methods research (MMR) is a "research that involves collecting, analyzing, and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon" (p. 267). Both approaches have their advantages as well as their disadvantages (see Section 3.1). This study combines between quantitative (multiple choice tasks + corpus analysis) and qualitative methods (corpus analysis). Read and Nation (2004) assert that "an adequate account of formulaic units as they function in language acquisition and language use can come only from a combination of quantitative and qualitative analyses." (p. 24). Using experimental tasks only to elicit language use from learners may not succeed in obtaining authentic language use (i.e. normal and unguided language use). In relation to this, Chen (2013) found that "learners' avoidance behavior observed under experimental conditions does not correlate with considerable underuse of phrasal verbs in actual writing" (p. 433). Such findings suggest that a fuller picture of how learners use, underuse or avoid PVs might

be gained by using corpora in combination with experimental tasks. In addition, using a mixed-methods approach can ensure research validity as it offers possible solutions to "reduce the inherent weakness of individual methods by offsetting them by the strength of another, thereby maximizing . . . [the] validity of research" (Dörnyei 2007, p. 43).

Therefore, for the purpose of the study, experimental data has been collected which aim to assess learners' productive and receptive knowledge, as well as their avoidance behavior. The participants were asked to complete three multiple-choice (MC) tasks designed to assess their productive and receptive skills, and to measure their PV avoidance behavior. The design of the MC tasks was informed by an analysis of a specially-constructed corpus of Saudi EFL textbooks that learners use in public schools in Saudi Arabia, and taking into account the most frequent PVs in Gardner and Davies' (2007) and Liu's (2011) corpus-based studies to maximize the chances that the learners have encountered the PVs used in the tests. In other words, it could be accounted for both corpus frequency (as identified by the lists in Gardner and Davies (2007) and Liu (2011) and textbook frequency. In this way we maximized the likelihood that that we were indeed testing the most frequent PVs in learners' language input.

In addition to the experimental data, a corpus of Saudi learners' writing has been collected. Known as the Saudi Learners of English Corpus (SLEC), it comprises narrative, descriptive and argumentative texts, with a view to analyzing the productive use of PVs on the basis of natural language use data. Saudi learners are an under-documented L2 population. In addition, the corpus contains both beginner and lower intermediate texts, while most learner corpora tend to focus on more advanced proficiency levels.

In both cases, the research attempted to trace the influence of the following variables on learners' use or avoidance of PVs: students' proficiency level (beginner vs. lower intermediate); students' gender; and the semantic type (literal vs. figurative) of the PV in question. In addition, the analysis of the SLEC corpus data investigates the impact of text genre (argumentative vs. narrative vs. descriptive) on learners' use of PVs. In addition, the study aims to identify the difficulties faced by Saudi learners of English with regard to the use of PVs. In the Saudi EFL context, there is only one study found investigating productive use and receptive knowledge of PVs by Sonbul et al. (2020). However, this study investigates productive and receptive L2 knowledge of polysemous PVs and the factors that determine L2 knowledge of the various senses. Moreover, there are few studies found investigating the avoidance behavior of PVs among Saudi learners of English in the ESL/EFL environment (Ben Duhaish 2008; Abu Jamil 2010; Aldukhayel 2014; Gandorah 2015, Alshayban 2018). Thus, this study is the first to investigate productive use and receptive knowledge *and* avoidance of PVs specifically among Saudi undergraduate students in the EFL context. In addition, it is the first study that I am aware of which conducts a largescale, exhaustive investigation of PVs in the interlanguage of this learner group. SLEC was compiled and used in this study and will be explored both in quantitative and qualitative terms – in terms of frequency of occurrence and also with respect to semantic and stylistic considerations. In order to achieve this, all PVs – including both literal and figurative ones – will be extracted from the learner corpus in order to guarantee a detailed investigation.

For PVs, which have been reported to be avoided (in the experimental data) or underused (in the corpus data) by some learner groups due to L1 influence, i.e. L1-L2 dissimilarity (e.g. Dagut and Laufer 1985; Hulstijn and Marchena 1989; Schmitt and

Redwood 2011), the most frequent PVs in Gardner and Davies (2007) and Liu's (2011) corpus-based studies will be investigated in order to identify the points of similarity and difference with respect to the use of PVs between the Saudi-speaking learners of English and their native English speaker counterparts. Thus, the methodology employed in a part of this study (the learner corpus data) is what Granger (1996b) termed 'Contrastive Interlanguage Analysis' (CIA). In this study, investigations in the case of PVs are based on only one type of comparison, namely L1 vs. L2.

The present study also aims to analyze possible effects of the above-mentioned factors (students' proficiency level; students' gender; text genre and the semantic type of the PV in question) in the use of PVs (or lack thereof) by examining the data to evaluate the possible impact of these variables on the learner's production of PVs. These variables are believed to be more relevant than others as regards learners' use of PVs and will, thus, be investigated. In addition, the study adds to findings from earlier corpus-based research which reported patterns of PV use in advanced L2 production (e.g. Waibel 2008; Weirszycka 2013; Gilquin, 2015), by reporting patterns of PV use in lower levels of proficiency (beginner and lower intermediate). Also, while the link between these factors and PVs use has been explored mainly by means of elicitation studies (e.g. Hulstijn and Marchena 1989; Liao and Fukuya 2004), little corpus-based work has been done in this respect. The present study contributes to filling the gap in knowledge about the effect of these factors on PV production by using learner corpus data. In sum, the ultimate aim in this work is to provide an exhaustive account of the way Saudi learners of English at beginner and lower intermediate level of proficiency use PVs with the hope of advancing the existing knowledge of the nature of vocabulary use and knowledge in a foreign language. In addition, the results of this study can

provide valuable input for those working in the field of English Language Teaching (ELT), materials development, and testing in Saudi Arabia and can provide important information for future empirical studies involving language learners. Finding out how a specific learner group makes use of PVs and what kinds of problems they have in their learning may be useful in helping teachers to choose appropriate materials and tasks that would allow learners to address potential difficulties.

Having in mind the general scenario of teaching and learning English in Saudi Arabia as mentioned above, the present study sets out to answer the research questions below:

1- How do Saudi Learners of English use PVs in productive and receptive tasks?

a- *How frequently do Saudi undergraduate learners of English use PVs?*

b- *Which PVs do they use?*

c- *Is there any difference in their use and knowledge of PVs depending on gender?*

d- *Is there any difference in their use and knowledge of PVs depending on language proficiency?*

e- *Is there any difference in their use and knowledge of PVs depending on text genre?*

f- *Is there any difference in their use and knowledge of literal and figurative PVs?*

2- What can we tell about Saudi undergraduate EFL learners' avoidance, if any, of PVs?

a- *Do Saudi undergraduate learners avoid using PVs?*

b- *Does their avoidance, if any, reflect differences in the semantic nature of PV types (Literal vs Figurative)?*

c- *Does their avoidance, if any, reflect differences in learners' proficiency level?*

1.5 Significance of the study

The significance of the present study comes from the contributions the results will have theoretically and practically. Theoretically, in terms of research into PVs, to my knowledge, there is not much research conducted in Saudi Arabia to investigate the productive use and receptive knowledge and avoidance of PVs specifically among Saudi undergraduate students in the EFL context. A small number of earlier studies have, however, investigated the use of PVs among other Arabic-speaking learners (e.g. Omani learners in Abdul Rahman and Abid 2014; Egyptian learners in El-Dakhs 2016).

The present study will thus shed the light on the use of PVs among a new population exploring the nature of the learners' receptive/productive knowledge and use in addition to their employment of the avoidance strategy, as well as the effect of their proficiency level, gender, text types and the semantic nature of PVs on the use of PVs. This study aims to fill the gap in this area, as well as to overcome a methodological shortcoming in previous studies investigating avoidance behavior: such studies failed to maximize the likelihood of participants' knowledge of targeted PVs prior to testing, so their results might simply reflect participants' ignorance (rather than avoidance) of the PVs in question. An attempt to address this problem was made in the current study by following a specific procedure to maximize the likelihood that students were presented with familiar PVs; those that they have likely been introduced to as well as 'high-frequency PVs', which many learners at this stage of learning (i.e. undergraduate students) may have encountered before testing. As already indicated, exposure and knowledge are not the same thing, thus I am using probable exposure to a form as a kind proxy for probable knowledge of that form, but this equation is not foolproof. This was done by compiling a corpus made of the textbooks which the participants

had used in public school in Saudi Arabia (elementary, intermediate and secondary). All the PVs in these textbooks were extracted, and the most frequent PVs (literal and figurative) which were all also found in Liu's (2011) list of the 150 most frequently used PVs were used in the tests to assess learners' use and knowledge of PVs, and their potential avoidance of these PVs. The thesis thus stands, I believe, to provide more reliable evidence on the issue of avoidance of PVs than previous comparable studies, as well as richer data and more detailed and accurate results regarding the other issues under investigation.

1.6   Structure of the thesis

This thesis is divided into 6 Chapters. Chapter 1 sets the stage by situating the current study within the area of phraseology research and underlining the importance of corpora to studies of phraseology. It also highlights the importance of phraseological units in language learning and the problems faced by learners when using them. In addition, it describes the current EFL situation in Saudi Arabia. Finally, it sets out the objectives and research questions to be addressed in this thesis and argues for the significance of the research reported on here. The rest of the thesis is structured as follows: Chapter 2 provides an overview of the relevant literature on PVs and avoidance behavior in relation to L2 learners of English. In addition, it reviews previous studies based on learner corpora and provides an overview of the relevant literature on corpus-based analysis of the use of PVs in written register by L2 learners. Chapter 3 outlines the methodology used in this study, which integrates two different instruments to collect data: corpus analysis and multiple-choice tests. The Chapter reviews previous studies based on learner corpora, homing in on criteria for creating new learner corpora. It describes the design, creation and content of the learner corpus created in the current study. It then outlines how the multiple-chose tests were designed and

administered, stressing the care taken to maximize the likelihood that participants had already encountered the PVs used in the tests. The findings gathered using these two main instruments are reported and discussed in Chapters 4 and 5 respectively. Finally, Chapter 6 ends the thesis by summarizing the results and discussing a number of applications, implications and limitations of the study, and presenting suggestions for future research in this area.

Chapter 2: LITERATURE REVIEW

2.1 Phrasal verbs

Phrasal Verbs are among the most commonly misused verbs in English and the body of literature that deals with them is extensive (e.g. Fraser 1974; Cornell 1985; Side 1990; Darwin and Gray 1999; Liao and Fukuya 2004; Gardner and Davies 2007; Siyanova and Schmitt 2007; Schmitt and Garnier 2017). The research that has been conducted in this area has also been bedeviled by long histories of definitory problems related to the grammatical status and nature of the adverbial elements used, and the significance of the idiomaticity of some PVs. However, this is largely for a good reason given that in most cases the exact meaning of the term PV has eluded many scholars and speakers of the language. The concept 'PV' also goes by several other names such as 'separable verb' (Francis 1958), 'two-word verb' (Taha 1960, Meyer 1975), and 'verb-particle combinations' (Fraser 1974), however the term 'PV' "appears (…) to be the winning term" (McArthur 1989: 38). Nonetheless, PV will be the term that will be predominantly used across the study as it is the most commonly applied across various current teaching materials and references that students interact with in the process of learning English, and as it is the most general term used by researchers studying PVs (e.g. Darwin and Gray 1999; Liao and Fukuya 2004; Gardner and Davies 2007; Siyanova and Schmitt 2007; Schmitt and Garnier 2017).

There are varied definitions which English scholars (linguists, grammarians, lexicographers and pedagogues) have produced whenever defining this term. Bolinger (1971) admittedly states that "I do not believe that a linguistic entity such as the PV can be confined within clear bounds […] being or not being a PV is a matter of degree" (p. 6). According to the Oxford Advanced Learner's Dictionary (1995: 310-311), PVs are verbs which are made

up of two, or sometimes three, words. The first word is a lexical verb (LV) and it is followed by an adverb particle (AVP) (e.g. 'come down') or a preposition particle (PRPrt) (e.g. 'get into') or both (e.g. 'put up with'). This dictionary also classifies PVs into transitive (which take an object), intransitive (which have no object) and ones which can be used both ways. Transitive PVs may be separable or inseparable by an object.

Fraser (1974) and Quirk et al. (1985) use the term 'PV' to refer to the combination of (LV) + (AVP) while LV + (PRP) is referred to as a 'prepositional verb'. The combination of LV + PRP (e.g. 'look at', 'go to') falls into the 'prepositional verb' category. There are, however, a number of combinations (e.g. 'run into', 'look into') in which the status of 'into' is not very straightforward.

Broukal and Wood (1990) look at PVs as a combination of a verb + an adverb particle where sometimes the particle may be followed by a preposition. They believe that most of the particles look like prepositions but behave as adverbs and change the meaning of the verb they are attached to.

Darwin and Gray (1999) agree that the definition in Quirk et al. (1985) is a precise one as it defines the type of verb and the particle, as proper and invariable, respectively. They state that "A PV consists of a verb proper and a morphologically invariable particle that function together as a single unit both lexically and syntactically" (Darwin and Gray 1999: 76-77) Therefore, it is proposed that the PV should be defined from two different perspectives: syntactically and lexically. From the syntactic point of view, a PV is a verb proper (as called by Bolinger 1971) that is followed by a morphologically invariable particle, which functions with the verb as a single grammatical unit, so as a result the PV works as a whole unit within the verb phrase, and that is partly what makes PVs genuinely different

from prepositional verbs in which the verb proper and the preposition work in isolation. On the other hand, the lexical definition is that the meaning of the combination manifestly cannot be predicted from the meaning of the verb and particle in isolation hence both words function as one lexical unit. This can be seen by the fact that many PVs can be substituted by a single word equivalent, and that the meaning of a PV is not only different from the meaning of the verb proper in isolation (e.g. 'give up' ≠ 'give'), but also different from the meaning of the verb proper associated with a different particle (e.g. 'give up' ≠ 'give back').

Koprowski (2005) defines a PV as a phrase that consists of a verb in combination with a preposition or adverb or both and the meaning of which is different from the meaning of the separate parts such as in "look after, work out, and make up" (p. 332). It is a difficult task to differentiate between particles and prepositions as they are like identical twins (Koffi 2015). As a matter of fact, "they are phonologically and orthographically indistinguishable, they are homophones and homographs" (p. 307). Thus, Bolinger (1971) suggested nine traditional tests to determine whether or not a multi-word verb combination constitutes a PV. Nonetheless, Darwin and Gray (1999) state that these tests have "noteworthy exceptions" as an immense number of PVs would not get over these tests (p. 75) which eventually would cause "a problematic lack of agreement among those who study PVs as to exactly which verb + particle combinations are or are not included in the category" (p. 75). The nine tests suggested by Bolinger to identify PVs from other phrases are summarized in Table 2.1

Table 2.1

Bolinger's (1971: 8-17) nine tests.

	Tests	Definitions	Examples
1	**Replacement**	The possibility to replace the multi-word verb construction with single word verb equivalents.	*Refer to* = mention *Look into* = investigate
2	**Formation of action nominal**	Forming nouns from the actions, verbs.	He *brought up* some facts. His *bringing up* of the Facts.
3	**Object Movement**	Placing the particle before or after the object of the verbs.	He *looked up* his friend. He *looked* his friend *up*.
4	**Forming of passives**	Changing the voice of the transitive verb from active to passive.	He *looked over* the issue. The issue was *looked over*.
5	**Pronoun placement**	Placing the direct object pronouns before the particles in transitive verbs.	pick up the pin -- pick it up NOT pick up it.
6	**Adverbial insertion**	Placing an adverb in-between the PV parts.	*Jamie ran *quickly* up the bill.
7	**Definite noun phrases**	The ability of the particle to precede the definite noun phrase, a proper noun or a common noun, without taking it as its object.	They *pushed in* the door. NOT * They pushed inward the door.
8	**Stress**	The particle in PV combination receives some degree of stress.	She *ran up* the bill. She ran to the park.
9	**Listing**	It is a suggestion to outline PVs by listing them.	Depend on intuition.

As pointed out earlier, these tests have weaknesses and strengths for identifying PVs. Thus, Darwin and Gray (1999) refine and exclude some of Bolinger's tests to overcome the problem of classifying and distinguishing PVs from prepositions and prepositional phrases and in order to "promote greater agreement among the experts and better presentation of verb + particle combinations to the ESL learner" (p. 75). They also suggest an alternative approach to consider all verb-particle constructions to be potential PVs until they can be proven otherwise. They propose a list of seven tests for that purpose. The seven tests suggested by Darwin and Gray to distinguish PVs from other phrases are outlined in Table 2.2. Here '[in]' means that the candidate (in italics) passes the test for inclusion as a PV according to Darwin

and Gray (1999), while '[out]' means it fails. The asterisk suggests an example is linguistically unacceptable.

Table 2.2

Darwin and Gray's (1999: 77-81) six tests.

Tests	Definitions	Examples
Particle repetition	it is not acceptable to repeat a particle without its verb	*I *looked up* your name, *up* his name and *up* her name. [in]
Where questions	particle is not a part of a PV if it retains its non-phrasal-verb meaning while answering a where-question	He *ran up* the valley. Where? *Up* the valley. [out]
Fronting	a particle in a PV follows the verb proper and inverting this order produces unacceptable sentences	He *made up* a story. *Up* he made a story. *Up* a story he made. [in]
Adverb insertion	only adverbs ending in *–ly* + combination of 2 adverbs should be used	*I *came* suddenly and unexpectedly *across* an interesting article. [in] They *crept* slowly and silently *down* the hall. [out]
Verb insertion	Placing a verb in-between the PV parts, both verbs cannot share the same particle and the combination with the additional verb is not acceptable.	* I really *messed* and *fouled up* on my test. [in for both *mess up* and *foul up*]
Stress	In PVs, the particle receives some stress	She *RAN UP* a huge bill. [in]
Intonation units	A pause cannot be inserted between the verb and a particle and without harming comprehension.	*I *passed*/*out* in the doctor's office. [in]

Gardner and Davies (2007) take a different approach by attempting to classify frequent PVs in a native speaker corpus (BNC); they include all combinations of LV+AVP, i.e. the particle needs to be an adverb, not a preposition, thus accounting for the majority of PV combinations.

For the present study, I primarily followed the definition of the term in Gardner and Davies (2007) and Liu (2011), which is a simplified version of the exhaustive definition in

Biber et al. (1999: 405). Gardner and Davies (2007) defined PV as any two-part verb ''consisting of a lexical verb (LV) proper . . . followed by an adverbial particle … that is either contiguous (adjacent) to that verb or noncontiguous (i.e. separated by one or more intervening words)'' (p. 341). This simplified definition still needs careful application, however, given that the identification of adverbial particles is not always straightforward, especially in learner corpora, and the analyst may still have to fall back on tests like those outlined by Darwin and Gray (1999). The full procedure used to identify PVs in the current research is outline in section 3.4.4.

2.1.1 PVs and idiomaticity

Another important principle that needs to be clarified with respect to PVs is the notion of idiomaticity. According to Dirven (2001), PVs are combinations of verbs and prepositions, adverbs or particles with a certain degree of idiomaticity, that is, the meaning of the phrase is more than the sum of its parts such as in 'put up', 'see off', and 'get off'. Rodríguez-Puente (2012) categorizes PVs into five semantic types: "literal, aktionsart/aspectual, reiterative, figurative and non-compositional" (p. 72). Rodríguez-Puente argues that it is not uncommon for certain PVs to be categorized under more than one semantic type due to the fact that a specific PV could be described as literal or idiomatic depending on the context it is used in.

Table 2.3

Rodríguez-Puente's (2012: 72) semantic classification of PVs.

Semantic types	Definitions	Examples
Literal	The meaning of a simple verb combines with the meaning of a simple local adverb homonymous with the particle.	I *went away* and left him.
Aspectual or Aktionsart	Includes combinations which consist of a verb plus a particle indicating either telic aktionsart or aspectual meaning.	The car just *broke up*. He would just have to *play along* for a while.
Reiterative	Its members are combinations of a verb and a particle which somehow repeats a part of the semantics of the verb.	They were *rising up*. I *lifted* my eyes *up*
Figurative	The members of this group are combinations whose meaning is still quite transparent, but somehow removed from the literal connotation. Both literal and metaphorical meanings depend on the context.	*Throw away* food. *Throw away* a fortune.
Non-compositional	Combinations whose meaning cannot be predicted from their parts in isolation.	*Pass away* = "to die" *Give up* = "to abandon"

Furthermore, Celce-Murcie and Larsen- Freeman (1999) and Darwin and Gray (1999) describe three semantic categories of PVs as literal, idiomatic and aspectual. Literal PVs are those whose constituents appear to keep much of their individual meanings, and which are equivalent to Quirk et al.'s (1985) 'non-idiomatic constructions'. The second category is idiomatic or figurative PVs which are the easiest to identify as they have idiomatic meanings in which the meaning of the whole verb appears to have lost its usual meanings and is not related to the meaning of the parts of the verb, for instance, 'give' and 'in' in 'I didn't want to but I eventually gave in' (to surrender). The usual meanings of 'give' and 'in' seem to be lost and the two elements ('give' and 'in') do not keep their regular meanings. Aspectual PVs are somewhere in the middle in that their meanings are more transparent than those of idiomatic PVs but not as transparent as those of literal PVs. They are equivalent to

Quirk et al.'s (1985) 'semi-idiomatic' constructions. Aspectual PVs made of particles, which support consistent aspectual meaning to the verbs. According to Celce-Murcia and Larsen-Freeman (1999), they are further subcategorized into "semantic classes depending on the semantic contribution of the particle" (p. 432). So, they are divided into:

1- Inceptive: signals the beginning state of an action, such as 'set up', 'start out', and 'take off', 'set out', 'start up' (Celce-Murcia and Larsen-Freeman 1999: 432).

2- Continuative: depending on the particle that is attached to the verb: the particles 'on' and along' are used with activity as in 'hurry along', 'carry on', and 'play along'; the particle 'away' is used with activity verbs as in 'sleep away' and 'dance away'; the particle 'around' is used to indicate the activity that has no purpose as in 'goof around' and 'play around'; and the particle 'through' is used with an active verb to show an activity from beginning to end such as 'read through' and 'think through' (Celce-Murcia and Larsen-Freeman 1999: 432).

3- Iterative: when using the particle 'over' to indicate a repetition in an activity as in 'do over' and 'write over' (p. 433).

4- Completive: includes the particles 'up', 'out', 'off' and 'down' to indicate that the action is complete: these particles can change activity verbs (e.g. 'drink', 'burn', 'turn') into accomplishment verbs (e.g. 'drink up', 'burn down', 'turn off') (p. 433). In addition, these particles can also be used to stress a goal-oriented activity, such as 'wind up', 'fade out', and 'cut off' (p. 433). Finally, particles like 'out', 'over' and 'up' are used to indicate longer time taken to achieve something, as in 'find out', 'check over', and 'catch up' (Celce-Murcia and Larsen-Freeman 1999: 433).

Dixon (1982) claims that non-literal PVs "have essentially the same syntax as literal co-occurrences of verb and preposition; the difference is almost entirely semantic" (p. 2). PVs thus "are idiosyncratic only at the semantic level; their syntactic behavior can be predicted from general grammatical statement and rules that apply to all combinations of verb and preposition, both literal and non-literal" (p. 2). However, the combinations of idiomatic PVs are not freely formed as there are several "collocational restrictions" governing them (Palmer 1974). That is to say, it is not possible to substitute the particles of PVs for their opposites, viz. it is possible to say 'I can look after someone', but it is not right to say 'I can look before someone' (p. 212). In the same way, it is not possible to substitute the verbs of PVs for their synonyms, viz. it is possible to say 'I helped him out', but it is not right to say 'I aided him out' (p. 226). It has been argued that "apart from their semantic unity and the collocational restrictions on the occurrence of verb and the particle, there is nothing that will establish which are phrasal verbs and which are not" (Palmer 1968: 185).

In Cowie and Mackin's *Oxford Dictionary of Phrasal Verbs* (1993), the authors suggest two tests to differentiate between idiomatic and non-idiomatic PVs; both tests deal with meaning rather than with syntax. The first test is "to ask whether one word can be substituted for the whole phrase", and the second is "to ask whether the second word can be deleted". For instance, to know whether the PVs 'fall out', as used in 'She was not happy with the way things had fallen out', is an idiom or not, one of these tests should be applied. Apparently, the answer to the first question is: yes, it is possible as the PV 'fall out' can be substituted with one word, that is, 'happen' or 'occur', and the answer for the second test is: no, as the second part of the PV cannot be deleted from 'fall out'. As its form is fixed and cannot be broken up, it is an idiomatic PV (p. ix).

However, Darwin and Gray (1999) believe that literal verb + particle combinations (e.g. 'come up', 'throw out', 'go out') occur as free combinations rather than PVs, since their meanings can be predicted from those of the individual components. Biber et al. (1999) also support this view by pointing out that "each element has separate grammatical and semantic status" (1999: 403). Celce-Murcia and Larsen-Freeman (1999), Gardner and Davies (2007) and Liu (2011), on the other hand, categorize these as PVs with a literal meaning due to the fact that they share most of the characteristics of their figurative counterparts, and as noted by Liu (2011: 664), "the application of the semantic criterion is not always straightforward and often involves some subjective judgments." In addition, as argued by Sawyer (2000), treating such combinations as PVs could help language learners better understand their surface structure and as a result decrease the chance of employing avoidance behavior. For this reason and following Gardner and Davies (2007) and Liu (2011), and subsequent studies such as those by Rodríguez-Puente (2012) and Garnier and Schmitt (2015, 2016), this study categorizes free combinations as PVs with a literal meaning due to the fact that they share most of the characteristics of their figurative counterparts. In other words, this study allows for both literal and figurative PVs.

2.1.2 PVs and polysemy

It has been seen from the previous discussion that PVs vary from being completely transparent in meaning to being completely opaque. Semantic classifications of PVs tend to vary across researchers. However, it is generally agreed that many PVs are 'polysemous' and thus have more than one meaning. Some PVs are said to be "highly polysemous" (Villavicencio and Copestake 2003). For example, the PV 'make up' has eight senses (Villavicencio 2003). Thus, it is hard to categorize a PV into one particular group (i.e. literal

or idiomatic) as the meaning of a PV relies on the context in which the PV is being used. For example, while the meaning of the PV 'pick up' ('to lift') as in 'I pick up the phone' is very transparent, and, thus, can be categorized as a literal PV; the meaning of 'pick up' in 'I picked up a few Spanish words while staying in Spain' is not. Thus, there is no clear-cut classification of PVs as there are many PVs placed along the idiomaticity scale with varying degrees of idiomaticity and many of them have more than one meaning. In addition, many PVs have a non-compositional meaning which has often been taken from a literal one, and as a result the original literal meaning either continues to exist in conjunction with the newly-created figurative one, or disappears completely (Rodríguez-Puente 2012). This semantic change process is known as 'idiomatization' or 'lexicalization' (Thim 2012). This process accounts, to some degree, for the polysemous nature of PVs.

2.1.3 PVs and transitivity

From a grammatical point of view, PVs can be transitive, meaning they are followed by a direct object, which can be either a noun phrase (e.g. 'Please switch off the light') or a clause (e.g. 'my friend found out that her parents had been planning a surprise party for her'). PVs can also be intransitive, meaning that they do not and cannot take objects, so the verb and particle always stay together. Quirk et al. (1985: 1152) give the following illustrative examples**:**

The plane has just *touched down*.	Did he *catch on*?
He is *playing around*.	The prisoner finally *broke down*.
I hope you'll *get by*.	She *turned up* unexpectedly.
How are you *getting on*?	When will they *give in*?
The plane has now *taken off*.	The tank *blew up.*

In these PVs, the adverbial particles function like predication adjuncts, and usually stay together with their lexical verbs and these PVs are typically used in informal registers (Quirk et al., 1985). Some PVs can be both transitive and intransitive in form (e.g. 'the house burned down/he burned the house down') (Sinclair et al. 1998). Dixon (1991) notes that:

> transitivity is a much more fluid matter in English. There are, it is true, a number of verbs that are strictly transitive […] and a few that are strictly intransitive […]. But many verbs in English may be used either transitively or intransitively. (Dixon 1991: 267)

> Quirk and Greenbaum (1973) have illustrated such PVs as follows:

> *Drink up* quickly. [Intransitive PV]
> *Drink up* your milk. [Transitive PV]
> When will they *give in*? [Intransitive PV]
> They *gave in* their resignation. [Transitive PV] (pp. 347-348).

Besides the transitivity of PVs, 'separability' is another important concept with respect to PV. Such a distinction typically can be made depending upon the position of the particle in the sentence (Gries 2002). As noted by Biber et al. (1999), almost all transitive PVs are separable and allow for particle movement either before or after the object noun (e.g. 'I need to get back my pen'/ 'I need to get my pen back') whereas prepositional verbs never do and cannot be separated (e.g. 'He looked at his bag', and NOT *'he looked his bag at'). However, if the object is a pronoun, the particle must come after the pronoun (e.g. 'please turn it on', and NOT '*please turn on it'). This rule also can be applied to words like 'this' 'that' 'one' (e.g. 'Shall I turn this on' / 'Now just turn that on' / 'I turned that one on').

On the one hand, there are some transitive PVs which are inseparable (e.g. 'they came across a problem' ≠ '*they came a problem across'; Darwin and Gray 1999: 72). In some others, particle movement may induce a change in meaning, as illustrated by the two following examples (Darwin and Gray 1999: 72-73):

'Why don't you run down the list?' ('review') ≠ 'Why don't you run the list down?' ('find')

'I don't want to take on Jill' ('hire') ≠ 'I don't want to take Jill on' ('challenge').

On the other hand, intransitive PVs are always adjacent; in e.g. 'take off' ('leave the ground and fly'), the lexical verb (take) cannot be separated from the particle (off) as in 'The flight will take off in ten minutes'/ '*The flight will take in ten minutes off'.

2.1.4 The prevalence and importance of PVs

PVs are one of the most productive areas of the English language (Bolinger 1971), and include many thousands of items (Gardner and Davies 2007), with new items coming into use on a regular basis (e.g. 'chill out', 'freak out', 'sex up', 'space out') (Schmitt and Redwood 2011). Early work in the area suggested that there are at least 700 PVs in ordinary, everyday use in English and at least 3,000 established ones (Bywater 1969; McArthur and Atkins 1974, as cited in Cornell 1985). Indeed, PVs make up one third of the English verb vocabulary, according to Li et al. (2003).

Gardner and Davies (2007: 347) compiled a list of the 100 most frequent PV constructions. As indicated above, their definition of PV was "all two-part verbs in the BNC consisting of a lexical verb proper […] followed by an adverbial particle […] that is either contiguous (adjacent) to that verb or non-contiguous (i.e. separated by one or more

intervening words)" (p. 341). The results indicated that the 16 potential preposition-particle forms examined were found as adverbial particles (i.e. as part of a PV construction) in 15.6 % of the cases in the corpus. The number of particle forms found in the corpus was high (656,641). Thus, they conclude that PVs are a major grammatical class and estimate that "learners will encounter, on average, one [phrasal verb construction] in every 150 words [tokens] of English they are exposed to" (p. 347). In addition, around 5% of all lexical verbs in the BNC were found in PV constructions (i.e. one in 20). There were 10,404,107 lexical verb tokens tagged in the corpus (approximately one in every 9.6 words). Moreover, the top 20 lexical verb types found in PV constructions accounted for 53.7% of all PV tokens in the BNC, and in 24.2% of cases in the corpus they were part of PV constructions. According to Gardner and Davies, as there are many of these lexical verbs among the most frequent verbs in the BNC, this can be considered as further evidence for the prevalence of PVs in discourse. In addition, these 20 lexical verb lemmas, when combined with only eight particles ('out', 'up', 'on', 'back', 'down', 'in', 'over' and 'off'), which make 160 combinations, appear to account for half (50.4 %) of all PV tokens in the BNC. Gardner and Davies found also that each of the most frequent English PV types had 5.6 meaning senses on average. These meaning senses often cannot be conveyed by a single word equivalent or may carry connotations that their single word equivalent does not have (Cornell 1985).

According to Gardner and Davies, the possibilities of these combinations between lexical verbs and adverbial particles seem to be to a great extent idiosyncratic, which means that learners should be aware of semantic constraints and understand which combinations are less likely to occur or do not occur at all.

Gardner and Davies' study was the first large-scale corpus study of PVs to try to compile a list of high-frequency PVs for pedagogical purposes. Despite this, there were a number of limitations with it. According to them, no further analysis was performed to examine frequency in different registers or different variants of English. The result is a frequency list that provides little information about register distribution patterns and focuses only on the British English language variety. Liu (2011) tried to address these shortcomings by examining the frequency of PVs in the Corpus of Contemporary American English (COCA) and then comparing the results to the BNC and Longman Spoken and Written English (LSWE) corpus and performing a cross-register distribution analysis within the COCA. Liu adopted Gardner and Davies' (ibid.) definition, to ensure comparability between the two analyses. Liu's results showed that a relatively small number of lexical verbs and adverbial particles formed the majority of the PVs found in the corpora. The frequency rank order of PV types in the COCA appeared to be quite similar to that of the BNC. Despite the fact that BNC and COCA cover different time periods, no really big difference in PV usage was found between the two corpora. This suggests that PV usage has remained fairly stable over the past few decades. Liu believes the situation may remain so for the next several decades. Despite this, he observed some usage differences between American English and British English. But overall, the most commonly used PVs seemed to be quite similar between the two variants. In addition, Liu's results also support the idea that PVs are mainly a feature of spoken English, rather than academic writing. This is consistent with Celce-Murcia and Larsen-Freeman's (1999) suggestion that some PVs are field-specific in nature. Indeed, Biber et al. (1999) propose a much lower frequency of PVs in formal registers, estimating that PVs occur almost 2,000 times per million words, or once in every 500 words.

Indeed, it is frequently assumed that PVs are significantly applied in spoken discourse more than written discourse, considering the (again often assumed) informal nature of the former. However, this is not entirely the case as can be seen in De Cock's comments in her contribution to the pedagogical mid-matter in the *Macmillan Dictionary of Phrasal Verbs* that "native speakers of English use approximately half as many PVs in formal writing as in informal speech" (2005: 17). Given their ubiquity in spoken discourse, even if PVs are only half as frequent in formal, written discourse, this implies that they are still of great importance in writing. Furthermore, PVs are regarded as important in formal discourses as there are several instances in which their application in expressing certain messages and ideas is more appropriate and sounds more natural than if they were missing (Becker 2014).

Part of the significance of PVs among native users comes out of the fact that they are considered as a standard feature for good idiomatic usage and offer great potential for creativity McArthur (1989: 42), with many linguists considering them to be fertile fields for new coinages (Greenbaum 1996) as the mere addition of a simple particle to a word can alter a simple verb and make it more specialized and intense in structure. This technique of extending the meaning of words by an addition of extra elements to it, also known as semantic spreading (Bolinger 1971: 45) or structural compensation (Quirk et al. 1985: 1401), is one most significant uses of PVs in the English language.

2.1.5 The treatment of PVs in EFL

PVs are now receiving much more attention from language coursebooks, and a growing number of publications and dictionaries devoted exclusively to PVs have been published in recent years, for instance: *The Ultimate Phrasal Verbs Book* (Hart 2009), *English Phrasal Verbs in Use* (McCarthy and O'Dell 2007), *Collins COBUILD Dictionary*

of Phrasal Verbs (Sinclair 2002), *Oxford Phrasal Verbs Dictionary* (Mcintosh 2006), and *Cambridge Phrasal Verbs Dictionary* (McCarthy and Walter 2006).

PVs are now seen as an important component of native-like spoken discourse and ESL/EFL learners not being able to use them can make them sound like non-natives and unnatural in speech (Siyanova and Schmitt 2007). This is despite the fact that the teaching of vocabulary had for several years received less attention within the language classroom as compared to the teaching of grammar. In the past, many perceived grammar to be the focal point of English language learning with the belief that all learners needed to master the language's grammatical structures to know it well (Rodríguez-Puente 2012). This over-emphasis on the teaching and comprehension of grammar skewed the situation of language teaching and learning, including syllabus design, teaching practice, and the learning and teaching materials that were used. Nonetheless, as indicated in Chapter 1 of this thesis, the increased amount of research that has been conducted into language teaching and learning has altered the researchers' views on the role that grammar plays and shifted the focus towards the lexical knowledge acquisition necessary for enhancing the learners' proficiency (Becker 2014). Armstrong (2004) points out the importance of teaching PVs, developing receptive awareness, and the ability to produce them by stating:

> In spite of their difficulty, PVs have to be taught at some stage because they are common, the system underlying them is economical and creative, and they are an important part of the language system; indeed, as Bolinger (1971: xi) puts it, they constitute 'an explosion of lexical creativeness that surpasses anything else in our language'. It is important that all learners develop at least a receptive awareness, which will help them decode the PVs that they encounter in spoken and written texts,

while those learners aspiring to be expert users need to be able to produce at least the more common PV combinations appropriately. (p. 214)

The writing and speech of English language native speakers is often filled with PV expressions. In contrast, most non-native English speakers avoid using PV expressions in their communication because they find them to be too difficult to use. The difficulty such non-native speakers experience in handling PVs is ascribed to the fact that PV constructions are highly idiomatic, which means that the word combination's meanings may be of little significance to those of individual words that they use.

PVs are also of great importance to English language learners as without a good knowledge of how they function or how to use them, one might find it an uphill task to gain the desired fluency in English (Rodríguez-Puente 2012). As such, PVs deserve equal attention in language teaching and learning, as well as better treatment by learners.

2.1.6 PVs in Arabic

Arabic is a language which is part of the Semitic language family (Ryding 2005: 1) in which the basic sentence order is verb-subject-object (VSO), alongside other variations depending on the literary style (Hawkins 1980: 196). According to Al-Rubai'i (2004: 248), Arabic "shows syntactic relationships by its frequent and systematic use of inflected forms" while English "shows syntactic relationships by word order and function words." The possibilities of interface errors are high between English and Arabic because the grammars of the two languages are radically different. For example, 'John wrote a letter' is in English SVO word order; however, in Arabic the VSO order would be 'wrote John a letter'. The Arabic language has three parts of speech: nouns, verbs, and particles (Wright 1967), which is a major difference in comparison to English (Alkhuli 1999). Verbs, in Arabic, are basically

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categorized as open class full verbs (lexical verbs) and act as main verbs. In Arabic, the verb phrase mainly consists of a single-word verb. Multi-word verbs, that is, verbs followed by prepositions, are common in Arabic, but Arabic grammarians have not classified them under a specific heading as is the case for English (Aldahesh 2009). As a result, it is debated among researchers whether such verbs should be classified as prepositional verbs or phrasal verbs. On the one hand, Aldahesh (2009) believes that verb+ preposition constructions in Arabic have characteristics of both prepositional and phrasal verbs, and Alkhuli (1999) also argues for the recognition of one type of PV, the prepositional verb, in Arabic.

On the other hand, Heliel (1994) doubted the presence of PVs in Arabic and preferred to label constructions that combine verbs with prepositions as "prepositional verbs, not phrasal verbs.". Heliel (1994) preferred this label because these verb+ preposition combinations do not act as PVs but rather as prepositional verbs, as the particle, in Arabic, always precedes the noun phrase, it can never come after it. Swan and Smith (1987: 207) also stated that "there are no PVs in Arabic and this whole area is one of great difficulty for Arab ELLs."

Furthermore, there are two varieties of Arabic known by learners, modern standard Arabic (MSA) and non-standard Arabic (NSA), which makes the situation more complicated. Style and vocabulary are the main differences between the two variations (Ryding 2005: 4). According to Ayadi (2010), PVs do not exist in NSA while there are few verbs that take particles in MSA and the meaning of the verb changes with each particle. MSA PVs are considered complex and sometimes difficult for students to understand and consequently difficult to use. Due to the inherent complexity of PVs in MSA, or because of the influence of NSA, students tend not to use this form. Therefore, in this study, the researcher adopts the

claim that Arabic, like other Semitic languages, has no phrasal verbs (Dagut and Laufer 1985).

In addition, languages can be categorized based on Talmy's (1985) definitions of satellite-framed (S-framed) and verb-framed (V-framed) languages. The differences between the two types can be seen in the structure a language uses to encode motion events, or how a theme moves from one place to another along a certain path (González 2010). English is a satellite-framed language that expresses the path information in satellites to verb roots, such as particles and prepositional phrases, while Arabic is a verb-framed language, which conflates the path information with the motion information contained in its verb roots (Slobin 2006; Talmy 1975). Previous research pointed out that learners from satellite-framed languages tend to use PVs in the L2 more often than leaners from verb-framed languages (González 2010). González did a study to test if Talmy's classification of languages could be applied also on multiword constructions – specifically PV constructions. 'Out' was picked to be investigated as it is the most frequent phrasal verb particle after 'up' (Gardner and Davies 2007). PVs with 'out' as a particle were extracted and then categorized into different tokens of PVs based on meaning. The tokens then were separated based on L1 backgrounds (S-framed Germanic, S-framed non-Germanic, V-framed languages, and native speakers of English). The data showed that both S-framed language groups used more 'out' PVs (60%) than learners from the V-framed languages (30%), and this finding went beyond directional PVs to include those 'out' PVs with transparent meanings. These findings specifically supported issues of underuse of PV constructions in learners of English.

2.1.7 PVs and the language learner

Given all the evidence for their importance and the many advantages associated with use of PVs as outlined in the previous sections, there is no doubt that L2 learners should acquire PVs if they wish to be genuinely proficient in English. The use of PVs can dramatically improve the overall impression of L2 learners' language production in spoken discourse as well as in written discourse. Despite their significance and high productivity in English, PVs have always posed numerous difficulties for ESL/EFL learners as confirmed by the findings of previous studies (Gardner and Davies 2007; Garnier and Schmitt 2015, 2016; Liao and Fukuya 2004; Liu 2011; Schmitt and Redwood 2011; Barekat and Baniasady 2014; Abdul Rahman and Abid 2014; Kamarudin 2013; Aldukhayel 2014; El-Dakhs 2016). Researchers have pointed out different reasons as to why PVs were considered to be problematic for language learners. In this respect, De Cock (2005:16-18) also summarizes the common problems learners may face with PVs as the following: avoidance, style deficiency, semantic confusion, lack of collocational awareness, using idiosyncratic PVs and syntactic error. Kurtyka (2001) states that reasons behind the difficulty in the learning of PVs and which are common to many learners regardless of their mother tongue, include the following: The existence of more than one meaning attached to an individual PV, the complexity of grammar, and collocational association of the same verbal head with different particles. This section will discuss these reasons in detail.

For non-native learners of English, specifically learners with non-Germanic first languages (L1s) such as Arabic, Hebrew and Chinese which do not have the verb and particle combinations (cross-linguistic factors), PVs are very difficult to acquire (Armstrong 2004; Celce-Murcia and Larsen-Freeman 1999; Neagu 2007). As a result, PVs may be seen as an

unnatural construction for learners whose L1 lacks such a structure and the non-existence of the same structure in learners' L1s may affect their understanding of PVs. There are many studies which confirm that this may result in the avoidance of PVs (Dagut and Laufer 1985; Laufer and Eliasson 1993; Liao and Fukuya 2004; Siyanova and Schmitt 2007). However, it is important to point out that the use of PVs has also been regarded as problematic for Dutch and Swedish ESL learners from the Germanic language family as well, although there is a similar construction in their L1 (Dagut and Laufer 1985; Hulstijn and Marchena 1989). So, structural differences between L1 and L2 are not the only reason for PV avoidance, but similarities between L1 and L2 are also possible reasons (Hulstijn and Marchena 1989: 241).

Moreover, various complex syntactic structures also add more confusion for learners and make it difficult for them to understand PVs. For instance, as previously mentioned, particle movement is regarded as one of the PV's unique grammatical characteristics, as there are inseparable PVs (e.g. 'run into', 'go over') and separable PVs, where the adverb particle can be separated from the verb when a PV has a direct object (e.g. 'pick up'). As a result, L2 learners might find it difficult to differentiate which ones are separable and which ones are not and it can add another layer of frustration for learners. In addition, as noted by Schmitt and Redwood (2011: 174), learners have to decide what can be included in between (pronoun, adverb, and short or long noun phrase). For instance, Schmitt and Redwood point out that while 'he gave all of his vast fortune away' is an acceptable sentence, the sentence '*the rebels are putting a huge amount of resistance up' is unacceptable one. Therefore, learners need to make informed decisions, which are often based on syntactic and stylistic conventions, context, prosody and intended meaning (Bolinger 1971).

Another reason for the difficulty of learning PVs is the fact that they are typically categorized as a type of idiomatic expression, with degrees of idiomaticity ranging from transparent or literal (e.g. 'pull down') to aspectual or completive (e.g. 'speak up') to idiomatic (e.g. 'figure out') as indicated above. Thus, PVs' meanings have often been considered as arbitrary, random, and unpredictable (Walkova 2012). Although some PVs can be considered as being more literal in meaning, the large majority are those with idiomatic or aspectual meaning and that have what Laufer (1997: 25) calls "deceptive transparency". Thus, these PVs are not easy for ESL/EFL learners to learn as their meaning cannot be easily derived from the meanings of the constituent parts (the individual verb and particle) and the PV has a new meaning which is different from the meaning of the individual verb and particle of the phrasal construction. For example, in the sentence "take down the cup from the shelf", 'take down' is much more transparent and literal in meaning than 'take off' in "I will take off" (Dagut and Laufer 1985). In this sentence, two possible difficulties can be faced. One difficulty can be found where the learner may only recognize one meaning of 'take off', such as talking about the removal of clothes or an airplane leaving an airport but does not know the extended polysemous meaning of *leave*. The other possible difficulty is that the learner might be completely unfamiliar with the form making it difficult to recognize that the two words together have a different unique meaning. Liao and Fukuya (2004) found in their study that learners chose fewer figurative PVs than literal PVs on a multiple-choice test. This avoidance was attributed to the semantic difficulty of figurative PVs. Yorio (1989) also found that 25 ESL learners of English used the same number of PVs as native speakers in their written productions; however, the learners used idiomatic PVs less frequently in speech, although they had lived in the United States for several years. However, it is worth noting

that Yorio's study is limited in that very few learners' productions were examined, as well as the fact that not many details were provided as to which PVs were used.

In addition to that, PVs are also highly polysemous as they have multiple, distinct meanings. Cornell (1985) pointed out:

It is not the case that a particular verb + particle combination may be polysemic in having both an idiomatic and non-idiomatic use: in addition, it may well be polysemic in having more than one idiomatic use. There is not merely one non-idiomatic use of put up and one idiomatic use, for example. As an idiomatic combination put up subdivides into several different meanings:

He put us up for the night.

Who put you up to this?

He put up a good fight. (p. 270)

This may add more confusion as to their meanings, and most certainly adds to the learning load involved in the process of learning and using them. Following up on the work of Biber et al. (1999), and as indicated above, Gardner and Davies (2007) conducted a corpus-based study of PVs in the British National Corpus (BNC) and found an average of 5.6 distinct meanings for each of the 100 most frequent PVs (Gardner and Davies 2007:339), and over 20 distinct meanings just for the phrase 'go on' (White 2012: 1). This specifically makes it more complex for learners to learn PVs. While memorizing 100 verb-particle combinations might be possible for a learner, individually memorizing the different sense of each of the polysemous meanings is almost impossible.

Another reason for the difficulty in learning PVs is that PVs can have strong collocations, and learners' lack of awareness of common collocates, regular patterns and usage lead to incorrect use of PVs. According to Pye (1996), PVs are "also inextricably linked to and restricted by their collocational environment or syntactic behavior" (p. 700). For example, it is correct to say 'break up with SOMEONE', but it is not right to say 'break up with SOMETHING', which must be memorized as part of the form. Generally, learners are insensitive to the collocations, specifically to the ones which are restricted to some degree, so learners have less difficulty when using PVs which are extremely restricted or completely free (Howarth 1998; Nesselhauf 2005). Nesselhauf (2005) found that learners face most difficulty with less restricted collocations in which the node word can take more collocates. The example given by Nesselhauf (2005) in the case of MWUs for a more restricted combination is 'pay attention', and for the less restricted combination is 'perform', which can collocate with 'an experiment', 'a miracle', 'a ceremony', etc. Thus, restricted collocations are problematic to L2 learners as the collocates of the PV used in one sense are constrained in the same semantic field, but the semantic restrictions are hard to grasp. Thus, choosing the right collocates could pose a difficulty for learners, whether they are semantically or arbitrarily determined.

As already indicated, the register of a PV could pose a challenge to ESL/EFL learners. It is generally believed that PVs are basically used in spoken discourse rather than written discourse and they are very common in informal rather than formal registers, while their one-word equivalents are more often used in more formal contexts. Biber et al. (1999: 408-409) confirmed this by using corpus statistics. They found the usage of PVs is more frequent in conversation and fiction with over twice the frequency than in academic writing, with news

journalism coming between the two extremes. This indicates that PVs are not completely absent from formal discourse and there are many instances on formal occasions in which the use of PVs is more appropriate and more natural in expressing certain ideas (Fletcher 2005). However, in the case of L2 learners, Siyanova and Schmitt (2007) noted that:

> For learners, the issue is not so much choosing the verb form which carries the correct meaning, but rather choosing the verb which has the appropriate register, and which conforms to the expectations of the speech community. As such, the correct selection between multi-word verbs and their one-word counterparts makes a difference in how native-like and communicatively effective a learner is. For example, by failing to use multi-word verbs in their speech, many learners of English tend to sound unnatural and non-idiomatic. (p. 121)

2.2 Learner-corpus studies

In corpus linguistics, there have been typically two approaches to analyzing L2 language: Computer-aided Error Analysis and the comparative research design. Computer-aided Error Analysis (CEA) (Dagneaux, Denness and Granger 1998) is an approach to learner language that involves the analysis of L2 speakers' errors which have been annotated in a learner corpus (Granger 2003). CEA is theoretically based on traditional error analysis (e.g. Corder 1971, 1981), which is a methodology used to describe L2 speakers' language by locating and analyzing errors in their production (James 1998). However, it does not attempt to provide explanations for the occurrence of those errors (Dagneaux, Denness and Granger 1998). Moreover, this approach is more suitable than the comparative research design for investigating instances of 'misuse' (Granger 2015). In addition, this approach does not only focus on identifying errors, but also it can be used in examining instances of correct language use (Granger 2009). For these errors

to be identified, this approach requires the development of an error taxonomy which is later used in an error-tagging system to assign a tag to each error in the corpus (Díaz-Negrillo and Fernández-Domínguez 2006; Reznicek, Lüdeling and Hirschmann 2013; Lüdeling and Hirschmann 2015). Furthermore, the error-tagging systems used tend to be rather flexible to give the researchers the freedom to add or change error tags depending on their research needs. It also allows for automatic error searches, counts, and analyses of learner language which were not possible in the past (Granger 2003; Lüdeling, Hirschmann and Shadrova 2017). However, this approach has been criticized for some limitations such as the high level of subjectivity involved in the development and assignment of error categories as there is sometimes the possibility of assigning more than one tag to the same error (Granger 2009; Callies 2015).

Comparative research design, on the other hand, has been regarded as useful in locating cases where linguistic features occur more or less frequently in two or more corpora. It has been used in two specific types of comparison: a comparison between a native speaker language variety (L1) and a non-native speaker language variety (L2), and a comparison between two or more non-native speaker language varieties or interlanguages (L2s) (Granger 1996, 1998). The basis of the Contrastive Interlanguage Analysis (CIA) framework developed by Granger (1996) was formed by both types of comparisons. To perform a comparison between L1 and L2, the CIA requires a control L1 corpus which serves as the reference against which L2 data is compared. To conduct a comparison between L2 and another L2, there is a need for having learner corpora or sub-corpora which are different in terms of learner variables (e.g. age, mother tongue, L2 proficiency level, etc.). In addition, the CIA can also be used to conduct a comparison between the language produced by

different groups of L2 speakers without the need to use any L1 variety as a reference (Hasselgård and Johansson 2011). Moreover, a more recent version of the CIA framework (Granger, 2015) allows the comparison of L2 speaker data against one or more L1 corpus.

Comparisons between L1-L2 have been found to be particularly useful as they can help us study instances of 'overuse' and 'underuse' in L2 production relative to L1 production (Granger 2009) by identifying linguistic features that are used more or less frequently by L2 speakers than by L1 speakers in similar situations. The main goal of L2-L2 comparisons, meanwhile, is to identify and differentiate patterns of L2 use that are characteristic of a specific L2 group from those that are general and can be found in the production of L2 speakers irrespective of their L1 or proficiency level (Granger 1996; Callies 2015). Both types of comparison (L1-L2 and L2-L2 comparisons) can be integrated in a single study.

Many factors (linguistic as well as extralinguistic) should be taken into account when selecting a native corpus to be compared with an L2 corpus. Extralinguistic factors refer to factors such as the age of the contributors and their educational background and conditions under which the texts are collected. For such factors to be controlled, Kaszubski suggests (1998: 25) that "it may be psycholinguistically more appropriate to compare EFL learner corpora not with ideal 'expert performances' in the target language but (more realistically) with the attainable performances of native learners of a comparable, preferably slightly lower, age and experience."

Another factor that should be taken into account when selecting a comparable native corpus is the variety of L1 English as there are different varieties of English, for example, American and British. The role of the L1 variety has been well documented in the literature

(e.g. Algeo 2006; Bauer 1988; Potts and Baker 2012; Rohdenburg and Schlüter 2009). For example, it has been found in other learner corpus studies that there are differences in the use of certain vocabulary items between novice writers of different L1 varieties. Ädel (2008) for example, investigated learners' use of metadiscourse in the Louvain Corpus of Native English Essays (LOCNESS, Granger et al. 2009), which includes essays written by American and British students. He found that American novice writers use significantly more personal metadiscourse than their British counterparts. In terms of ESL/EFL context, studies show that learners are aware of the differences between American and British English, and they show marked preference for a certain variety or varieties (Jarvella et al. 2001; Zhang and Hu 2008).

2.2.1   PVs in learner corpora

With electronic collections of authentic learner texts at hand, which provided a solid empirical basis to study learner language qualitatively as well as quantitatively, it became possible to carry out larger-scale studies, going beyond the issues of avoidance and L1 influence. A number of detailed corpus-based studies into the use of PVs by learners with different mother tongue backgrounds were carried out (De Cock 2005; Waibel 2008; Mandor 2008; Chen 2013; Wierszycka 2013; Ryoo 2013; Riguel 2014; Gilquin 2015; Badem and Şimşek 2021; Fadanelli 2012; Garbatovič and Grigaliūnienė 2020). The focus in some of these studies has been the difficulty experienced by learners in using PVs trying to pinpoint the possible factors behind this difficulty (e.g. Kamarudin 2013). Other studies have focused on the phenomena of overuse and underuse compared to native speakers (e.g. Chen 2013). Others have had pedagogical concerns, i.e. they are concerned with how PVs are taught (e.g. Garnier and Schmitt 2015). The number of studies carried out in this field is expanding

quickly. However, at the time of writing, there is still no published study focusing specifically on the use of PVs in the writing of Saudi EFL learners of English.

A number of studies have attempted to explore, measure, and compare the use of PVs in learner corpora as opposed to native ones. A large-scale and comprehensive corpus-based study on PV use by learners was carried out by Waibel (2008). By collecting the data both quantitatively and qualitatively and following Granger's (1996) Contrastive Interlanguage Analysis, Waibel compared LOCNESS (a native corpus of academic essays) and the International Corpus of Learner English (ICLE), a non-native corpus of essays from learners with different L1s. According to Waibel, PVs were used more frequently by native speakers in LOCNESS than by second language learners of English in many sub-corpora of the ICLE corpus (French, Spanish, Italian and Russian). However, the Dutch and Polish learners showed no significant difference from the native ones in terms of using PVs. When it comes to the German learners, whose L1 possesses the PV structure, there were surprising results as they used more PVs than the native speakers. Waibel thus pointed out that the use of PVs may be facilitated for learners whose L1 has the same PV structure as the L2 and that the results showed positive L1 influence. Finnish learners and those with a Slavic language background used PVs to a lesser extent than native speakers, i.e. about 300 PV tokens less. Waibel (2007: 79) suggests that the reason Slavic learners did not display an underuse of PVs despite their unfamiliarity with this verb type in their L1 was probably due to successful teaching. The learners with a Romance native language, on the other hand, only used half the number of PVs compared to native speakers. According to Waibel (2007: 78), the possible reasons behind the overall low frequency of PVs in the writings of the learner groups with a Romance background could be the lack of similar verb type in Romance languages and the

fact that they probably tend to use more Romance-based verbs in English. In a later study, Waibel focused the investigation of PV use by two groups of advanced learners of English (German- and Italian-speaking) to find out other possible factors in the use of PVs. Waibel compared these two learner groups' performances with that of their native speaker counterparts (LOCNESS). The results indicated that the learners' L1s has an influence on their use of PVs both positive and negative. As already mentioned, German learners are familiar with a similar verb type from their L1, thus the overuse of PVs by German learners was due to the increased use of Germanic verbs, and the underuse of the PVs by the Italian learners was due to the learners' greater reliance on Latinate verbs in Italian, and the fact that the English PVs are mostly of Germanic origin whereas phrasal verb like structures are marginal in Italian. In addition, Italian learners' writings showed topic-sensitivity to a greater extent, while German learners' writings showed style-insensitivity as they used both formal and informal PVs within the same essay. Moreover, the productions of both groups shared some features of non-nativeness, such as inappropriate PV choices in a given context, collocational deviations and simplified use of PVs as some learners tend to use verbs of general meaning with a particle instead of a more appropriate verb. Waibel's study has two limitations. On the one hand, the comparison was based on different text types (e.g. personal and descriptive essays were compared with argumentative essays). The researcher could have produced more compelling results by using texts of the same. On the other hand, the study's scope was restricted to a single reference corpus with two L1 varieties (American and British English). The results could have been more reliably obtained by using two L1-variety corpora.

Another corpus-based study on PV use by learners was carried out by Chen (2013). Chen (2013) conducted a longitudinal study on the quantitative use of PVs by Chinese learners of English in their written productions. Chen compared Chinese university students' use of PVs with that of American and British students by compiling a corpus of 780 argumentative essays written by 130 English majors in their first three years of undergraduate studies at a Chinese university and comparing it with four native corpora based on two English varieties (British and American English) and two genres (argumentative and academic writing). According to the author, the proficiency level of the Chinese students was that of upper-intermediate EFL learners. She found that the number of PVs used by the Chinese learners was remarkably different from that of the American native speakers in both genres (argumentative and academic writing), and from that of the British speakers in the academic genre only, while the Chinese learners actually frequently used more PVs in their academic prose than the native speakers. It is worth pointing out that the PV structure is absent in the Chinese language; however, the Chinese learners were able to produce many PVs in their writings. According to Chen, these results are contrary to Waibel's (2008) and this might be because of the Chinese learners' general language proficiency. Moreover, Chen argues against the claim that learners whose L1 lacks PVs face more difficulty in learning and using them. Chen points out that L1 is not necessarily the most influential factor in PV learning (2013: 436).

However, one of the shortcomings of this study is that it does not provide information as to which PVs were used. It could be argued that a certain small number of PVs were overused, and the result does not really represent the true Chinese students' knowledge of PVs or mean that they have reached a native level. In addition, in the argumentative genre,

the Chinese university students used similar quantities of PVs to the British students, but they performed significantly more poorly compared to the American students. This could suggest that PV use may differ quantitatively depending on the language variety. As a result, Chen argues that the selection of native corpus to be compared with the learner corpus is important as the English variety of the corpus could yield more or fewer similarities between the two corpora. In a follow-up study, Chen (2017) investigated the semantic behavior of the PVs used in the data by calculating the number of meaning senses of each PV. She argued that as each sense of a given PV represents a different usage of it, the number may show how productive the learners were at different stages. The findings showed that as learning progressed, Chinese learners' semantic knowledge of PVs improved, i.e. after two years of undergraduate study. That is, as their learning progressed, the learners used phrasal verbs not only in a greater variety of senses, but also more often in figurative senses (Chen 2017: 142-147). These findings show the importance of increasing input and proficiency in PV learning.

In order to evaluate whether Brazilian EFL students utilized PVs at a similar rate to native English speakers by comparing them with the list of Gardner and Davies (2007), Fadanelli (2012) investigated the PV usage of the Brazilian's EFL students by compiling a corpus called CoMAprend Learner Corpus, which is a project developed by the University in São Paulo. It includes texts from three different genres: narrative, descriptive and argumentative texts. The study was conducted only on the narrative and the argumentative texts (almost 100,000-word tokens) as they appeared to be the most representative for learners of English. The results showed that PVs occur in the learner corpus 289 times. That roughly accounts for 1 PV token occurring in every 350 tokens in the corpus. In addition, the results also showed that a relatively high number of PV types found in the Brazilian Corpus

were not within the list of the most common PVs presented by Gardner and Davies (2007), and that Brazilian EFL students exhibited a significant level of 'avoidance', a term used by the author instead of using 'underuse' which may be more appropriate in this context. In addition, many of the PVs they employed did not show up among those most frequently used by L1 English speakers. The researcher suggested that contrasting linguistic characteristics of learners' L1 to target language, in that case being a verb-framed language (see 2.1.6), might be an underlying reason for avoidance. This study has one limitation which is the researcher limited himself to one L1 variety. Instead, different L1 varieties could have been used to make sure the results would be more reliable.

Similarly, Ryoo (2013) conducted research on Korean EFL learners' PV uses in written register by compiling a corpus from 257 Korean students' essays from essay contests. Again, as in Fadanelli (2012), comparing their findings to the list created by Gardner and Davies (2007), the results revealed that although there is an overall underuse of PVs by Korean learners, the top four most frequent AVPs – 'up', 'out', 'back' and 'down' – and the top four most frequent verbs – 'go', 'come', 'take' and 'get' – were identical to the ones used by native speakers. Moreover, they revealed that more than half of the 20 verb types used in PV constructions were the same as for native speakers of English. The most frequent PV combinations in the BNC also often occurred in the student corpus, while less frequent combinations in the former rarely appeared in the latter. The findings indicated that Korean EFL learners lack the formulaic competence of PVs and that highly frequent PVs in native speakers' use appeared to influence Korean learners' use of them. Similar to Fadanelli (2012), this study has one limitation which is the researcher limited himself to one L1 variety.

Instead, different L1 varieties could have been used to make sure the results would be more reliable.

To investigate creativity and unnaturalness in the use of PVs by Malaysian learners of English, Zarifi and Mukundan (2014) conducted a corpus-based content analysis of the EMAS corpus, a corpus of around 32,555 tokens which contains written essays and oral data of 872 students at form one and form four secondary level and form five primary level in Malaysia. Zarifi and Mukundan (2014) excluded the data collected from the Primary Level students as, because of their low competency in English, they produced only a small number of PVs. They used WordSmith Tools version 4.0 to extract the PVs which then were tagged and lemmatized to collect all the inflectional forms of each type. With the help of dictionaries, they tried to judge the acceptability of the PVs. They also checked those items without a dictionary entry against the BNC. Zarifi and Mukundan (2014) found that although The Malaysian ESL learners showed a great tendency towards both making up and using PVs in their language production, they often use and create unusual forms of idiomatic PVs. They suggested that material developers and teachers should provide students with materials and activities that enable them to produce PVs, especially idiomatic ones, more effectively.

In a French-speaking EFL learner context, the absence of PVs or parallel verbal forms in a speakers' L1 (French) may result in a lower frequency of PVs in L2 production. This is supported by Gilquin (2015), who investigated the use of PVs by higher-intermediate to advanced French-speaking learners of English in written and spoken registers. The results indicated that the French-speaking EFL learners' most commonly used particles were 'on', 'back', 'out', and 'up' (Gilquin 2015: 73) and the verbs were 'go', 'come', 'bring', and 'take' (2015: 75). In addition, Gilquin concluded that native speakers use more PVs in spoken than

in written registers while French-speaking EFL learners have the opposite pattern despite the fact that French-speaking EFL learners displayed general underuse of PVs in both spoken and written production (Gilquin 2015: 66). Moreover, French-speaking EFL learners showed mixed uses of formal and more informal PVs in their writing, displaying close similarity between their choice of PVs in their writing and speech (Gilquin 2015: 77). According to Gilquin (2015), this stylistic discrepancy between learners and native speakers is due to "the learners' failure to recognise the spoken-like (and often informal) nature of most phrasal verbs and/or to their lack of automaticity in the production of phrasal verbs under unplanned conditions" (Gilquin 2015: 81). Another study in the French-speaking EFL learner context was conducted by Riguel (2014), who conducted a corpus-based study to compare L1 French EFL learners' PV usages in writing to their native counterparts. The results showed that there was also an underuse of PVs by French-speaking EFL learners and preference for the single word equivalents. Riguel attributed this result to the lack of a similar linguistic feature between L1 and the target language as French does not possess PV constructions.

In another large-scale corpus-based study, Sung (2017) investigated the use of PVs by Korean learners of English, whose L1 lacks a similar structure. The learner corpus comprised 300-word argumentative essays written by 3,286 Korean-speaking learners of English, whose proficiency levels covered all proficiency levels. However, they were not evenly distributed. Sung (2017) focused on the most frequent 150 PVs in COCA (Liu 2011), and he compared the use of PVs by learners with that of native speakers, who were represented by the American part of LOCNESS. The focus of his study was on the structural patterns of PVs and preference between PVs and their one-word equivalents in the learner corpus. The findings revealed a significant difference between learners and native speakers

in terms of both token and type frequency of PVs. While learners significantly underused all structural types of PVs (i.e. VP, VPO, VOP), discontinuous transitive phrasal verbs were significantly underused. In addition, the results showed that learners preferred one-word verbs more frequently, indicating a close relationship between learners' underuse of phrasal verbs and their preference for one-word synonyms as suggested in earlier studies. According to Sung (2017: 21), the general underuse of PVs in the learner data is due to three major causes: a) typological and systemic incongruencies between the learners' L1 and the target language, b) syntactic complexity of the PV construction, and c) preference for one-word synonyms.

Garbatovič and Grigaliūnienė (2020) also examined the difficulty presented by PVs for non-native learners of English focusing on two learner groups from different mother tongue backgrounds, i.e. Lithuanian and Polish advanced students of English. The analysis was conducted based on Granger's (1996) Contrastive Interlanguage Analysis methodology, investigating the Lithuanian and Polish components of the International Corpus of Learner English, as well as the Louvain Corpus of Native English Essays. In order to analyze their written English, two components of ICLE were used: a subcorpus of Polish learner English (PICLE) from the second version of ICLE (Granger et al. 2009) and a subcorpus of Lithuanian learner English (LICLE, Grigaliūnienė and Juknevičienė 2012), which is a new addition to the currently developed version of ICLE. Both subcorpora represent written English of senior undergraduate university students whose first languages are Lithuanian and Polish. As a reference corpus, the Louvain Corpus of Native English Essays (LOCNESS, CECL, 1998) consisting of argumentative and literary essays written by British and American students (excluding A-levels examination essays) was employed. The results showed that

both learner groups underuse PVs compared with native English speakers which corresponded with the observations reported in the previous study on use of PVs conducted by Wierszycka (2013) on Polish advanced speakers of English. It is concluded that this could be due to the learners' limited repertoire of PVs as they employ significantly fewer PV types than native speakers. Furthermore, the results showed that learners face similar stylistic, semantic and syntactic difficulties in the use of PVs. In particular, the analysis showed that such errors might be caused by native language interference, as well as the inherent complexity of PVs.

In a more recent study, Badem and Şimşek (2021) investigated the most frequently used PVs by L1 speakers of English and Turkish EFL learners in written and spoken registers. Badem and Şimşek (2021) compared Turkish EFL learners' usage of PVs to L1 English speakers through four corpora. For written register, subcorpora of ICLE (International Corpus of Learner English), TICLE (Turkish International Corpus of Learner English) and LOCNESS (The Louvain Corpus of Native English Essays) were chosen. For spoken register, subcorpora of LINDSEI (The Louvain International Database of Spoken English), LINDSEI-TR (the Turkish component of LINDSEI) and LOCNEC (The Louvain Corpus of Native English Conversation) were selected, to find out if there is overuse or underuse of PVs by Turkish EFL learners. Moreover, Badem and Şimşek investigated the most frequent adverbial verb particles and lexical verbs in phrasal constructions comparing learners and native speakers. The results revealed that although lexical verb types differ to a large extent, Turkish EFL learners display a similar profile to L1 English speakers in terms of types of PVs and adverbial verb particles. However, these verbs and particles are significantly underused, especially in spoken register. In addition, Turkish learners tend to favor few

adverbial verb particles out of the ten most frequently used while leaving out the others regardless of the register.

In addition to the previous studies where the comparison was made between L2 and L1 in the use of PVs, there are some studies which focused on comparing the quantity of PVs in a native English speakers' corpus and a learners' textbook corpus (Kartal 2018; Sung 2012; Yang 2019). Sung (2012) compiled a corpus of 12 high school English textbooks in Korea to identify the types of PVs and their frequencies introduced in those textbooks. He found that a small subset of lexical verbs (e.g. find, put, give, go, come) combines with the most frequent particles (e.g. up, on, out, in), accounting for more than half the phrasal verb occurrences (tokens). The ten most frequent PV types he identified are 'find out' (18 tokens), 'put on' (17), 'give up' (11), 'go on' (9), 'come over' (8), 'get on' (8), 'look up' (8), 'pick up' (8), 'grow up' (8), and 'build up' (7). In study in the Turkish EFL context, Kartal (2018) compared PVs in four upper-intermediate level English course books used in Turkey to COCA and the BNC. The results revealed that the books differed greatly in their selections of PVs. It was suggested that a few of the PVs in the books were extremely rare in COCA and BNC.

In order to find out if China's textbooks contain enough frequently-used PVs, Yang (2019) compared PVs in Chinese textbooks with those in BNC and COCA. The purpose of the study was to explore the quality of the People's Education Press English textbooks by measuring if the books can provide students with necessary language materials – e.g. PVs. Yang (2019) found that the PVs chosen in the textbook corpus (TC) are largely based on intuition instead of scientific quantitative research, because the PVs in the TC differed from those in BNC and COCA from the four perspectives measured, namely frequency, rank order,

distribution patterns and coverage percentages. In addition, the TC covers only 27.3% of Liu's (2011) list of PVs, which indicates that the textbooks do not provide enough language input to prepare students to be proficient English users.

The results to date are somewhat inconclusive, as should be obvious from the aforementioned account of learners' PV knowledge. However, PVs continue to be a challenging aspect of English vocabulary despite growing awareness of their use – both by learners and native speakers. It is also revealed that English proficiency level has an effect on utilizing PVs combinations. Learners' difficulty using them or preference for their one-word equivalents has been explained by a variety of factors, including crosslinguistic differences between learners' L1 and English, the inherent semantic and structural complexity of PVs, the proficiency of learners, and quality and quantity of exposure. Although it may be reasonable for most of us to assume that each of these factors influences how learners learn and use PVs, it is still unclear exactly how they do so or how they interact.

2.2.2 Towards a study of PVs in a learner corpus in the Saudi context

A review of studies reveals a need for a systematic and comprehensive corpus-based analysis of the use of PVs in written register by L2 learners since there has been no quantitative analysis which investigates Saudi undergraduate EFL learners' use of PVs. Even though there are some studies on PVs focusing on *avoidance* behavior with various methodologies, to the best of my knowledge, there is no corpus-based study of use and under-use of PVs conducted in this context. Therefore, this study is notable for using corpus data to attempt to reveal an overall and characteristic profile of PV usage by Saudi EFL learners of English in written register in a comparative fashion. Results from this study could be a helpful resource for creating language teaching materials and guidelines for language

teachers. Thus, one of the goals of this study is to identify the most frequently used PVs by Saudi EFL learners in their written productions using corpus analysis and to reveal any possible overuse and/or underuse, and to compare the frequency results of PVs as well as their usage to find whether the most frequently used PVs in these EFL learners' productions are parallel with those by native speakers of English in written register.

Therefore, in this study, investigations of PVs are based on only the L1 vs. L2 type of comparison. Moreover, in order to take the issue of comparability and the variety of L1 English discussed earlier into account, the results of the present study will be compared not only to the list of most frequent PVs in Gardner and Davies (2007) as in the case of Fadanelli's (2012) and Ryoo's (2013) studies, but also to the list of most frequent PVs in Liu's (2011) corpus-based study. The reason behind choosing these Liu's (2011) is to ensure having two different L1 varieties (American and British) to compare with, as Gardner and Davies' list is a subset of Liu's list and these lists contain PVs from two well-known corpora BNC and COCA. It can be argued that the PVs found in the written compositions of the Saudi learners should be compared to the list of PVs found in the Saudi textbooks analyzed (see 3.5.3) which are used by those learners in the years of their studying English in public schools, However, although many of the PVs found in the Saudi textbooks (see Appendix A) can be found in Gardner and Davies and Liu lists, the purpose of this study is not to evaluate whether these textbooks include the suitable PVs to be taught, as in the case of Kartal's (2018), Sung's (2012) and Wenting's (2019) studies. Moreover, after analyzing the writings of Saudi learners, it has been found that there are some used PVs which were out of the list of PVs found in the textbooks but still can be found in Liu's list of 150 most frequent PVs such as 'blow up', 'bring back', 'bring out', 'cut off', 'keep on', 'lie down', 'settle down'

and 'throw out', (see Appendix B) . This means that using the list of PVs in the textbooks might not be suitable to be used as a reference list to be compared with. In addition, this shows that Saudi learners have access to sources other than the classroom to learn English as they were able to produce PVs not in their textbooks and it shows that classrooms could be not the only source for learning English. Furthermore, as this study has three different genres with different sizes as indicated in Section (4.2.1), in addition to having students with beginner level contributing to the corpus, it was hard to utilize a comparable corpus which included different genres. As this could yield unreliable results concerning the learners' knowledge/use of PVs. Therefore, for these reasons, it seems suitable to choose Gardner and Davies (2007) and Liu (2011) lists of the 150 most frequent PVs to be compared with the PVs used by Saudi learners in their writings.

2.3   Word knowledge

Vocabulary research's central tenet is that vocabulary knowledge is a much richer and more complex construct than what many people think it is. Researchers studying language acquisition have concentrated on various dimensions of vocabulary knowledge. Anderson and Freebody (1981:92-93) made a distinction between two main dimensions of vocabulary knowledge: breadth and depth. Breadth can be defined as the size or quantity of vocabulary, while depth is the quality or what kinds of information are known about the vocabulary. In addition, Meara (1984) concentrated on a third dimension called lexical organization, which refers to how a person's vocabulary knowledge is interconnected in their mind. Nation (2001) has also categorized vocabulary as receptive (related to word recognition) or productive (related to word production).

In the depth dimension, there are two main approaches to define vocabulary depth: the *developmental approach* which is based on the assumption that words undergo a number of stages in a learner's mind, from zero knowledge to full mastery (Wesche and Paribakht 1996), and the *dimensions approach* which details the various aspects of word knowledge (Nation 2001).

Compared to the developmental approach, the dimensions approach has attracted more attention over the last years (Read 2007; McCarthy, 1990; Henriksen 1999). These researchers have attempted to break down vocabulary knowledge into various components. As Schmitt (2010: 15) points out:

"While it is true that the form-meaning link is the first and most essential lexical aspect which must be acquired, and may be adequate to allow recognition, much more must be known about lexical items, particularly if they are to be used productively."

This claim draws on two significant areas of vocabulary knowledge research: the multi-faceted dimension of vocabulary knowledge, and the distinction between receptive knowledge and productive knowledge. Nation's (2013: 49) framework was the most comprehensive of these. Various knowledge components involved in knowing a word are divided into three major categories: form, meaning, and use. Under each category, features can be either related to productive mastery (P) or receptive mastery (R). These factors are referred to as lexical knowledge. They are listed in Table 2.4 below.

Table 2.4

The various components of word knowledge (Nation 2013: 49).

Form	Spoken	R	What does the word sound like?
		P	How is the word pronounced?
	Written	R	What does the word look like?
		P	How is the word written and spelled?
	Word parts	R	What parts are recognizable in this word?
		P	What word parts are needed to express the meaning?
Meaning	Form and meaning	R	What meaning does this word form signal?
		P	What word form can be used to express this meaning?
	Concept and referents	R	What is included in the concept?
		P	What items can the concept refer to?
	Associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
	Grammatical functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
	Collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	Constraints on use (register, frequency…)	R	Where, when, and how often would we expect to meet this word?
		P	Where, when, and how often can we use this word?

In fact, all these components of word knowledge are interrelated (Schmitt, 2014). It becomes clear that, from a practical pedagogical perspective, it would be impossible for teachers to conduct vocabulary tests assessing each of these components in order to determine student knowledge of vocabulary items. Due to time restrictions, the number of words that could be tested would inevitably be very small. Additionally, some aspects of word knowledge (e.g, word frequency or register) are difficult to elicit and lack established measurement techniques. Therefore, when choosing which aspect(s) of vocabulary knowledge to measure for their own purposes, vocabulary researchers (and teachers) interested in evaluating learners' vocabulary knowledge must carefully consider the constraints and implications of their decisions (Schmitt, 2010).

In the light of earlier discussion about receptive and productive distinction and since the form-meaning link can be thought of as the most crucial component of word knowledge, the following decision is whether to prioritize productive or receptive mastery. Productive knowledge refers to the user's knowing a lexical item well enough to produce it in speaking or writing, while receptive knowledge refers to the user's knowing and understanding a lexical item well enough during reading or listening (Schmitt 2010). These two components of word knowledge are interrelated (Schmitt 2014). The learners' receptive knowledge of lexical items does not mean that they are able to use them in language production. In vocabulary studies, there is a belief that learners' receptive knowledge is much larger than their productive knowledge (Webb 2008), and that both productive and receptive knowledge are essential for the proper assessment of the overall vocabulary knowledge (Schmitt 2010). In addition, a study carried out by Webb (2008) showed that "learners who have a larger receptive vocabulary are likely to know more of those words productively than learners who have a smaller receptive vocabulary". Schmitt (2010) believes that receptive and productive knowledge are both important components of overall vocabulary knowledge. Thus, language learners need both receptive and productive knowledge of PVs to function well in real-world communication. However, the extent to which receptive and productive knowledge overlap is inconclusive (Melka 1997; Fan 2000).

Schmitt (2010) suggests using the terms *form recall, form recognition, meaning recall, and meaning recognition* to help better understand the construct of receptive/productive knowledge. Form recognition occurs when the meaning is given and the L2 form must be chosen from a variety of options, as opposed to form recall, which occurs when the meaning is given and the L2 form must be produced. Meaning recognition occurs

when a form is presented and a meaning must be chosen from a range of options as opposed to meaning recall, which occurs when the form is presented and a meaning must be produced. Since vocabulary acquisition is a process that happens incrementally, students who are exposed to a word several times gradually acquire greater and greater mastery of that word (Garnier 2015). Although it is still unclear when a word switches from receptive to productive knowledge or rather how much exposure is necessary to reach this point, in terms of form-meaning knowledge, Schmitt (2010) hypothesizes that words are essentially learned in two stages. Learners first establish meaning recall, or the ability to know what a word means when they are reading or listening to it. They can use the word in a variety of spoken and written contexts, which establishes form recall in the second step.

On the other hand, form recognition and meaning recognition have very little application in the real world. As when listening to a radio program, people are not given a choice of form or meaning options. Therefore, as pointed out by Schmitt (2010: 88), "form recognition and meaning recognition levels of knowledge are useful in measuring the initial stages of vocabulary acquisition but have limited utility in describing usage-based receptive and productive mastery."

Moreover, among the subcategories of lexical knowledge, collocational knowledge is an important component of lexical knowledge for learners. Learners must know how words are combined or collocated. It is thought that competence in using appropriate collocations will help learners become more native-like (Lesniewska 2006:96). Knowing "collocability" is a crucial component of learners' lexical competence and that lacking it can cause "a serious loss of precision" (Howarth 1998:162). According to Waller (1993), collocational errors are more common in nonnative speaker writings than they are in native speaker writings. Lexical

collocations are more challenging to acquire than grammatical collocations, and learners' collocational knowledge has been found to increase with proficiency levels (Gitsaki 1996). In fact, there are many studies in L2 acquisition research have shown that lack of knowledge and use of collocations at different levels of proficiency could affect learners' communicative competence and language performance in a negative way (Stubbs 2004; Wray 2002; Nesselhauf 2005).

Furthermore, another important component of word knowledge is frequency (especially in input) which plays a central role in language acquisition as postulated by usage-based theories of language, both for single words and phrases (e.g. Ellis 2002, Tomasello 2003). Research on L1 acquisition (see Ellis 2002), has demonstrated how input frequency effects can have an impact on reading and spelling (e.g. Coltheart et al. 1993) and lexis (e.g. Balota and Chumbly 1984). The acquisition of L2 has also been found to be influenced by frequency (Ellis 2006). It has been demonstrated that frequency can be a predictor of L2 vocabulary knowledge as L2 learners tend to learn higher frequency words before lower frequency words (Nation 2013; Schmitt 2014; Ellis 2002; Nation and Waring 1997; Leech, Rayson and Wilson 2001) and the more frequent a word, the more likely it is to be known (Schmitt 2010). In addition, it has also been demonstrated that frequency plays a role in the acquisition of formulaic language such as PVs (Schmitt and Redwood 2011; Chen 2013; Garnier and Schmitt 2016; Zhang and Wen 2019).

Another key factor in language acquisition related to frequency is language exposure as a whole (for example through reading or watching films in the L2). In most learning contexts, there is no way of knowing how many times a specific word is encountered by learners, with the exception of carefully controlled experiments where it is possible to

determine or regulate the number of word exposures each learner experiences (Garnier and Schmitt 2016). The L2 environment of each learner is likely to be unique, with varying amounts of interaction with native speakers, exposure to L2 media like television, radio, and magazines, as well as classroom instruction. Additionally, the type of exposure is probably different depending on the goals for learning English, different interests, etc. Most EFL students receive the majority of their L2 exposure in a classroom setting, usually with the help of a teacher, a course book, and a predetermined syllabus (Garnier 2016). These could differ greatly from one learner to another based on their country of origin and why they are learning English. However, to solve these problems and get reliable measures of vocabulary frequency, corpora have thus been used as the main indicator of frequency as they rely on computers which help for obtaining accurate and fast counting. Since everyone's exposure to language is unique, intuitions of frequency are also likely to vary from person to person, which is the reason why corpora are viewed as being more reliable than individual judgment and intuitions of frequency.

The relationship between corpus frequency and knowledge of PVs has been investigated using corpus findings as the primary measure of frequency. To the best of my knowledge so far, only 4 studies tested PV corpus frequency as a predictor of PV knowledge: Schmitt and Redwood (2011); Chen (2013); Garnier and Schmitt (2016); Zhang and Wen (2019). Schmitt and Redwood (2011) measured the receptive and productive PV knowledge of 68 EFL learners by testing 60 highly frequent PVs using a form recall (to test productive knowledge) and a form recognition (to test receptive knowledge) test. Results indicated that students scored better in the receptive test (65.2%) than the productive test (48.2%) with a positive correlation between PV corpus frequency and PV knowledge at both the productive

and receptive levels. The researchers concluded that corpus frequency can reliably predict PV knowledge. Similar results were obtained by Chen (2013) in the form of positive correlations between the frequency rankings of the top 50 phrasal verbs in the BNC and COCA and their frequency rankings in her Chinese learners' corpus. According to Chen, this result shows that "high frequency of occurrences does lead to the learning and eventual production of phrasal verbs by EFL learners" (p. 436). Garnier and Schmitt (2016) examined 128 EFL learners' knowledge of highly polysemous PVs. Participants were asked to complete a form recall test (in the form of a gap fill exercise) containing 40 PVs (and a total of 100 meaning senses) taken from the PHaVE list (Garnier and Schmitt 2015). The results indicated that participants on average successfully produced PVs in 40.56% of all the 100 senses tested. The mean scores of participants on the most frequent sense of each of the 40 PVs was slightly higher at 44.5%. Investigating the individual senses of each PV in descending order of frequency (up to the 4th one) it has been concluded that the mean for each meaning sense was low, especially for the third sense (31.6%). However, in some instances, the fourth sense's scores were almost as high as the first one (44.3% and 44.5% respectively), which demonstrated that knowledge did not decline in parallel with sense frequency. The researchers pointed out that this might be partially explained by the fact that only three of the PVs used in the test had four senses. The PV senses frequency in learners' actual input such as their textbooks, might not have been the same as the native speakers' corpus frequency, which is another explanation that has been put forth. In another recent study, Zhang and Wen (2019) examined intermediate and advanced Chinese learners' knowledge of polysemous English PVs. Participants were asked to judge the acceptability of 100 senses of 50 PV taken from the PHaVE list (Garnier and Schmitt 2015). Only two senses

of each PV were tested, however (the highest frequency meaning sense and the lowest frequency meaning sense). The conclusion was that both intermediate and advanced learners tend to accept the higher frequency senses more than the lower frequency sense.

The aforementioned studies to an extent confirm the central tenet of usage-based models that frequency is a key factor in PV acquisition, even though they do not demonstrate the mechanism by which corpus frequency actually affected the participants. However, what is frequent in the context of native speakers as identified in a corpus of native speakers does not necessarily translate to frequency in the context of the second language. (e.g. classroom, textbooks). In fact, there is a notable discrepancy between applied linguists' recommendations and what is presented in textbooks, according to the small body of research that examined the selection criteria of PVs in ELT textbooks (Darwin and Gray 1999; Koprowski 2005; Zarifi and Mukundan 2012). Koprowski (2005) analyzed three general English foreign language textbooks and concluded that "the selection process appears to be unscientific and largely grounded on the personal discretion and intuition of the writers" (p.330). Thus, learners might be presented with low-utility PVs that they may only encounter in their textbooks if textbook writers base their selection on intuition rather than on empirical results. In fact, it appears that the relevant input that students are exposed to in the classroom from both the materials (Schmitt and Schmitt 2014) and the teachers' talk (Horst 2010) is unprincipled in regard to PVs. To better understand the relationship between frequency and PV acquisition, it is necessary to take into account textbook frequency counts if we view the ELT textbook as one of the primary sources of language input in the ELT classroom (Ljung 1990).

In addition, to determine which PVs the participants were familiar with and, consequently, which PVs to target in creating their tests, most of the researchers in the studies reviewed on the avoidance of PVs by EFL learners (see 2.4.2 and 2.4.3) largely relied on their experiences as teachers. The main flaw in this approach, however, is that it makes the assumption that the participants only received input in the context of the classroom, which may not be true. The type of input that students are exposed to is almost impossible to control because it greatly depends on their personal preferences, such as whether they prefer reading or watching movies. Therefore, any conclusions drawn intuitively about the specific PVs that students are exposed to are generally liable to error. Indeed, as Alderson (2007) points out "judgements by professional linguists do not correlate highly with corpus-based frequency counts." (p.383). Therefore, in order to select target items that will produce results that are meaningful and understandable, rigorous analyses of large corpora and textbook frequency counts must be performed.

2.3.1 Previous research on receptive and productive knowledge of PVs

A number of studies have focused on the EFL/ESL learners' receptive and productive knowledge of PVs. Perhaps most notable is the study by Schmitt and Redwood (2011), who examined L2 learners' receptive and productive knowledge of highly frequent PVs in English. Being aware of the fact that "phrasal verbs are idiosyncratic in terms of their learning burden" and that "a purely frequency-based explanation can never fully explain their acquisition" (p. 187), looked at some possibly influential factors in their learning such as PV frequency, amount and type of exposure to TL, gender, age and proficiency level. Fifty of the 60 PVs chosen in Schmitt and Redwood's study were taken from Gardner and Davies' (2007) list of PVs, and the other ten were less frequent items taken from student coursebooks

and grammar reference books. 68 students participated in this study. They were studying English in private language schools. Their proficiency levels were intermediate (23) and upper-intermediate (45). The instrument which was used to measure the receptive and productive knowledge of PVs was the cloze test format. In the receptive test the students were asked to select the correct PV among four options in order to complete a sentence, whereas in the productive test, students were asked to provide the missing PV in a sentence context. Results showed that they had good receptive knowledge (65.2 %) and fair productive knowledge (48.2 %) of the target PV bearing in mind their level of English. Because frequency has long been recognized as a crucial predictor of L2 vocabulary knowledge (i.e. the more frequently a word occurs, the more likely it is to be known; Nation, 2013), (see Section 2.3), Schmitt and Redwood made the assumption that the same could be expected with PVs. The results showed a significant positive relationship between the students' receptive and productive scores and PV frequency rankings in the BNC, with higher level of correlation for the productive scores than for the receptive scores. In addition, there was no significant difference in the scores between the written component of the BNC and the spoken one in relation to both receptive and productive knowledge. Regarding COCA, similar correlations were noticed between PV knowledge and frequency rankings in the COCA in terms of productive mastery, but they were slightly higher in terms of receptive mastery. As a result, the study showed that there is a relationship between PV knowledge and frequency of occurrence in corpora as higher frequency PVs were noticeably learned by a greater number of participants than lower frequency PVs. However, this relationship was not strongly linear as some PVs which are considered as less frequent were better known by participants than the most frequent PVs in in Gardner and Davies' (2007) list. This suggests,

as Schmitt and Redwood have noted, that it is unlikely that the participants' exposure to PVs strictly matched PV frequency in the BNC and COCA. Since many course books used in language classrooms are not corpus-based, the selection of items to be included is generally based on their intuition (Koprowski 2005). Additionally, non-native language instructors might not even be very familiar with some of the most frequently used PVs themselves. Therefore, besides corpus frequency, other factors must have been involved which would explain why some PVs at the lower end of the frequency range were more well-known than more frequent PVs. According to Schmitt and Redwood (2011), there was a relationship between achieving high scores and overall language proficiency. Upper-intermediate participants scored higher than the intermediate level participants. In terms of age, gender and the type of instruction and hours of classroom input that the participants had received prior to the test, no significant relationship was found. However, when it comes to language exposure, the authors noticed that both extensive reading and watching English language films or television was significantly correlated with PV knowledge, while listening to English language music or using social networking sites in English was not.

In another recent study, Garnier (2016) conducted a study to explore L2 learners' productive knowledge of a sample of PVs and meaning senses on the PHaVE List at a form-recall level of mastery, and the effect of a number of factors on this knowledge. The participants were 128 Chilean students of English (36 males, 84 females, 8 unknown) from two Chilean universities. Their age ranged from 18 to 44 years old, and they shared the same L1, Spanish, which does not possess the PV structure. The participants were all following a mixed English-medium and Spanish-medium BA course in either TEFL or English Language and Literature in their universities. She found that only about 40 % of meaning senses were

known, with a 20 % chance that all the various meaning senses attached to a given PV would be known. A mixed-effect modelling analysis revealed a significant effect of two factors on scores: item frequency and learner engagement in leisure activities in the L2 such as reading and social networking. According to Garnier, the participants showed rather limited knowledge of highly frequent polysemous PVs, despite their presumably high level of English proficiency. However, one of the shortcomings of this study is that the proficiency level of the participants is unknown. The researcher relied on her presumption that they had a relatively high level of L2 proficiency. In fact, her assumption could not be confirmed since she could not get access to their scores on standardized proficiency tests which they may have taken upon starting university.

Kamarudin (2013) investigated the use of PVs by Malaysian learners of English. The study included a comprehension, multiple choice test of PVs completed by 480 secondary school students, and corpus analysis of 24 PVs in the corpus of English of Malaysian Students (EMAS) and the Bank of English (BoE) Corpus. The results showed an average understanding of frequent PVs among Malaysian students; however, these results were influenced by language proficiency. As language proficiency improved, better understanding and use of PVs was achieved. Other factors were also found to be relevant to varying degrees, such as gender, L1-L2 structural differences and the semantic complexity of PVs.

Yorio (1989) investigated the use of idiomatic expressions, specifically idioms, in learners' writing. In terms of PVs, he found that the PVs produced by the learners are similar in number to these produced by native speakers, but idiomatic PVs are produced less frequently in spite of the fact that the learners had lived in the United States for a number of years. Yorio (1989) used free written production data from which he extracted all occurrences

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of PVs. Yet, one of the shortcomings with this study is that the number of learners' productions examined was still very small, and there was no discussion regarding the details of which PVs were used in the study. However, this could be explained by the fact that the PVs in this study are only one aspect of Yorio's (1989) research, and his main interest was learners' avoidance of idioms.

Sjöholm (1995) carried out a study where he investigated how internal and external learner factors influence the processes of SLA, and under which conditions cross-linguistic influence appears. Finnish-speaking and Swedish-speaking participants aged 16-25 were given a multiple-choice test with each item containing two correct alternatives: a PV, a synonymous one-part verb, and two distractors. Sjöholm found that both language groups tended to avoid or underuse English PVs, but Finnish speakers did so significantly more than Swedish speakers in the early stages of learning. The choice pattern made by Swedish speakers was similar to their native language pattern. As Swedish has a PV structure while the Finnish does not, Finnish-speaking students underused PVs significantly more than Swedish-speaking students. This result supports the findings in Dagut and Laufer's (1985) study, which suggest that L1-L2 structural differences can slow successful learning of PVs. However, structure did not seem to be the only factor. While Finnish-speaking participants totally avoided idiomatic PVs, the Swedish-speaking participants were found to perform better on those PVs that have semantic equivalents in Swedish, especially during the early stages of learning. This seems to suggest that both structural and semantic differences of L1-L2 or even the similarity between L1 (Swedish) and L2 (English) present problems to language learning. In addition, learners who have been exposed to the wide use of PVs abroad

based on the number of years studying English are more likely to produce idiomatic PVs more frequently than those who did not receive 'natural' input.

However, there are a number of shortcomings identified from the past studies discussed above such as the way the PVs were chosen in the studies which were based on the intuitions of the researcher or taken randomly from different sources, small numbers of participants, imbalanced numbers of literal and figurative PVs, or learners of unknown proficiency level. Thus, a number of adjustments will be made to the present study to avoid these shortcomings. For example, the choice of PVs will be decided based on a specific procedure to maximize the likelihood that students were presented with PVs with which there is a good chance they are familiar, namely those that they have been introduced to through textbooks as well as 'high-frequency PVs', which many learners at this stage of learning (i.e. undergraduate students) are likely to have encountered. As the previous studies failed to ensure the participants' knowledge of the PVs prior to testing, so their results on avoidance could simply reflect the participants' ignorance of the PVs. Furthermore, this study will balance between the number of literal (16) and figurative (16) PVs to gain more reliable results. It will also proceed on the basis of clear knowledge of participants' English proficiency level, and a large number of participants.

2.4   Avoidance

It is generally believed that PVs are considered to be one of the problematic features for ESL/EFL learners. An avoidance strategy is thus employed by ESL/EFL learners when they perceive that a target language word or structure is difficult to produce. It is one of the common strategies employed by L2 learners in the production of the target language when they have inadequate and incomplete knowledge about grammatical rules and lexical items.

Having already discussed how difficult PVs can be for ESL/EFL learners for the reasons mentioned in the previous section, in this section, avoidance behavior will be discussed in detail, starting with avoidance in general and later focusing on PV avoidance specifically.

2.4.1 Definition

Avoidance is defined as a strategy in which L2 learners choose to use one language form or structure over another because they find it difficult or that particular structure is non-existent in their L1 in order to avoid producing an error. It is further viewed as a tactic demonstrated by second language speakers when they are faced with "a linguistic problem" and need a solution due to a lack of the necessary linguistic resources (Faerch and Kasper 1983). "Linguistic problems" can be defined as "recognition by an individual…of the insufficiency of his … existing knowledge to reach a … goal and of the consequent need for expanding this knowledge" (Klaus and Buhr 1976: 974). Richards et al. (1998) described avoidance as follows: "When speaking or writing a second or foreign language, a speaker will often try to avoid using a difficult word or structure and will use a simpler word or structure instead.". Kellerman (1992) argues that avoidance is a complex phenomenon and classifies this complexity into three types; the first one happens when learners know or expect the existence of a problem and at least have some incomplete idea of what the target form is like. The second one occurs when learners know what the target form is like but find it too difficult to use. The third one is manifested when learners know what to say and how to say it but are unwilling to express it since it means disregarding the norms of their own behavior. Seliger (1989) claims that the identification of avoidance is difficult, and it only makes sense to talk of avoidance if learners are aware of what they are avoiding.

Avoidance has in some cases been confused with ignorance and one should distinguish between them (Laufer and Eliasson 1993: 36; Liao and Fukuya 2004: 194; Kharitonova 2013: 52; Sjöholm 1995: 118): avoidance, rather than ignorance, occurs when the learners are somewhat passively familiar with the construction that is being studied (Hulstijn and Marchena 1989: 243). It is crucial to draw a clear distinction between ignorance and avoidance. One of the differences between the two can be made in terms of knowledge. Seliger (1989) states that it is very difficult to differentiate avoidance from ignorance or incomplete learning. He points out that "true avoidance" happens "when learners can form the target structure but have not yet acquired contextual or distributional rules of form" (p. 12). Seliger carried out a study to investigate Hebrew EFL learners' use of the passive voice. He found that Hebrew-speaking learners avoided the passive voice structure in English because they did not use it in their L1 (Hebrew) and therefore they transferred this into L2 (English) preferring to use the active voice instead. He refers to this phenomenon as "true avoidance." However, since Hebrew learners might not have known the context where the passive voice is used, Kamimoto et al. (1992) argue that "true avoidance" might not be avoidance at all as the learners in question might not have avoided a structure which they do not know.

In the same line, Ellis (2003) points out that the identification of avoidance is difficult and "it only makes sense to talk of avoidance if learners know what they are avoiding" (p. 302). Thus, ignorance suggests lack of knowledge whereas avoidance denotes some degree of knowledge, which could be faint. According to Li (1998), avoidance is a situation when L2 learners know of the existence of the rules of a certain structure but are not sure about the details. As a result, when they find themselves in situations which require the use of this

structure, they try to avoid using it and use an alternative structure or structures which serve the same communicative purpose.

In addition, avoidance "presumes an awareness, however faint of a given target language feature, and it involves a quasi-intentional or intentional choice to replace the feature by something else" (Laufer and Eliasson 1993: 36). In other words, avoidance can take place with an intentional choice and a conscious plan by which the learner decides to use or not use a certain structure while ignorance is regarded as not intentional (Congreve 2004).

The avoidance phenomenon was initially reported in 1974 by Schachter during an investigation of its causes. She pointed out the significance of investigating not only what second language (L2) learners do produce but also investigating what L2 forms learners tend to avoid using consistently. She investigated Chinese, Japanese, Persian, and Arabic-speaking learners' avoidance of relative clauses. She found that if students find a particular construction in the target language difficult to comprehend, it is very likely that they will try to avoid producing it. Since this early study, many others have researched avoidance of various structures in English, including PVs.

However, Kleinmann (1977) argued that Schachter's study was inconclusive as neither the subjects' L2 proficiency level nor their ability to use English relative clauses was controlled, thus the subjects' so-called avoidance of English relative clauses could be simply due to their ignorance of such L2 forms rather than conscious avoidance. Therefore, Kleinmann (1977) suggests that avoidance should not be considered as equal to ignorance, as ignorance is a state of mind and should be viewed as the end point of a scale or continuum relating to the amount of mentally stored or memorized information in a given area, while

avoidance is a process for L2 learners to be able to handle information and that can be applied anywhere along the scale. Therefore, avoidance is one of the strategies employed by L2 learners to overcome what they might see as difficult in the second language. Also, Kleinmann (1977) argued "to be able to avoid some linguistic feature presupposes being able to choose not to avoid it; i.e. to use it," (p.97). In other words, it is crucial to make sure that the learners know the target structure before investigating their avoidance of its use. Learners cannot be labeled as 'avoiding' a specific structure of which they are basically ignorant.

Liao and Fukuya (2004) also criticized Schachter's (1974) study because of some unnecessary shortcomings found in the study. They argue that it was limited because it "did not control for proficiency level or the frequency of relative clauses in the texts" (p. 194). In addition to that, as Seliger (1989) pointed out, they had "no proof that the learners had the ability to use relative clauses. Therefore, the Chinese and Japanese learners' so-called avoidance of producing English relative clauses may have resulted simply from their ignorance of the structure rather than conscious avoidance" (p. 194). Thus, Japanese learners, according to Seliger, might have shown partial or incomplete acquisition due to the fact that there were some occurrences of relative clauses in their compositions.

Further, Kleinmann (1977) investigated the relation between avoidance and knowledge seeking to find out more about avoidance behavior in different syntactic structures (the passive, present progressive, infinitive complement, and direct object pronouns). The participants were 39 intermediate level learners of English divided into two groups (24 native speakers of Arabic and 15 native speakers of Spanish and Portuguese). These four structures were selected based on the contrastive analysis between English and these three languages. Kleinmann made an assumption that Arabic learners would have

difficulty with passive and present progressive structures and Spanish and Portuguese learners would have difficulty with infinitive complement and direct object pronoun structures. To establish the learners' prior knowledge of three of the structures (passive, infinitive complements, and present progressive structures), a multiple-choice comprehension test was administered so that any non-use could not be attributed to ignorance but to avoidance. Regarding the fourth structure (direct object pronouns), it was assumed that because the participants were intermediate level students and so they had already mastered this structure, there was thus no need for a test to be administered on this structure. The results showed a pattern of avoidance in accordance with difficulty predictions. There were significant differences between the Arabic and Spanish/Portuguese learners in the frequency with which they used the target structures. There was also a correlation between frequent use of the structures and various affective measures (such as confidence and anxiety measures). He concluded that the reason behind these significant differences was avoidance. The findings support Schachter's (1974) claim that avoidance can be explained by the structural differences between the first and the second language. However, there is an interaction between linguistic and psychological factors. Seliger (1989) commented that the reason for the non-use of language structures in the target language could be L1-L2 differences, ignorance, non-acquisition, or pre-systematic use of the not yet fully acquired form, or true avoidance.

Another study which was inspired by Schachter's (1974) observation and confirmed the presence of avoidance of some linguistic structures by English learners is Li (1996). Li (ibid.) aimed to differentiate between conscious avoidance and subconscious underproduction hypothesizing that Chinese and Japanese learners in Schachter (1974) under

produced English relative clauses rather than avoiding them. He found that Chinese ESL students could produce all the relative clauses except for those that had special pragmatic functions, bearing in mind that the structures of relative clauses were different in the two languages. He thus concluded, "it is not the apparent formal difference that causes Chinese learners to consciously avoid English relative clauses, but the more subtle pragmatic differences that make them subconsciously underproduce this structure" (p. 171).

Various categorizations of avoidance exist in the literature. The strategies of reduction can be subcategorized into formal reduction strategies and functional reductions (Faerch and Kasper 1983). Formal reduction strategies are described by Faerch and Kasper (1983) as communication by a learner through the application of a reduced system to avoid producing utterances that are either incorrect or not fluent. It is done when L2 learners avoid using the rules which they have not fully mastered yet and choose a reduced system of rules instead. Faerch and Kasper further subdivide formal reduction strategies into the following sub-categories: phonological, morphological, syntactic, and lexical.

Functional reduction strategies are also utilized when L2 learners reduce or abandon their communicative goal. They are also divided into the following sub-types:

- Actional reduction: when learners prefer to avoid performing certain speech acts or discourse functions unfamiliar to them.

- Model reduction: when learners decide not to mark a certain speech act for politeness/ social distance.

- Reduction of the propositional content includes topic avoidance, message abandonment, and meaning replacement (Faerch and Kasper 1983).

Dörnyei (1995) and Rababah (2001), on the other hand, classify avoidance into two subcategories:

- Topic avoidance: when L2 learners avoid talking about topics which pose difficulty to them.

- Message abandonment: when learners leave the message unfinished due to linguistic difficulty.

In Corder's (1983) taxonomy, avoidance is considered as message adjustment or a risk avoidance strategy. He adds semantic avoidance as a third subcategory of avoidance. Additionally, Brown (2007) categorizes avoidance into the following types: syntactic avoidance, lexical avoidance, phonological avoidance, and topic avoidance.

However, these various classifications of avoidance are considered somewhat unclear or similar in nature, and not always practical. It is generally believed that avoidance in language communication is a positive, active and conscious strategy to solve linguistic problems and to attain the best results regarding communication. However, if learners resort to avoidance strategies whenever they face linguistic obstacles, they will not be able to improve and make progress to master the target language at the end as desired. Ellis (1994) highlights this by saying that the overuse of the avoidance strategy to make up for the lack of proficiency in the target language would result in an illusion where the learner felt no need to acquire new knowledge of the target language.

2.4.2 Avoidance of PVs

Researchers in the field of SLA have attempted to examine the avoidance of PVs among ESL/EFL learners (For example, Dagut and Laufer 1985; Hulstijn and Marchena

1989; Laufer and Eliasson 1993, Liao and Fukuya 2002; Schmitt and Siyanova 2007; Brown 2000; Cook 1993; Dagut and Laufer 1985; Ellis 1989, 2003; Faerch and Kasper 1984) from different contexts such as Korea (You 1999), Egypt (El-Dakhs 2016), Sudan (Minalla 2017), Turkey (Akbulut 2018), Jordan (Abu Joudeh and Fatim 2022), Japan (Okuwaki 2021) and so on. The findings from previous studies support the fact that PVs are one of the linguistic features of English which many EFL/ESL learners find difficult and which may lead to avoidance causing learners to prefer using a single word synonym instead. Some studies described PVs as "a recurring nightmare" for EFL/ESL learners (Littlemore and Low 2006), and other studies have claimed that PVs "do not enjoy a good reputation" (Rudzka-Ostyn 2003). Researchers have reported many different reasons as to why PVs were found to be problematic and three common main reasons were given for possible avoidance: L1-L2 difference, L1-L2 idiomatic similarity, and inherent L2 complexity (Dagut and Laufer 1985; Hulstijn and Marchena 1989; Laufer and Eliasson 1983; Liao and Fukuya 2004).

Research on the avoidance of English PVs was first conducted by Dagut and Laufer (1985), who looked at a group of Hebrew-speaking students of English and their use of English PVs, focusing on the frequency of the avoidance of three types of PV (literal, figurative and completive). They administered three tests to test learners' active use of PVs: a multiple-choice test, a translation test and a memorizing test. For each test, they used 15 test sentences for which they had found - with a multiple-choice test- a preference for the PV over the semantically equivalent one-word verb by a group of native speakers. The multiple-choice test with these 15 test sentences, then, was given to 60 first-year university students from various departments except English Language and Literature. These students had had 7-8 years of English in high school, and they were taking an EFL course for non-English

majors. The translation test, on the other hand, was given to 60 different Hebrew-speaking students, 30 of whom were EFL students whereas the other 30 were students of English Language and Literature whose proficiency in English was higher than that of the EFL students. Finally, the memorizing test was given to a third group of 60 EFL (non-English majors) Hebrew-speaking students.

The results of the study demonstrated that the majority of the learners avoided using PVs, exhibiting a strong preference for one-word verbs, and the avoidance was very noticeable with figurative PVs rather than with the literal or completive PVs. The authors attributed this finding to L1–L2 structural differences between L1 (Hebrew) and L2 (English) as Hebrew does not have a construction that corresponds to the English PVs.

However, Liao and Fukuya (2004) and Waibel (2007) pointed out some shortcomings with Dagut and Laufer's (1985) study. First of all, they had not tested the learners' proficiency level vis-à-vis the PVs before administrating the test. They only assumed that "these students had come across all of the 15 PVs at some point in their education" (Dagut and Laufer 1985: 75). Thus, they failed to eliminate learners' ignorance of these PVs which therefore could be the reason behind these Hebrew-speaking learners' underproduction of PVs rather than real avoidance. Secondly, according to Liao and Fukuya (2004) and Waibel (2007), although Dagut and Laufer (1985) had pointed out that the literal PVs had been used much more frequently than the figurative ones, the study did not take into account semantic difficulties as a cause of avoidance. However, with all these shortcomings, Dagut and Laufer's (1985) study is considered as an important study for researchers who are concerned with the avoidance of PVs in learner English.

Based on the conclusion drawn by Dagut and Laufer (1985), a follow-up study on avoidance was carried out by Hulstijn and Marchena (1989) who hypothesized that Dutch learners would still avoid PVs, not for structural reasons as the Hebrew-speaking learners did, because they have the same syntactic structure in their L1, but for semantic reasons. They used the same kinds of tests as Dagut and Laufer (1985), i.e. a multiple-choice test, a translation test, and a memorizing test. Their participants were six independent groups, three groups of intermediate learners and three groups of advanced learners. The intermediate learners were secondary school students (about 17 years old) who had received instruction in English for a period of 5 to 6 years whereas the advanced learners were first-year university students of English. Their results indicate that Dutch learners (both intermediate and advanced) did not avoid PVs but, interestingly, they avoided idiomatic PVs that have Dutch equivalents and that they perceived as too Dutch-like. Thus, Hulstijn and Marchena (1989) conclude that similarities between L1 and L2 are also a possible reason for PV avoidance. Another interesting finding was that the Dutch learners also sometimes tended to adopt a 'play-it-safe' strategy as they were "preferring one-word verbs with general, multi-purpose meanings over PVs with specific, sometimes idiomatic meanings" (Hulstijn and Marchena 1989: 241). Hulstijn and Marchena (1989) therefore claimed that the L2 learners of English avoid using PVs mostly because of semantic considerations.

A similar study was carried out by Laufer and Eliasson (1993), who took up both Dagut and Laufer's (1985) and Hulstijn and Marchena's (1989) lines of argument to find whether avoidance behavior was due to L1-L2 differences, L1-L2 similarity, and L2 complexity. They used a multiple-choice test and a translation test to examine whether Swedish learners of English would prefer PVs or one-part verbs. The learners were Swedish

adult university students in the Departments of Scandinavian, English, and Linguistics at Uppsala University. The multiple-choice test was given to 50 students, and the translation test was given to 37 students. There was a control group of 17 additional students who completed a supplementary comprehension test to ensure that the PVs used in the multiple-choice test and translation test were clear.

They found that the PVs were not avoided, not even figurative ones, by the Swedish learners whose L1 possesses such a structure. Comparing their results with the Hebrew-speaking learners of English in Dagut and Laufer's study (1985), Swedish learners used significantly more PVs than Dagut and Laufer's Hebrew-speaking learners. Moreover, Swedish learners used significantly more figurative PVs than Hebrew-speaking and Dutch learners as well. They conclude that the best factor triggering avoidance is differences between L1 and L2 language.

Sjöholm's (1995) study, referred to above, also looked at the avoidance of PVs. The Finnish and Swedish speaking learners of English who participated in this study had four different levels of English proficiency. All of them were given a multiple-choice test. The findings indicate that both groups (Finnish and Swedish) tended to use PVs less than native speakers of English. However, Finnish participants underused PVs significantly more than Swedish participants, especially at the intermediate level (Sjöholm 1995; Kharitonova 2013: 40; Waibel 2007: 28).

Sjöholm suggests that these differences are basically due to structural causes, as PVs are absent from Finnish whereas Swedish does have this structure. The greater avoidance of PVs on the side of the Finnish-speaking learners would thus support Dagut and Laufer 's

(1985) hypothesis. Additionally, Sjöholm found that U-shaped behavior[1] could be recognized more with the Swedish-speaking learners than with the Finnish-speaking learners, which makes sense as U-shaped behavior has been claimed to be found only when there are similarities between L1 and L2. Also, these results indicated that Swedish-speaking learners performed better with 'Swedish-based' PVs than Finnish-speaking learners, for which the similarity between L1 (Swedish) and L2 (English) again could be the reason. However, structure did not seem to be the only factor as Finnish-speaking learners tended to prefer figurative PVs less often than Swedish-speaking students, especially during the early stages of learning. This seems to indicate that inherent complexity of figurative PVs also has some influence on avoidance behavior.

Another study focusing on PV avoidance is Liao and Fukuya (2004), who investigated the avoidance of PVs by 70 Chinese learners of English, who do not have PVs in their L1. They used the same kinds of tests as Dagut and Laufer (1985) and Hulstijn and Marchena (1989), i.e. a multiple-choice test, a translation test and a recall test. They used different PVs and more casual dialogues as the context to suit their students, who were divided into six groups (intermediate and advanced).

Liao and Fukuya's findings show that proficiency level, PV type, and test type have an effect on learners' avoidance of PVs. The intermediate learners avoided using PVs significantly more than the advanced learners. The advanced learners, on the other hand,

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[1] Kellerman (1985) defines U-shaped behavior as systematic linguistic behavior over time which can be manifested in three different stages. First stage, the learner displays error-free performance in some limited linguistic domain. Second stage, the performance deviates from the target, and as a result also from performance in stage 1. Third stage, "marks a return to performance which matches the norm, as was also the case in stage 1." (1985, 345).

showed a slight tendency to use PVs less than the native speakers did. Liao and Fukuya explain intermediate learners' avoidance by the structural differences between English and Chinese which supports Dagut and Laufer's (1985) finding that L1-L2 difference plays a basic role in triggering avoidance. Figurative PVs were avoided by the intermediate group but not by the advanced learners, which suggests that in the advanced group "learning seems to have counteracted the effects of L1-L2 difference for the advanced learners of English" (Liao and Fukuya 2004: 211). As a result, and contrary to the previous findings, Liao and Fukuya (2004) claim that PV avoidance behavior is a manifestation of interlanguage development from avoidance to non-avoidance rather than of L1-L2 differences or similarities. Therefore, Liao and Fukuya assume that regardless of learners' native language, all learners of English will avoid using PVs at the beginning until they become proficient enough to use them in a correct way. They claim that this has been confirmed by their findings and the finding of Hulstijn and Marchena's study (1989) which found that intermediate Dutch learners of English avoided PVs on the MC test whereas advanced Dutch learners did not avoid them categorically. However, the claim that the intermediate Dutch learners avoided PVs is based on a statistically significant difference for only one of three tests, which makes it inconclusive. Thus, more research would be needed to confirm this claim and that Dutch learners of English show a developmental shift from avoidance to non-avoidance.

Furthermore, Liao and Fukuya (2004) found that the intermediate Chinese learners of English tended to avoid figurative PVs more often than literal PVs on the translation test in which neither phrasal nor simple verbs were given as possible answers so that learners did not have any cues. They believe that this could be due to L2 semantic complexity, "an indicator of the impedimental nature of L2 semantic complexity on learners' use of English

PVs" (p. 199). However, it could also be due to a distributional bias as 11 of the PVs used in their study were literal whereas only 4 were figurative, which might have influenced the results.

In spite of the significance of Liao and Fukuya's study (2004) for pointing out different factors that could have an influence on learners' avoidance, their study had some shortcomings. The PVs used in the study were exclusive to American English, and no reference was made to the logic behind the choice of these PVs. It would be more convincing to provide a solid ground for their choices such as looking at a corpus of spoken or written data or ESL/EFL textbooks or even using native-speaker intuitions. In addition, as argued by Kleinmann (1977) and discussed above "to be able to avoid some linguistic feature presupposes being able to choose not to avoid it; i.e. to use it" (p.97). Therefore, Liao and Fukuya (2004) should have provided at least some evidence that the learners had prior knowledge of the PVs being tested in order to decide why learners avoided some PVs. Furthermore, one of the significant issues which is even brought up by Liao and Fukuya is the above-mentioned unequal distribution of figurative and literal PVs (11 literal and 4 figurative). They point out that this could be the possible reason for learners' avoidance, and it might have led them to rely more often on some choices rather than others, which thus influences the overall results. Finally, the recall task was one of the tasks employed by Liao and Fukuya to elicit actual use of PVs. However, this specific task appears to have tested the memorization of PVs instead.

Siyanova and Schmitt (2007) examined the use and the relative frequencies of multi-word vs. one-word verbs by advanced learners of English as compared to native speakers in both spoken and written contexts and investigated whether exposure to the second language

environment has an effect on the use of PVs. The participants were 65 native speakers (undergrad, postgrad, and professionals), and 65 non-native speakers whose English proficiency was advanced, and first languages were Arabic, Russian, Italian, and Chinese. They used both corpus analysis and questionnaires as tools to collect the data. A questionnaire was made up of 26 phrasal verbs and their one-word verb pairs set in short dialogues and they consulted three corpora: the CANCODE, BNC, and the above-mentioned International Corpus of Learner English (ICLE). The results indicate that 'multi-word verbs' are more frequent in spoken than written discourse and that one-word verbs were more prominent than 'multi-word verbs' in both corpora and questionnaires. Also, non-native speakers were less likely to use multi-word verbs than native speakers in informal spoken contexts.

In addition, the length of time in a native English-speaking environment did not affect the likelihood of using the multi-word verbs, which indicates the complex nature of 'multi-word verbs' and cross-linguistic factors which make the learners need to spend an extremely long period of time to feel completely comfortable with these 'alien' 'multi-word verbs' (Siyanova and Schmitt 2007, p. 132). Siyanova and Schmitt (2007) concluded that their findings supported those of Dagut and Laufer (1985) who found evidence of avoidance. Therefore, the results were different from Liao and Fukuya (2004), who found their advanced Chinese learners differed slightly from native speakers on using PVs and where no avoidance behavior was reported.

2.4.3 Saudi Arabian studies of avoidance

A small number of studies focus on the avoidance of PVs among Saudi learners of English in the ESL/EFL environment[2].

Ben Duhaish (2008) investigated the avoidance behavior of 129 Arab intermediate and advanced learners of English assuming that four factors are responsible for avoidance. The four factors are the learners' proficiency level (advanced vs. intermediate), test types (multiple-choice vs. translation test), PV type (literal, semi-transparent, and figurative), and language environment (ESL vs. EFL).

The findings of his study indicated that learners' proficiency level, PV types, test types and language environment all play a role in influencing Arab learners' avoidance of PVs. The results indicate that the main effect was the proficiency level of the learners as advanced learners had noticeably higher scores than the intermediate level learners. Regarding verb types, the results show that the learners had noticeably higher scores in the use of literal PVs than the figurative and semi-transparent ones. When it comes to test type, the learners performed better on the MC test than they did on the translation test. With regard to ESL learners and EFL learners, ESL learners had significantly higher scores than EFL learners.

Ben Duhaish (2008) suggested that the Arab learners' avoidance is due to the fact that Arabic does not have the PV structure (L1-L2 structural differences) which is consistent with the analysis in Dagut and Laufer (1985), Laufer and Eliasson (1993) Liao and Fukuya (2004),

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[2] However, I could not find studies focusing on learner's knowledge and use (productive or receptive) of PVs in Saudi context.

and Siyanova and Schmitt (2007). However, Abu Jamil (2010) argues that L1-L2 structural difference is not the main factor behind learners' avoidance based on the evidence presented in the study itself as learners preferred the literal PVs over their one-word verbs in both tests (MC and translation tests). Therefore, there was a tendency by the learners to avoid using the idiomatic PVs more than the literal ones. Thus, the most important factor behind the learners' avoidance could be the semantic complexity of the PVs rather than L1-L2 structural difference. In addition, according to Abu Jamil (2010), the method employed in this study to establish learners' prior knowledge of the 25 PVs was not well grounded as Ben Duhaish relied on his intuition and experience instead of the learners' exposure to a variety of texts and conversations.

In a follow up study to Ben Duhaish's study, Abu Jamil (2010) carried out a study to explore avoidance behavior among 160 ESL and EFL Arab learners (40 intermediate and 40 advanced learners in the foreign environment (Saudi Arabia) and another 40 intermediate and 40 advanced learners in the native environment (USA)) by focusing on the influence of the following factors: proficiency level (advanced, intermediate), the impact of educational background (EFL, ESL), the context of structural differences between L1 and L2, and the inherent semantic complexity of the phrasal verb (literal, semi-transparent, figurative). The selection of PVs in this study was based on different sources such as Saudi English curricula, dictionaries, and concordances. 100 PVs were selected at the beginning, and a comprehension MC test was carried out by 20 Arab learners to establish learners' prior knowledge of these PVs. As result, 30 PVs were chosen, and they were divided into three types (literal, semi-transparent, and figurative). Two types of test were employed (two versions of multiple-choice tests and two versions of translation tests).

The study found that the learners, whose L1 (Arabic) does not have the PV structure, did not avoid literal PVs in the preference task. This finding does not support the findings of the previous studies that have proposed that the L1-L2 differences are a good predictor of learners' avoidance of PVs (Dagut and Laufer 1985; Sjoholm 1995; Ben Duhaish 2008). In addition, the results show that the learners performed significantly better with higher scores in the use of literal PVs than figurative and semi-transparent verbs. Thus, like Hulstijn and Marchena's (1989), Abu Jamil (2010) suggested that the major reason for learners' avoidance in his study is the semantic complexity of English phrasal verbs.

As already indicated, Abu Jamil (2010) carried out a comprehension MC test to establish learners' prior knowledge of the chosen PVs with 20 Arab learners. However, he failed to mention whether those learners were EFL or ESL learners or whether they were Saudi. This is an important omission, as the learners who select the PVs to be used in the main study should be representative of the cohorts (EFL or ESL) targeted in that study.

Aldukhayel (2014) investigated the avoidance of PVs by Arab ESL learners in relation   to phrasal verb types (literal, semi-transparent, and idiomatic) and their length of exposure to the English-speaking environment (long exposure, short exposure). The data were collected from 81 graduate and undergraduate Arab ESL learners who took a multiple-choice test comprising 45 questions. The results showed that PV type significantly affected Arab ESL learners' preferences for PVs. Also, the results revealed that Arab ESL learners with long exposure did not avoid any type of PVs. Moreover, the results suggested that Arab ESL learners   with   short   exposure avoided the idiomatic PVs. In sum, the major outcome of this study is that Arabic-speaking

learners' avoidance of English PVs is due to their relatively short exposure to the English-speaking environment.

Gandorah (2015) conducted a study investigating avoidance behavior among 18 Saudi male learners of English in an ESL environment (an ESL program in one of the universities in the Midwest of the USA) focusing on three factors that might have a direct effect on avoidance behavior: learners' proficiency level, the length of stay in the L2 environment, and the type of PV. The average age was between 21 and 23. Nine participants were advanced learners, 5 of them had been in the United States for one year, 3 had been for 9 months, and the remaining learners had been in the US for 4 months only. Nine were intermediate learners, 5 of them had been in the US for 9 months and the remaining 4 had been in the US for a year. The 18 participants then were divided into two groups (intermediate and advanced) based on the Cambridge Michigan Language Assessment (CaMLA) English Placement Test (EPT).

Three tasks were employed: tasks one and two were based on MCQs, while task three was a composition question. The selection of PVs in this study for task one was replicated from Liao and Fukuya (2004); whereas for task two they were chosen based on the rate of frequency of use in Chen's study (2013). Task one consisted of 8 items: the first 4 PVs were literal PVs and the second four were idiomatic PVs. Task two consisted of 5 items all of which were figurative PVs. These PVs were among the top 10 PVs of the 50 most frequent PVs in the academic sub-corpora of the BNC and COCA from Chen's study (2013).

The results showed that the intermediate group avoided more PVs than the advanced group, and the advanced group selected and used more PVs in the test than the intermediate group. The longer a learner had stayed in an English-speaking environment, the more PVs

they had learned. Also, idiomatic PVs were avoided more than literal PVs. Gandorah (2015) attributed the poor performance with figurative PVs and the low performance of the intermediate group generally to the inherent semantic complexity of PVs which is in line with Hulstijn and Marchena's (1989) and Abu Jamils' (2010) findings.

However, there are a few shortcomings with this study; firstly, the number of the participants (18) was small and only males participated. Secondly, only 13 PVs were tested. Thirdly, the selection of PVs was a replication of Liao and Fukuya's (2004) study, which has been criticized since it was pertinent only to American English. Liao and Fukuya (2004) also failed to address how they compiled their particular list of PVs, neglecting to provide at least some evidence that the learners had prior knowledge of the PVs being tested.

2.5   Conclusion

In summary, avoidance as a strategy remains a controversial issue in the literature on second language acquisition and the above-mentioned studies came up somewhat with contradictory and confusing results in that there was no agreement on the reasons influencing avoidance of PVs, whether they were linguistic (e.g. L2 complexity, degree of the difference or similarity between L1-L2, or L2 proficiency) or technical (e.g. teaching order, test type, PV type, or a manifestation of hesitation and a play-it safe strategy) or related to language users' preference. In addition, as the review of the literature indicates, there are no studies investigating learners' knowledge of and use of PVs productively and receptively specifically in the Saudi EFL context to my own knowledge. Hence, the present study aims to investigate the productive and receptive use by Saudi learners of English of PVs and to examine their avoidance, if any, of PVs. In so doing, this study will aim to avoid the shortcomings of the previous studies. All PVs used in the present study were selected based on the textbooks used

by the students at their elementary, intermediate and secondary schools (see Section 3.5.3). In addition, they are all found within the list of 150 most frequently used PVs in Gardner and Davies' (2007) and Liu's (2011) studies to maximize the likelihood that students were presented with familiar PVs; those that they have likely been introduced to as well as 'high-frequency PVs', which many learners at this stage of learning may have encountered, which they might then either use or avoid. Moreover, the present study tries to avoid other shortcomings by employing more participants of both gender (male and female) than previous studies and using more PVs (32) than previous studies. Furthermore, there is an equal distribution between the number of literal PVs and the number of figurative PVs.

Chapter 3: METHODOLOGY

3.1 Introduction

The methodology used in this research is divided into two separate sections as this study integrates both corpus work and multiple-choice (MC) tests to provide comprehensive findings regarding Saudi English as a Foreign Language (EFL) learners' knowledge and use of phrasal verbs (PVs) and their potential avoidance of PVs in contexts in which it can be surmised that the learner has previously been exposed to the PVs in question.

One particularly innovative aspect of this thesis is that it relies on a mixed-methods approach, an approach which has recently been strongly advocated in applied linguistics (Dörnyei 2007; Hashemi 2012) but has as yet rarely been put into practice. Mixed-methods research (MMR) is a research methodology that incorporates multiple methods (qualitative and quantitative) to address research questions in an appropriate and principled manner (Bryman 2012; Creswell 2015). Using a mixed-methods approach can ensure research validity as it offers possible solutions to "reduce the inherent weakness of individual methods by offsetting them by the strength of another, thereby maximizing . . . [the] validity of research" (Dörnyei 2007 p. 43). Moreover, using a mixed-methods approach allows the researcher to obtain both quantitative and qualitative data, to gain deeper insight into the phenomenon of interest, and to answer the research questions and to help overcome the limitations of quantitative and qualitative methods. According to Hallie Preskill, while "all methods have inherent biases and weaknesses […] a mixed method approach increases the likelihood that the sum of the data collected will be richer, more meaningful, and ultimately more useful in answering the research questions" (as cited in Johnson, Onwuegbuzie, and

Turner, 2007, p. 121). However, there are some practical challenges associated with mixing qualitative and quantitative components (David et al. 2018; Dawadi 2019; and Fauser 2018). For instance, data gathering and analysis could take a very long time. As a result, both the cost and the time involved could be higher. Researchers frequently struggle to plan their studies within the time and budgets constraints they have set (Fauser 2018; Hauken et al. 2019). According to some experts, the timeline of recruitment is demanding and the labor in data collection is intensive (David et al. 2018; Linnander et al. 2019). In addition, a further difficulty with the mixed methods approach is selecting an appropriate design and maintaining quality in data integration. There may be instances where data gathering and interpretation using one approach affects those using a different method (Leal et al. 2018). Moreover, selecting the MMR design that is best for a given study is the mixed method researcher's biggest problem. The study's goal and how the qualitative and quantitative strands are prioritized will both have a significant impact on the suitability of a design. Because each design has disadvantages and possible difficulties of its own, researchers can lack the confidence to select one from a variety of designs. Therefore, in order to meet the demands of using a mixed-approaches strategy, novice researchers need to have sufficient skills in both qualitative and quantitative methods (Creswell and Plano Clark 2011).

Furthermore, using experimental tasks only to elicit language use from learners may not succeed in obtaining authentic language use (i.e. normal and unguided language use). In relation to this, Chen (2013) found that "learners' avoidance behavior observed under experimental conditions does not correlate with the considerable underuse of phrasal verbs in actual writing" (p. 433) suggesting that using corpora to analyze PVs represents a great addition to using experimental tasks. Most importantly, corpus analysis can provide

empirical evidence based on learners' actual production of the language, rather than relying on intuition, which is not always accurate.

The first part of this Chapter thus discusses corpora in general and learner corpora in particular. In addition, the methodology used in designing the corpus analyzed in the current research, the Saudi Learners of English Corpus (SLEC), will be outlined. The second part addresses the methodology used in creating and administering the three multiple choice questionnaires (MCQs) used in the current research: 1) an MCQ to test learners' productive use of PVs, 2) an MCQ to test learners' receptive knowledge of PVs, and 3) an MCQ to test learners' avoidance behavior with PVs. Ethical guidelines and the procedures that had to be followed before the actual conduct of the tests are also discussed below.

3.2 Corpora

A 'corpus' (plural form: 'corpora') can be described as an electronic collection of authentic texts or spoken words produced by language speakers and stored in a machine-readable format (McEnery 2003; Nesselhauf 2004; Nugues 2006; Sinclair 1996; Wynne 2005). There have been several attempts made by researchers to come up with specific definitions of 'corpus'. According to Sinclair (2005), for example, a corpus is "a collection of pieces of language text in electronic form, selected according to external criteria to represent, as far as possible, a language or language variety as a source of data for linguistic research" (p. 16). Contrary to Sinclair, who is more concerned with the main role that a corpus plays in linguistic research, issues of representativeness, and design criteria, Nesselhauf (2004) believes that a corpus should be intended for general use, not only for one specific study or even a limited number of studies. Moreover, McEnery et al. (2006) state that a corpus should be made of a principled collection of texts, which differs from a random

collection of texts. Therefore, a principled corpus can be described as "a collection of machine-readable authentic texts (including transcripts of spoken data) which is sampled to be representative of a particular language or language variety" (p. 5).

The first appearance of corpus research in the field of linguistics dates back to the 1960s with the publication of the Survey of English Usage, which was the first large-scale language-data-collecting project for grammar research conducted by Randolph Quirk (Teubert and Cermakova 2004: 51-53). Then, in 1967, Henry Kučera and W. Nelson Francis introduced the Brown Corpus at Brown University, which was made up of a huge (for the time) database that paved the way for the launch the LancasterOslo/Bergen Corpus (LOB Corpus) in 1978. In 1963, John Sinclair with the help of other scholars, started conducting a project called English Lexical Studies, which analyzed lexemes and collocation using corpora for the first time. Since then, many corpus projects have been undertaken, such as the Lancaster-IBM Spoken English Corpus (SEC), and the renowned British National Corpus (BNC), and the Bank of English (BOE). The BNC was established in the 1990s and developed by a consortium led by Oxford University Press, together with major dictionary publishers Longman and Chambers, and research centers at the Universities of Lancaster and Oxford, and at the British Library. It contains *roughly* 100,000,000 (100 million) tokens of English. Sketch Engine counts 112,345,722 tokens (including punctuation) and 96,134,547 word tokens (i.e. excluding punctuation), and 724,893 word types. According to McEnery (2003: 452), this huge volume of data would have been impossible to achieve before the use of computers in corpus research. The BNC is described as follows on the website homepage:

Collection of samples of written and spoken language from a wide range of sources, designed to represent a wide cross-section of British English from the later part of the 20th century, both spoken and written. The latest edition is the BNC XML Edition, released in 2007. The written part of the BNC (90%) includes extracts from regional and national newspapers, specialist periodicals and journals for all ages and interests, academic books and popular fiction, published and unpublished letters and memoranda, school and university essays, among many other kinds of text. The spoken part (10%) consists of orthographic transcriptions of unscripted informal conversations (recorded by volunteers selected from different age, region and social classes in a demographically balanced way) and spoken language collected in different contexts, ranging from formal business or government meetings to radio shows and phone-ins." (BNC 2005).

In the late 20th century, the Corpus of Contemporary American English (COCA) was launched by Mark Davies of Brigham Young University. It is described as follows on the COCA website homepage:

the largest freely-available corpus of English, and the only large and balanced corpus of American English. (COCA 2008).

It contains more than 560 million words of text (20 million words each year from 1990 to 2017) and it is equally divided among spoken, fiction, popular magazines, newspapers, and academic texts.

3.2.1 Kinds of corpora

After many decades of designing and developing, a variety of different corpus types have been identified. Corpus studies can be divided into two kinds of corpus research: corpus-based and corpus-driven (Tognini-Bonelli 2001: 10-11).

Corpus-based studies use corpora as a resource from which to provide evidence for pre-corpus descriptions of language. According to Tognini-Bonelli (2001: 74) they use corpora to "expound on, or exemplify, existing theories, that is theories which were not necessarily derived with initial reference to a corpus". She states that it is preferred by corpus-based linguists to adopt a theory before conducting the corpus analysis, which suggests less confidence in the data. Thus, a theory is adopted first, and then a corpus is used to examine the evidence in the data to decide whether it is in line with the theory or not. So, in a sense, the corpus is regarded as a tool that helps in making minor changes or refinements to the adopted theory. Tognini-Bonelli (2001) believes that with corpus-based research, there is no strict commitment to the data, thus, the unbalanced distribution or the non-existence of specific patterns are not regarded as major factors by which theories about the examined system are formulated as "corpora are typically used to validate-but not only to a certain extent- existing categories or supplement the theory with a probabilistic dimension" (Tognini-Bonelli 2000: 81). Biber, Conrad and Reppen (1998: 4) list the essential characteristics of a corpus-based study: it is empirical, analyzing the actual patterns of use in natural texts; it utilizes a large and principled collection of natural texts as the basis for analysis; it makes extensive use of computers for analysis, using both automatic and interactive techniques; and it depends on both quantitative and qualitative analytical techniques.

On the other hand, corpus-driven studies adopt the methodology of corpus linguistics to identify meaningful findings from the corpus and turn them into research results (Teubert and Cermakova 2004: 57). According to Tognini-Bonelli (2001), corpus-driven studies can be described as follows:

> the commitment of the linguist is to the integrity of the data as a whole, and descriptions aim to be comprehensive with respect to corpus evidence. The corpus, therefore, is seen as more than a repository of examples to back preexisting theories or a probabilistic extension to an already well-defined system. (p. 84).

However, these two principles sometimes overlap and are used interchangeably, but sometimes completely oppose each other, depending on the writer's point of view (Tognini-Bonelli 2001). As a matter of fact, McEnery et al. believe that "the distinction between corpus-based vs. corpus-driven approaches is overstated" (2006: 8).

In terms of their aims, different researchers (Baker 1995: 230-235; Bowker and Pearson 2002: 11-13; Cobb 2003; Granger 2003: 19; Hatim 2001: 152; Hunston 2002: 14-16; Laviosa 2002: 34-38; Munday 2008: 181; McEnery 2003: 450-451; Olohan 2004: 23-44; Sinclair 1991: 23-26; Teubert and Cermakova 2004: 76, 139-144) have categorized corpora into many different types. These types are:

1- **Monolingual corpora**, which are made up of texts produced in one language and are used to analyze linguistic naturalness or to measure deviation from the norms of a language.

2- **Comparable corpora,** which include two or more corpora designed along similar parameters but each of which represents a different language or variety of the same language.

They are used to identify the nature of the text in general. Examples include the CorTec Corpus, which contains examples of technical language in texts from five areas in both English and Portuguese and the ICE (International Corpus of English) corpus which contains samples of 1 million words of a number of different varieties of English.

3- **Parallel corpora,** which are similar to (multilingual) comparable corpora in terms of having two or more collections of texts in different languages. However, the difference lies in the fact that they contain source texts and their translations and have been aligned so that the user can view all the examples of a particular search term in one language and all the translation equivalents in a second language and can thus investigate the difference between languages. Examples include the Arabic English Parallel News Corpus, which contains 2 million words of news stories in Arabic and their English translations collected between 2001 and 2004.

4- **Learner corpora**, which contain texts written by learners of a foreign language. They are frequently compared with corpora of texts written by native speakers, to examine what learners know and do not know in an attempt to facilitate the learning process. Examples include the International Corpus of Learner English (ICLE), mentioned in Chapter 2, which is a collection of corpora. Each subcorpus of the ICLE totals 200,000 words, where each one includes essays written by learners of English from a particular language background (German, Swedish, French etc.).

5- **Historical corpora**, which include texts of a specific language in different time periods and are used to trace the development of aspects of a language over time. A well-known example is the Helsinki Diachronic Corpus of English Texts (containing 1.5 million words written between 700 and 1700).

6- **Internet as Virtual Corpora**, which are made up of texts taken from internet and are generally used to find out whether a word or a phrase we have heard really exists and in which kinds of texts it occurs.

7- **Specialized corpora**, which include texts of a specific genre or register or a specific time or context, such as scientific articles used to make observations about that particular language in that specific field. Examples include The Michigan Corpus of Spoken English (MICASE), which contains approximately 5 million words of spoken data collected from a variety of different encounters at the University of Michigan.

8- **General corpora**, which include texts of many types from a wide variety of different domains in written and spoken forms and are used to make general observations about that particular language. A well-known example is the above-mentioned British National Corpus (BNC) with 100 million words and which "… aims to represent the universe of contemporary British English [and] to capture the full range of varieties of language use" (Aston and Burnard 1998: 5). General corpora are also sometimes known as reference corpora.

9- **Spoken corpora**, which include only spoken texts of many types compiled into many kinds of corpora to make observations from spoken texts.

10- **Monitor corpora**, which are designed to track current changes in a specific language of the same type. Texts are added to this kind of corpus annually, monthly or even daily, so the texts of one year (month or day) can be compared to those of another, similar, period. According to Baker, Hardie and McEnery (2006: 64-65), monitor corpora are useful in that they provide the means to monitor language change over time.

11- **Pedagogic corpora**, which consist of all the texts to which a learner has been exposed (Hunston 2002: 16). They are collected by a teacher or researcher and include all coursebooks, readers, etc. used by a learner and the audio materials they have listened to. This includes all instances of words or phrases that learners come across in different contexts. They are used to improve learners' knowledge of language.

3.2.2   Learner corpora

Learner corpora as explained above are "electronic collections of writing or speech produced by foreign or second language learners" (Gilquin and Granger 2015: 1). They are regarded as a relatively new addition to the wide range of existing corpus types (Nesselhauf 2004). Granger (2008) states that "Learner corpus research is a fairly young but highly dynamic branch of corpus linguistics, which began to emerge as a discipline in its own right in the late 1980's/early 1990's" (p 259). There are many learner corpora which focus on English as the target language such as the Advanced Learner English Corpus (ALEC), and only few others which focus on languages other than English, such as German and Spanish. However, these few corpora have proven to contribute to the variety of learner data along with those in the English language (Gilquin and Granger 2015).

One of the first learner corpora in an academic setting was the above-mentioned International Corpus of Learner English (ICLE) (Pravec 2002: 83). It was launched in 1990 by Sylviane Granger and it consists of argumentative essays written by advanced learners of English (i.e. university students of English in their third or fourth year of study) from various native language backgrounds, namely Bulgarian, Chinese, Czech, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Polish, Russian, Spanish, Swedish, Tswana, and Turkish. It continues to be developed at the Université Catholique de Louvain (UCL) in

Belgium. There is also the spoken counterpart of ICLE, which is the Louvain International Database of Spoken English Interlanguage (LINDSEI). It contains oral/speech data produced by advanced learners of English from several mother-tongue backgrounds (Gilquin et al. 2010).

The number of learner corpora has increased rapidly in the last two decades, as have studies based on these corpora, such as those by Pravec (2002), Granger (2004), Nesselhauf (2004), Wen (2006), Granger et al. (2013), Díaz-Negrillo and Thompson (2013), and Granger and Dumont (2014), which suggests how important corpora have become in language learning research and how valuable a data resource can be provided by them. Learner corpora have been used by researchers for the purpose of Contrastive Interlanguage Analysis (Granger 1998) to investigate a wide range of instances of overuse, underuse, and misuse of many different aspects of learner language at different levels: lexis, discourse, and syntax (Granger 2003). In addition, they help researchers, teachers, material designers and dictionary designers to identify the interlanguage errors caused by Language (L1) transfer, learning strategies, and overgeneralization of L1 rules. These errors can happen at the level of words, phrases, or language structures (Granger 2003; Nesselhauf 2004). Moreover, learner corpora can be a useful resource to measure learners' improvement in various aspects of the target language (Buttery and Caines 2012; Nesselhauf 2004), which in turn can be used for pedagogical purposes in creating teaching materials that are more appropriate to learners' proficiency levels.

Most learner corpus studies rely on analyzing raw data. However, some studies such as Granger (2003) and Bestgen and Granger (2014), make use of annotated data specifically in the form of part-of-speech (POS) tagged or error-tagged data. Nevertheless, it has been

argued that annotation of learner data could be problematic as applications of POS-taggers on learner texts have not been found to be as good and practical as on native corpus data (Gilquin and Granger 2015: 420).

3.2.3   Rationale for creating a learner corpus of Saudi EFL writing

To the best of my knowledge and having reviewed the existing literature on learner corpora in EFL Saudi contexts, it appears that there is no Saudi written EFL corpus in existence. However, as an official part of LINDSEI (Algouzi 2014), there is a subcorpus based on the spoken production of learners of English in Saudi Arabia, the Saudi Learner Corpus (SLC). This is the only Saudi EFL corpus that could be found in the literature, and which is available to researchers. For this reason, there is a need to create a purpose-built corpus of English written by Saudi EFL learners for this project.

3.3   Designing the learner corpus

This section discusses the criteria surrounding the design of learner corpora in general and the SLEC in particular. Building a corpus, and a written corpus in the case of this study, is time-consuming. However, in a study such as this, based in the Saudi context, there was no available written corpus to investigate, which led to the compilation of my own corpus to allow me to answer the research questions posed in this thesis. A major additional feature of this project is that this corpus will be a starting point for an expanded Saudi Learners of English Corpus as I am planning to keep adding to this corpus for future research. In addition, it will allow me and other researchers a wide range of opportunities for comparison of the written production of Saudi learners of English with that of native and other non-native varieties of English, in terms of linguistic features other than PVs.

One of the key issues in corpus studies is the creation of the corpus itself. A random collection of heterogeneous learner data does not qualify as a learner corpus (Granger 2002: 9). Therefore, learner corpora should be compiled according to strict design criteria, some of which are the same as for native corpora (Granger 2002). According to Conrad (2002:77), determining the criteria that will guide corpus design, such as size of the corpus, types of texts included, number of texts, the sampling procedure, etc., is crucial in order to achieve reliable results. Thus, it is necessary to ask questions like: how big should the corpus be? How many texts should be included? What genres and text types should be represented? and so on.

These are some of the significant questions researchers have to find answers for prior to designing and creating their corpora for research. In the next part, these most important theoretical and practical considerations of corpus building and criteria for designing a corpus will be discussed in more detail.

3.3.1 Purpose of the corpus

Before researchers start to design and compile corpus materials, they must set up clearly and exactly the purpose and goals of the corpus in the first step, that is, what questions the corpus is supposed to provide answers for. Also, the design criteria and the corpus construction will be guided and outlined by the purpose. Based on previous studies in learner corpora, two main categories can be generally identified. The first one is corpora which are meant to be used by a wide range of users for broad aspects of research (general purposes), and the second kind are corpora which are meant to be used by a specific group of users to study specific aspects of language (specific purposes). Thus, the design criteria and the content as well could be affected by the purpose whether for general or specific purposes.

Both kinds of corpora have their own special characteristics in their design and content. A corpus can be designed to serve one or more purposes such as language learning/teaching, material development, error analysis, descriptive analysis, translation and so on. For instance, the purpose of the ICLE corpus is "to make use of advances in applied linguistics and computer technology to effect a thorough investigation of the interlanguage of the foreign language learner" (Granger 1993:57). Thus, specific purposes corpora could be used to examine the role of age and gender in learning, or to explore learners' lexico-grammatical and phraseological competence, or to record lexical uses, as is the case with the Bilingual Speech Corpus for French and German Language Learners (Fauth et al. 2014).

3.3.2 Size

Size is a controversial issue in corpus development as it plays a significant role with regard to the notion of representativeness as the result of which a corpus-based study could be generalized to the population of language learners.

The size of a given corpus is usually decided by the purpose or a specific research question. Sinclair (1991) suggested that to get useful empirical evidence regarding word use and collocation behavior, building a large corpus of many millions of words is useful. Sinclair (1991) confirms this by adding:

> in order to study the behaviour of words in text, we need to have available a quite
>
> large number of occurrences. Again, the statistics are against us, since if we classify
>
> the occurrences in terms of 'uses' or 'meanings' we shall find the same kind of
>
> imbalance again. One of the uses will typically be twice as common as all the others;
>
> several will occur once only, and that is not enough on which to base a descriptive

statement. This is why a corpus needs to contain many millions of words. (p. 18-19).

However, it is believed that a smaller homogenous corpus that features a high-quality design is more valuable than a larger corpus (Granger 1993). Koester (2010) believes that smaller, but more specialized corpora allow researchers to take a deep look into patterns of language in a particular setting as there is a strong connection between the corpus and the contexts in which the texts in the corpus were produced, as compared to large corpora which are made of a mix of different text types. When it comes to learner corpora, Granger (2003) argues that:

> Size is obviously a relative notion. A corpus of 200,000 words is big in the SLA field where researchers usually rely on much smaller samples but minute in the corpus linguistics field at large where recourse to mega corpora of several hundred million words has become the norm rather than the exception. (p. 465)

However, she believes that large learner corpora would be "a major asset in terms of representativeness of the data and generalizability of the results" (Granger 2004:125).

But generally, does the size of a corpus really matter? According to Sinclair (2005), absolute size is not the most important consideration, and the size of the corpus should rely on two factors: "the kind of query that is anticipated from users and the methodology they use to study the data" (p.10). Thus, there is no specific size the corpus should be as each corpus is built to address particular needs, but at the same time a learner corpus should be

representative of the language of the learner being studied. However, the difficulty of collecting data from specific learners may force researchers to minimize the size of the corpus especially in the first stage of collecting data.

3.3.3 Representativeness

Corpus representativeness is arguably one of the most significant issues of corpus design which have been discussed by many studies (Sinclair 1991; Biber et al. 2002; Sinclair 2005). According to Leech (1991: 27), a corpus is thought to be representative of the language variety it is supposed to represent if the findings based on its contents can be generalized to the said language variety. In fact, Sinclair (2005) argues that "Corpus builders should strive to make their corpus as representative as possible of the language from which it is chosen." (p. 2). As discussed earlier, the purpose of a corpus affects and controls its design, thus its representativeness. Biber (2002) points out that:

> a corpus is not simply a collection of texts. Rather, a corpus seeks to represent a language or some part of language. The appropriate design for a corpus therefore depends upon what it is meant to represent. The representativeness of the corpus, in turn, determines the kinds of research questions that can be addressed and the generalizability of the results of the research. (p: 246)

Therefore, for a corpus to be representative, it must be able to answer the research questions under investigation.

To achieve representativeness when designing a corpus, Sinclair (2005) suggested important steps to follow. These steps are:

1. Decide on the structural criteria that you will use to build the corpus and apply them to create a framework for the principal corpus components.

2. For each component draw up a comprehensive inventory of text types that are found there, using external criteria only.

3. Put the text types in a priority order, taking into account all the factors that you think might increase or decrease the importance of a text type — the kind of factors discussed above.

4. Estimate a target size for each text type, relating together (i) the overall target size for the component (ii) the number of text types (iii) the importance of each (iv) the practicality of gathering quantities of it.

5. As the corpus takes shape, maintain comparison between the actual dimensions of the material and the original plan.

6. (most important of all) document these steps so that users can have a reference point if they get unexpected results, and that improvements can be made on the basis of experience." (p.4)

Primarily, representativeness depends upon how balanced the corpus is, i.e. the range of text categories included in the corpus. Balance is an important issue in corpus creation (Hunston 2002; Nelson 2002) and refers to "the weighting between the different sections in a corpus" (Kennedy 1998: 62). Similar to representativeness, the acceptable balance of a corpus is decided by its intended use. A balanced corpus usually includes a wide range of text genres which are supposed to be representative of the language under consideration. According to Sinclair (2005: 9) corpus designers "should retain, as target notions, representativeness and balance. While these are not precisely definable and attainable goals, they must be used to guide the design of a corpus and the selection of its components." Thus, corpus designers should work to achieve a well-balanced corpus.

3.3.4 Target language

The target language is the language used to create the corpus materials, and it is the language under investigation. Most corpora contain data of a single language; however, there are some corpora which include more than one language such as the Foreign Language Examination Corpus (Banski and Gozdawa-Golebiowski 2010) which contains data in three different target languages, English, French and German, produced by learners sharing one L1, Polish. This kind of corpus is helpful when there is a need to study the effect of the learners' first language on second or foreign language acquisition, especially if the learners share the same L1. In the current doctoral study, the corpus contains data from a single language, namely English produced by Saudi EFL learners of English.

3.3.5 Text dates

The text date indicates the time period the corpus materials are collected in. This information about a particular language or its varieties included in the corpus can be invaluable. For example, text collected more recently can provide us with data on the current situation regarding teaching and students' performance in English. This can help teachers and material designers to focus on relevant issues in the second language. However, some corpora lack this important information and this can lead to difficulty in comparing the language used in different time periods and limit the usability of the corpus.

3.3.6 Text location

Text location indicates the place (country) where texts were originally produced or published. In many cases, the home country of the writer is the same as the location of the text. Knowing the location of the text is significant as there are some corpora which contain

a variety of texts from different writers or publishers from different countries who speak the same language. This kind of information adds more value to the corpus. Disregarding such information when designing a corpus minimizes the potential benefits of the corpus, such as the possibility of conducting linguistic comparisons and contrasts on the basis of geographic locations.

3.3.7 Text format and domain

Text format refers to the sources from which the texts are taken, such as books, journals, or magazines in the case of written texts. Related to text format is the text domain. It refers to the subject field. For example, it refers to whether a text is related to theoretical or applied mathematics, in the case of journals.

A corpus that has different text formats and diverse text domains will provide a clearer picture of multiple language varieties and would be able to answer a variety of research questions in a better way. In addition, the intended purpose of a corpus decides what formats of text should be included.

3.3.8 Data availability or accessibility

Data availability refers to whether the corpus is freely available online for search and download, such as the Spanish Learner Language Oral Corpus (Dominguez et al. 2010; Mitchell et al. 2008), or whether it is meant to be used only by a specific research community and access to it is restricted to certain people, as is the case, for example, with the Cambridge Learners Corpus (Cambridge University 2012), or whether you have to pay for access, as with the International Corpus of Learner English (Granger 1993, 2003; Granger et al. 2010). Corpora may be made publicly available to give a chance to a larger audience of researchers

to reuse the data for their own studies. Doing so increases the value of the corpus to the research community as well as helping to reveal the strengths and weaknesses of the corpus itself.

3.3.9 Learners' nativeness

Most learner corpora are concerned with and designed to include: data produced by non-native speakers in a learning context, as can be understood from Granger's (2002) definition of learner corpora and exemplified by the NUS corpus of Learner English (Dahlmeier et al. 2013); or data produced by both non-native speakers and native speakers, which are mostly used to perform a comparison between the two, such as happens with the Corpus of English Essays Written by Asian University Students (Ishikawa 2010). The reason behind this focus on non-native speakers' learner corpora might be the belief that "learner corpora focus specifically on language produced by L2 learners" (Thoday 2008: 146), and not on the language produced by L1 learners in a learning context, as such a corpus would be considered as a "general corpus of native speakers" and not a "learner corpus of native speakers". Thus, the difference between the two lies in the nativeness factor regardless of the context of data production. In respect of the current study, the corpus will be designed on the basis of the data produced by non-native speakers of English and then their data will be compared to the data produced by native speakers of English (as extracted from the BNC and COCA, among other sources), so there will be no need to build a particular learner corpus of English produced by native speakers.

In addition, learner corpora can be divided based on the first language they include. Some of the corpora include data from learners of various L1s, such as the corpus of Academic Learner English (Callies and Zaytseva 2011; Callies et al. 2012). Other kinds of

corpora include those with data from a single L1, such as the Hong Kong University of Science and Technology Learner Corpus (Milton and Chowdhury 1994; Pravec 2002).

3.3.10 Learners' proficiency level

Learners' proficiency level refers to the ability of the learners to use the target language in a certain way, which allows them to be classified either as beginner, intermediate or advanced, or based on the Common European Framework of Reference classification (Council of Europe 2001). The Spanish Learner Language Oral Corpus (Dominguez et al. 2010; Mitchell et al. 2008), for instance, uses the three-level classification (beginner, intermediate and advanced).

3.3.11 Material mode

Material mode refers to whether the language is produced in speech or written form (Sinclair 2005). Designing a corpus made of hand-written texts or from speech data is somewhat similar: both would undergo similar processes especially when converting data into a textual computerized format. An example of a corpus that depends solely on written data is the Longman Learner Corpus (Longman Corpus Network 2012). An example of a corpus which includes only spoken data is the French Learner Language Oral Corpus (Myles and Mitchell 2012). Other corpora include both modes, spoken and written, such as the Santiago University Learner of English Corpus (Diaz-Bedmar 2009). According to Kennedy (1998), most corpus-based grammatical and lexical studies of English have been based on written corpus analysis; however, the dominance of written corpora does not mean that the spoken corpora are less important. Gilquin and Granger (2015) also claim that written corpora by far outnumber spoken corpora and attribute this imbalance to the fact that

collecting and transcribing oral data produced by learners is difficult. Mauranan (2007), nonetheless, claims that "when we seek to capture language patterns in the process of ongoing change, the best data can be expected from spoken corpora rather than written, because speech is more sensitive to new trends" (p. 41).

3.3.12 Text genre

One of the questions that arises when building a corpus is what genre to include. While there is "no comprehensive taxonomy of genres from which to select" (Kennedy 1998), looking into existing corpora in the field, it can be noticed that the most used genres are argumentative, narrative, and descriptive. Other genres employed in various other corpora include discursive, expositive, reflective, and so on. Some corpora include only one type of text genre such as the International Corpus of Learner English (Granger 2003) which includes exclusively argumentative texts.

3.3.13 Sample size

Sample size relates to the size of each text included in the corpus. It is important to include whole texts in corpora especially when studying genre and discourse. An example of a corpus with whole texts is the Bank of English (Renouf 1987). Sinclair (2005: 7) argues that "samples of language for a corpus should wherever possible consist of entire documents or transcriptions of complete speech events or should get as close to this target as possible. This means that samples will differ substantially in size."

Although there is no linguistic justification that demands that all texts in the corpus be of equal length, researchers tend to think that this should be the case and impose a

minimum-maximum word count on the learner's writings. However, Sinclair (2005), a strong advocate for whole texts in corpora, argues that:

There is no virtue from a linguistic point of view in selecting samples all of the same size. True, this was the convention in some of the early corpora, and it has been perpetuated in later corpora with a view to simplifying aspects of contrastive research. Apart from this very specialized consideration, it is difficult to justify the continuation of the practice. The integrity and representativeness of complete artifacts is far more important that the difficulty of reconciling texts of different dimensions. (p. 6)

Thus, what should be really crucial is to add complete texts which could vary in length. The reason behind this variation in the length of the text can be attributed to the differences in the proficiency level of the learners. Some compositions which are written by beginner level learners, for example, would probably be shorter in length as their proficiency is low compared to advanced learners. In short, all texts in a corpus should be complete texts, and should be included irrespective of their size.

3.3.14 Task type

There are different task types which can be used to collect data in learner corpora, such as essays, tests, interviews, assignments, and dissertations. For instance, the Czech as a Foreign Language Corpus (Hana et al. 2010), which is a written and spoken corpus, used three different task types to collect data (i.e. essays, interviews and tests). On the other hand, there are corpora which use only one task type for collecting data, such as the Cologne-

Hanover Advanced Learner Corpus (Römer 2007) which used essays as the only task type. In the current study, only one task type (an essay) will be used to collect the data.

3.3.15 Metadata

Metadata is defined as "data about data" (Burnard 2005: 30). Thus, it is a collection of information that depicts the corpus data, and which Granger (2002) referred to as documenting the corpus data. When designing a corpus, it is crucial to have this metadata as an important part of the corpus. Without metadata, it would be difficult to identify different patterns of linguistic behavior in naturally occurring samples of language as metadata "restores and specifies… context, thus enabling us to relate the specimen to its original habitat" (Burnard 2005: 31).

Then, the question arises of which variables should be included in the metadata of a learner corpus. Metadata, according to Granger (2008), can be classified along two major dimensions relating to characteristics of the learners who have produced the data and characteristics of the tasks they were requested to perform, such as 'age', 'gender', 'nationality', 'text mode', 'text genre', 'country of production', etc. These features can be used as determinants to search any subset of the corpus data or to conduct comparisons between different groups of learners or texts.

Based on the criteria discussed above, Tables 3.1 and 3.2 summarize the criteria and metadata used to design and document SLEC, the corpus used in this study:

Table 3.1

Corpus-building criteria in SLEC.

Criterion	Corpus characteristics
Purpose	It focuses on specific group of users who are undergraduate Saudi learners of English as a Foreign Language and investigates a specific aspect of the English language which is PVs.
Language and mode	English written texts
Size	200,000 tokens, with a plan to increase the number
Target language	It contains data from a single language which is English produced by Saudi EFL Learners.
Text dates	2019
Text location	Saudi Arabia, western region
Text type	academic writing
Learners' proficiency level	beginner and lower intermediate
Material mode	written data
Task type	essays
Material genre	argumentative, narrative, and descriptive

Table 3.2

Metadata elements used in in designing and documenting the corpus.

	Learner variables			Text variables	
1	Age		**1**		Text genre
2	Gender		**2**		Text mode
3	Nationality		**3**		Text medium
4	Native language		**4**		Text length
5	Nativeness		**5**		Year of production
6	Number of years learning English		**6**		Country of production
7	Number of years spent in English-speaking countries		**7**		Timing
8	Level of study		**8**		Reference use
			9		Dictionary use

Thus, the corpus is designed to include a variety of metadata which describes features of the texts and the learners. The job of these features is to work as determinants to explore any subset of the corpus data or to make comparisons between different groups of texts or learners. The corpus is thus marked up with 17 metadata variables. Eight are related to the learners and nine are related to the texts.

So, as shown in Tables 3.1 and 3.2, the purpose of designing this corpus is to investigate the use of a specific aspect of the English language, namely PVs, by a specific group of learners who are undergraduate Saudi learners of English as a foreign language to check their knowledge and use of the most common PVs in English. The intended target size of this corpus is 200,000 words (tokens) in the first stage to achieve representativeness. The proficiency level of the learners ranges between beginner and lower intermediate as they are undergraduate students whose level of English is expected not to be very high. Therefore, as there was limited time for data collection, advanced learners were not included due to the fact that it would be difficult to find many advanced learners of English in Saudi Arabia and it would require more time and more university visits. In terms of L1 background, all learners share the same L1, which is Arabic. In addition, the corpus contains written data only, and includes three different material genres: argumentative, narrative, and descriptive.

3.4 Implementation

In this section, I describe the application of the design criteria set out in Section 3.3 in the construction of SLEC, my learner corpus.

3.4.1 Participants

This section describes the groups of participants involved in my learner corpus study. The learners who participated are learners of English as a Foreign Language (EFL) rather than as a Second Language (ESL). Regarding their L1 background, learners are from only one mother tongue background, Arabic. Based on their performance on the Oxford Quick Placement Test, the results of only two groups will be compared, namely group A2 (beginner) with group B1 (lower intermediate), see Section 4.2.1. They were 1st year Saudi undergraduate students of English as a foreign language who have studied English for nine years in Saudi public schools. The age range of these participants was between 18 and 24 years old. In terms of gender, the data were produced by both male and female learners.

The participants were asked to provide some demographic information such as native language, gender, years of studying English, number of years they have attended English classes, and other languages they speak fluently. In addition, the participants also had to indicate their age group: 1) Age group I (18-22), 2) Age group II (22-26), and 3) Age group III (26-30). These learner profiles thus provide researchers with information which allows comparisons across different sections of the corpus.

3.4.2 Tasks

The corpus was designed to include 200,000 words of (hand-)written data as the process of dealing with spoken data such as audio recording and converting these data into a written form is time-consuming, and expensive (Thompson 2005), and it would not have been possible to achieve this within the time assigned for this study. These data are written

by beginner and lower intermediate learners of EFL, i.e. university students of different majors.

In terms of task type, essays were used to collect the data as it is the most preferable task type in the literature (Gilquin and Granger 2015; Kennedy 1998). Three genres were included: argumentative, narrative and descriptive. All texts were written in class as part of writing activities with no help from further resources or reference works such as grammar books, monolingual dictionaries, or bilingual dictionaries. Participants were asked to produce between 150 and 300 words as an average length for each text in a timed setting (lasting approximately 40 minutes). All the data were elicited in one country, Saudi Arabia, more specifically in the western region of Saudi Arabia (Taif and Almadinah) as knowing the place of the production of data could help researchers to identify any differences in the language use of learners from different cities. All the texts were collected over a three-month period between April and June 2019.

3.4.3   Data gathering

The corpus data was not taken from previously existing materials; instead, a particular methodology was designed to carefully collect and manage the corpus data. This methodology includes designing tasks, setting the standards for converting the hand-written texts into electronic form, measuring the consistency between transcribers of written data, and storing and managing the data through creating a database and generating different types of files automatically. The methodology including all these processes is explained in the following sections.

3.4.3.1 Collecting the Data

The corpus contains one type of medium: materials written by hand. Guidelines were created to illustrate the steps the researcher (or his representative) would follow in collecting the data. Data collection took place during one main session that was repeated with each group of students, typically representing one class, at each educational institution. During each session, which was expected to last for about 1 hour, an assignment was distributed, and procedures were explained to the participants. The assignment consists of five parts as follows:

1. Information sheet, which includes brief outline of the project, its benefits, data collection procedures, and participation in the research.

2. Consent form, in which the participant agrees that that the purpose of the research has been explained to them, that they have understood the purpose of the study, and that they understand that their participation in this study is voluntary and that they are free to withdraw from the study at any time, without giving a reason and without consequence; they also agree that their answers, which they have given voluntarily, can be used anonymously for research purposes.

3. Learner and task metadata (information about the participant and the task being performed).

4. The Oxford Quick Placement Test, which places students on the Common European Framework of Reference for Languages (the CEFR). The participants were given 20 minutes to finish the test.

5. The Task, which includes writing 1 text (narrative or argumentative or descriptive) in class.

Each of the learners signed a consent form which stated that the data collected would be published and used in relevant future research. As already indicated, participants were both male and female. However, the education system in Saudi Arabia is organized based on single gender classes, thus genders do not mix. For this reason, it would have been so difficult if not impossible for a male researcher to go into a female university during their working hours to collect data. Therefore, it was necessary to recruit female representatives to help collect the required data. Two female representatives were asked to sign a consent form confirming that all data they collected would be saved in a secure place until they were handed on to the researcher at the end of collection process. The form stated that the representatives were not allowed to keep any part of the data in any medium and would not share any information they might know about the learners or their materials with any third party. The researcher also got permission from the institution from which the corpus data was collected for him or his representative to meet students and collect the corpus materials. The participants were motivated to contribute to this project due to its importance to research into the teaching of English in Saudi Arabia. As a result, they were not paid for their participation as they were happy to participate voluntarily.

After the researcher introduced the research, learners could ask any question about the research, its purposes, or their participation before signing the form. Then the task was distributed with an explanation on how to complete it. First, they were given The Oxford Quick Placement Test to be completed in 20 minutes. Then they were given the writing task which was timed (40 minutes) and the learners were not allowed to consult any language references (e.g. dictionaries, grammar books) while writing their essays. Table 3.3 shows the instructions for a selected task.

Table 3.3

Task Instructions.

The text: Do you agree or disagree with the following statement: Watching TV is bad for children. Write at least 250 words.
Time: 40 minutes.
Place: in class.
Language references: during this task you are NOT allowed to use any reference tools such as dictionaries or grammar books.
Medium of writing: writing these texts is by hand on the sheets provided by the researcher; two pages are provided for each text.

3.4.3.2 Collecting the Corpus Metadata

The learner profile questionnaire of the International Corpus of Learner English (Granger 1993, 2003; Granger et al. 2010) was used to collect the metadata. However, some modifications were made in order to suit current purposes. Some questions which are related to learners' relatives were omitted, such as father's and mother's mother tongue, as were questions related to primary and secondary education, medium of instruction, etc. In total, 17 elements were collected as the corpus metadata, eight related to the learner and nine were associated with the text (see Table 3.2).

3.4.3.3 Computerizing the Corpus

Corpora containing hand-written texts require further work to convert them into electronic form to make them readable by most language processing tools. Transcribing such hand-written with no standards, specifically when it is done by more than one transcriber, can result in differences in the final production, as many items may be omitted or added

during the transcription process and thus change the results of the corpus analysis. For the conversion process, the researcher used specific standards as described below.

3.4.3.4 Transcribing the Data

As the corpus data is all derived from hand-written texts, specific standards were created in order to achieve a high level of consistency in transcription. Those standards address issues such as how to handle struck out words, or a doubtful form of a character, or unknown words or phrases. Two transcribers, the researcher and one volunteer English teacher who works as teacher of English at Taif University, performed the transcription based on a number of agreed-upon standards (see Appendix C). The agreed-upon standards were also discussed and revised by transcribers prior to the task to ensure consistency in transcribing, and additional reviews were performed throughout the transcription process when transcribers came across uncertain points.

3.4.3.5 Processing the data

All the transcribed essays were uploaded to Sketch Engine (Kilgarriff et al. 2014) to compile them into a corpus. Sketch Engine was preferred for use in this study because it is possible to upload the researcher's own corpora, and it has many advantages and functions such as the availability of the Corpus Query Language (CQL), which can be used to input complex search queries for specific structures or collocations, and automatic Part-of-speech (POS) tagging. The corpora were then automatically tagged using the tagset named 'TreeTagger Part-of-speech (POS) tagset with Sketch Engine Modifications'.

3.4.4 Identifying the PVs

For the present study, I followed the definition of the term in Gardner and Davies (2007) and Liu (2011), which is a simplified version of the exhaustive definition in Biber et al. (1999: 405). Gardner and Davies (2007) defined PV as any two-part verb ''consisting of a lexical verb (LV) proper . . . followed by an adverbial particle (tagged as AVP) that is either contiguous (adjacent) to that verb or noncontiguous (i.e. separated by one or more intervening words)'' (p. 341). The reason for using their definition is that the most frequent PVs examined in this study will be compared to the ones in Gardner and Davies' and Liu's studies. Also, it is simple and involves only one syntactic criterion: ''a verb plus an AVP''. This is in contrast to Biber et al.'s definition, for example, which requires the inclusion of an additional semantic component in which PVs must ''have meanings beyond the separate meanings of the two parts [i.e. the verb and the AVP]'' as in the case of ''give up, look out'', whereas verb + AVP combinations in which ''the verb and the adverb have their own meanings'' are ''free combinations like come back, come down . . .'' (Biber et al. 1999: 404). This semantic criterion is not always straightforward to apply and often requires some subjective judgments. Because of this, Liu (2011) and Garnier and Schmitt (2015) adopted Gardner and Davies' straightforward definition. This definition will also be used in the present study.

An initial attempt was made to identify instances of PVs in the data using the Corpus Query Language (CQL) (Kilgarriff et al. 2014). A CQL search for a PV was conducted using the query [tag="V.*"] [] {0,2} [tag="RP"] looking for instances of any lexical verb followed by zero, one or two word tokens followed by a particle. A cursory glance at these hits reveals

much 'noise', however.[3] First, some hits are due to faulty tagging. See example (a), where 'According' is tagged as a lexical verb (VVG, progressive form) instead of as part of a complex preposition ('according to') and 'in' is tagged as a particle (RP) rather than as a preposition. In this case there are two intervening tokens ('to' and 'study'), which are also wrongly tagged.

Example (a)

The incorrect tagging of prepositions as particles is particularly common, as in example (b)

with 'around'.

Example (b)

In other cases, words are tagged correctly, but the lexical verb and particle belong to two

different constituents. This is the case in example (c), where 'do' is a lexical verb that is separated from a particle 'up' by two intervening tokens but is not part of the same PV as that particle.

Example (c)

Example (c), nonetheless, contains a PV in 'give up'. This instance is retrieved as a separate hit by Sketch Engine, as in example (d).

Example (d)

`<s>`Fourth, if you fall in the beginning,	do not give up	. `</s>`
JJ , IN PP VVP IN DT NN .	VVP RB VV RP	SENT

A more serious problem is caused by 'silence', which happens when correct instances are not returned as hits by Sketch Engine. Again, this is usually due to faulty tagging. In example (e), for instance, both 'wake' and 'up' are incorrectly tagged, and so the PV 'wake up' is not found by the CQL query used.

Example (e)

`<s>`Try stop smoking 3 hours for 3 days when	wake up	morning .
VV VV NN CD NNS IN CD NNS WRB	NN IN	NN SENT

While tagging errors are to be expected with nearly all taggers (Manning 2011) they may be particularly common in learner data (Gilquin and Granger 2015; Nagata et al. 2018), as sequences of tags tend to differ from those found in 'well-formed' native data on which taggers are likely to have been trained.

The issues that arise when using the CQL to search for specific sequences of POS tags are difficult to address without manually searching for individual lexical verbs or particles that occur in the data and checking their environments individually. Given that there is a limited set of such particles, whereas lexical verbs constitute an open class, a reliable and feasible procedure was thus to use the list of particles in Claridge (2000: 46), which is based on lists provided by previous scholars (cf. Bolinger 1971: 17; Cowie and Mackin 1978; Fraser

1976: 5; Quirk et al. 1985: 1151) and to search for each potential particle manually. The list includes the following 34 items: aback, aboard, about, above, across, after, ahead, along, apart, around, aside, astray, asunder, away, back, behind, by, counter, down, forth, forward(s), home, in, off, on, out, over, past, round, through, to, together, under, up.[4] Note that Gilquin (2015) uses a similar, albeit shorter list, based on Huddleston and Pullum (2002). Like Gilquin, we disregard the word *home* "as it did not seem grammaticalised enough to qualify as a particle on a par with, e.g., *about* or *up*" (Gilquin 2015: 58). Eight of the remaining particles on Claridge's (ibid.) list are not attested in SLEC, leaving 25 particles for which data were extracted from the corpus. These are: 'about', 'above', 'across', 'after', 'along', 'around', 'away', 'back', 'behind', 'by', 'counter', 'down', 'forward', 'home', 'in', 'off', 'on', 'out', 'over', 'past', 'through', 'to', 'together', 'under' and 'up'.

Every instance of each of these 25 forms was retrieved from the corpus and inspected using a KWIC concordance. Irrelevant hits, where, for example, the form in question functioned as a preposition rather than a particle, were eliminated. (This case is illustrated by example (b) above.)

Full details for each potential particle forms searched for are given in Appendix O. Appendix O also shows the POS tags assigned to the forms in question, whether correct or erroneous. The number of instances that turned out to be true positives (i.e. they were actual instances of verb+particle combinations) for each potential particle is also listed in Appendix O.

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[4] Similarly to Gardner and Davies (2007), the intention was to treat the particles 'around' and 'round' as variants of the same form as they "are synonymous and represent mainly a usage variation between American and British English (Liu 2011: 668). As it happened, only 'round' appeared in the SLEC corpus.

To confirm whether the multiword verbs in concordances were phrasal and to be included in the results, a specific procedure was followed based primarily on syntactic descriptions from Biber et al. (1999: 405):

1. If the multi-word unit is used intransitively then the unit is a PV as the particle is adverbial since prepositions must be followed by noun phrase objects.

    Example (f) Suddenly my car *broke down*.[5]

2. If the multi-word unit is used transitively but the verb and particle are separated, then the combination is a PV.

    Example (g) the teachers were trying to *calm* me *down*…

3. If the multi-word unit is used transitively and the verb and particle are not separated, but a pronoun object could be placed between the lexical verb and the particle, then the combination is a PV.

    Example (h) *write down* anything you think is important.

    (which could be paraphrased as '*write* it *down*.')

4. If a given multi-word unit appears to meet the above primarily syntactic criteria for PV status, but does not constitute a recognizably institutionalized PV, then it is not counted. This occurs in SLEC in cases where a learner appears to be using a PV, but that PV is not generally attested in English or else it is not attested in the particular lexicogrammatical environment in which the student attempts to use it, or in the sense that the student appears to be targeting. Examples include:

    Example (i) Horror games must *fright* them *out*.

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[5] All examples in this section are taken from SLEC. Italics are added to highlight the PVs.

(This may be an attempt to use a PV along the lines of freak someone out, but it is not institutionalized in English.)

Example (j) While walking he *bog down*.

(The PV bog down exists in English, but it is used transitively and primarily in the passive voice, and not with the sense that appears to be targeted here.)

Example (k) I played a horror story in the radio to *cut* the road *off*.

(The PV cut off exists in English but not with the sense that appears to be targeted here.)

For more examples and information on how many erroneous instances of PVs (types and tokens) were discarded see Table 4.16, Chapter 4, Section 4.2.5. Note here that in examples such as the case of *dress up* in (l) the student is given the benefit of the doubt, because it is possible that they actually mean *dress up* as opposed to the more expected *get dressed*.

Example (l) After I have my breakfast I *dress up* and go to my university.

5. If an otherwise permitted instance of a PV manifests orthographic or inflectional errors (e.g. wrong tense or number on the lexical verb), then it is still accepted as an instance of a PV. Examples abound in SLEC

Example (m) she came and *turn* it *off*…

(where the past tense suffix *-ed* is missing on *turn*)

On the issue of the distance between lexical verbs and particles, we note here that while past research into PVs (Gardner and Davies 2007; Garnier and Schmitt 2015; Liu 2011) looked at PVs that are separated by two word tokens maximum (e.g. 'turn the lights on'), in this study the manual inspection of concordance lines meant that we did not have to impose

such a limitation. Having said that, instances of PVs whose verb and particle were separated by three or more words, turned out to be rare in SLEC. There were only two such instances, namely:

Example (n) *put* your favorite movie *on.*

Example (o) *take* these video games *away* from them.

Once criteria (1) to (5) above were fulfilled, a candidate was accepted as a PV. Appendix P contains concordances for all instances of all potential particles attested in SLEC, with the exception of *to.*[6] It shows the POS tags assigned by TreeTagger to the form in question (and the surrounding forms). Each concordance is ordered in the first instance by the tag assigned to the potential particle.

Appendix Q, finally, shows all instances of those potential particles that were ultimately validated as particles in verb+particle constructions using the above procedure. It is organized in the first instance according to the particle form investigated, and in the second instance by the lemma immediately to the left of the particle (e.g. so that *FIND out* generally appears before *GO out* and so on).

Validated instances of PVs were subsequently grouped by the particles they used and ranked by frequency of occurrence (tokens) for different PV types according to the particle used (see Table 4.2, Chapter 4, Section 4.2.3).

3.4.5 Statistical framework

In research, it is crucial to use statistical methods to find any data differences that are meaningful. It should be noted that the type of data being analyzed affects the statistical

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[6] While the form *to* is attested in SLEC 5553 times (see Appendix O), it never occurs as an adverbial particle in a PV structure. It was thus not deemed desirable to include a lengthy table containing only irrelevant hits.

procedure that is selected. In addition, a researcher must take the objectives of the study into consideration when selecting a statistical technique. The statistical procedures in the present study used to establish whether there is a difference between the absolute frequency of PVs in the learners' and natives' corpora (BNC); to establish whether there is a difference between the absolute frequency of PVs in the different variables, and to establish how big the difference is in these two points.

For this purpose, the loglikelihood test is used test whether the difference between the frequency of the PVs used by Saudi undergraduate EFL learners and the use of PVs in BNC is significant. In addition, it is used to test whether the difference between the frequency of PVs between the different groups (male / female, beginner / lower intermediate, and argumentative / narrative / descriptive) is significant. Log-likelihood is one of the statistical significance tests used in corpus linguistics which allow to test for significant difference in the frequency of a linguistic item or a linguistic feature between two corpora (Brezina 2018). In this study, the log-likelihood value is calculated using Paul Rayson's online loglikelihood calculator. It should be noted that the higher the log-likelihood value, the more significant the difference between the two frequency scores. A log-likelihood value of 3.84 or higher is significant at the level of $p < 0.05$, a log-likelihood value of 6.63 or higher is significant at $p < 0.01$, a log-likelihood value of 10.83 or higher is significant at the level of $p < 0.001$, and a log-likelihood value of 15.13 or higher is significant at the level of $p < 0.0001$. After establishing that there is a difference between two frequencies or groups, there is a need to see how large this difference is. This is usually done using an effect size measure to allow us to "indicate the magnitude of an observed finding" (Rosenfeld and Penrod 2011). %DIFF Gabrielatos and Marchi's (2012) used in the study to measure the effect size.

3.5 Multiple-Choice Tests

The primary goal of this section is to present the second instrument used in conducting this study, a multiple-choice (MC) test comprising (1) MC questions to test learners' productive use of PVs, (2) MC questions to test learners' receptive knowledge of PVs and (3) MC questions to test learners' potential use of PV avoidance. As indicated above, the first two tests were carried out in order to answer the research question, how do Saudi Learners of English use PVs in productive and receptive tasks? The third test set out to answer two research questions: do Saudi undergraduate EFL learners avoid using PVs? And do proficiency level and type of PV influence their use of PVs? Ethical guidelines and the procedures that had to precede the actual conduct of the tests are also discussed below.

3.5.1 Background

As already discussed in the previous Chapters, many different studies have generated inconclusive, differing and even conflicting results about the nature of learners' receptive and productive knowledge of PVs and their employment of avoidance. The critical literature review made it clear that one of the reasons for these inconclusive results is serious methodological problems associated with these studies, which influenced the reliability of the data. Given these methodological flaws, any firm conclusion drawn from the results of these studies should be viewed skeptically.

The study reported on here is focused precisely on overcoming these issues. It was designed to address some of the shortcomings of the previous studies, and specifically to establish Saudi EFL learners of English productive/receptive use and knowledge of PVs, which is missing in the literature. In addition, it was questionable in previous studies whether the concept of avoidance was applicable to Saudi learners, since their poor performance

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seemed better attributed to their ignorance of the structure than their avoidance of it. This interpretation was, however, inconclusive, as the previous studies used either recognition tasks or free writing without a separate task to assess the learners' productive knowledge. Moreover, the studies did not control for the learners' possible ignorance of the PVs used in the tests.

Note that this is not to claim that this study is free from weaknesses; the limitations associated with this study are discussed in Chapter 6.

3.5.2 Participants

This section describes the groups of participants involved in this second study. The learners who participated were 195 learners of EFL. The L1 background of all learners was Arabic. The learners' proficiency predominantly fell in the beginner–lower intermediate range, see Section 3.5.9. They were first-year Saudi undergraduate students of EFL who had studied English for nine years in Saudi public schools. The age range of the participants was between 18 and 24 years. In terms of gender variables, the data were produced by (116) male and (79) female participants.

The participants were asked to provide some demographic information, such as native language, gender, years of studying English, years attending English classes, and other fluently spoken languages. In addition, the participants also had to indicate their age group: (1) age group I (18–22 years), (2) age group II (22–26 years) and (3) age group III (26–30 years). These learner profiles provided the researcher with information that allowed comparisons.

Each of the learners signed a consent form which stated that the data collected would be published and used in relevant future research. The data were taken from both genders

(male and female). However, and as already discussed above, the education system in Saudi Arabia mandates single-gender classes; for this reason, it would have been difficult if not impossible for a male researcher to enter a female university during working hours to collect data. Therefore, as before, it was necessary to recruit female representatives to help collect the required data. These two representatives were asked to sign a consent form confirming that all data they collect would be saved in a secure place until they were handed to the researcher at the end of the collection process. The form stated that the representatives were not allowed to keep any part of the data in any medium and would not share any information they might know about the learners or their materials with any third party. The researcher also received permission from the institution from which the data was collected. As before, the participants were motivated to contribute to this project due to its importance to the research on teaching English in Saudi Arabia. As a result, they were not paid for their participation as they were happy to participate voluntarily.

3.5.3 PVs chosen for the test

As there are a huge number of PVs in English, it was obvious that not all of them could be included in a test, due to the fact that this study is concerned with overcoming some of the shortcomings of previous studies as discussed earlier and due to time restrictions, some selection of PVs to be tested had to be made.

As indicated in Chapter 2, Kleinmann (1977: 97) argues that "to be able to avoid some linguistic feature presupposes being able to choose not to avoid it; i.e. to use it". That is, it is crucial to make sure of learners' prior exposure to the target structure before assessing their productive or receptive knowledge and avoidance of its use. Basically, if learners are ignorant of a target structure, they cannot be described as avoiding it. This observation has

been neglected in previous studies, and there was a failure to verify the learners' knowledge of the PVs employed in the research. For example, the PVs used in Dagut and Laufer's (1985) study were selected based on the researchers' own judgment as language instructors. Saiya (2011) used the same PVs as Liao and Fukuya (2004), which had been selected based, essentially, on the native speakers' judgment, while the selection of PVs in Barekat and Baniasady's (2014) study was based on a reference book which includes 1,000 well-known PVs. Therefore, such studies were criticized for neglecting participants' prior knowledge of the target PVs and for failing to ensure that the participants' performance reflects avoidance, since the results could simply be attributed to the participants' ignorance of the PVs.

To avoid this deficiency, the 31 PVs used in the present study were taken from the textbooks used by the students at their elementary, intermediate and secondary schools. In addition, they are all found within the list of 150 most frequently used PVs of Liu's (2011) study, which was based on the BNC and COCA. It is assumed that most of the learners participating in this study should have been met and be familiar with these PVs in the process of learning English as they are taken from their textbooks and from the most frequent PVs according to the two most well-known corpora. In this way, I maximized the likelihood that learners had been introduced to the PVs in the study and this helped to maximize the degree of bias as the participants were not tested with unfamiliar PVs.

The Saudi EFL textbooks analyzed in the present study were designed from 2016 onwards. EFL is taught from the 4th to the 12th grade. Each of the textbooks is provided in print and in a readable and searchable PDF format. The PDF format allows for resaving the files in other formats to process them in any computer software tool built for language processing. The textbooks examined were six EFL textbooks from the series Smart Class,

aimed at Saudi elementary students. Another six EFL textbooks came from the series Full Blast, aimed at Saudi Intermediate students. Yet another six EFL textbooks came from the series *Traveller*, aimed at Saudi Secondary students. They are produced by MM Publications in the UK and authored by H. Q. Mitchell and Marileni Malkogianni. The textbooks examined in the study were intended for use in the first semester and second semester of each grade. The corpus-processing tool Sketch Engine was used to process the textbooks for the purpose of the present study. It was also used to retrieve PV forms from the data using the CQL that identify PVs.

Table 3.4

PVs chosen and their frequencies and overall rank order in COCA, BNC and the textbooks.

NO.	Rank					PVs	Frequency		
	Secondary	Intermediate	Elementary	COCA	BNC		S	I	E
1	1	1	12	1	1	go on	53	44	2
2	2	6	-	6	8	find out	20	10	-
3	3	5	20	35	62	wake up	20	13	1
4	4	10	4	8	6	go out	19	7	3
5	5	16	-	17	10	make up	12	6	-
6	6	93	-	98	88	get in	12	1	-
7	7	14	-	149	114	put in	11	7	-
8	8	30	16	24	31	take out	10	4	1
9	9	9	-	13	30	get out	10	9	-
10	10	4	-	41	18	take up	10	16	-
11	11	59	-	4	9	come up	10	2	-
12	12	-	-	11	2	set up	9	-	-
13	13	13	-	26	15	go down	9	7	-
14	14	39	-	49	128	check out	9	3	-
15	15	23	-	7	12	come out	8	5	-
16	16	24	15	2	3	pick up	8	5	1
17	17	-	-	16	23	give up	7	-	-
18	18	44	-	12	21	turn out	7	3	-
19	19	78	-	38	61	hold up	7	1	-
20	20	3	-	86	146	hang out	7	15	-
21	49	8	13	14	14	come in	4	9	2
22	43	2	1	23	25	get up	5	15	23
23	89	7	2	51	58	put out	`3	10	8
24	22	36	8	3	5	come back	7	3	2
25	34	17	9	5	4	go back	5	6	2
26	149	80	-	9	7	point out	1	1	-
27	74	32	5	10	53	grow up	3	4	2
28	50	-	-	15	22	take on	4	-	-
29	56	72	-	18	32	end up	4	1	-
30	58	38	-	19	19	get back	4	3	-
31	71	33	-	20	26	look up	3	4	-

Table 3.4 provides the chosen PVs, their frequencies and their overall rank order in COCA, BNC and the textbooks. A total of 31 PVs were selected to be used in this study. To be more specific, these 31 PVs are:

1. The first 20 PVs in COCA,

2. The first 20 PVs in secondary textbooks,

3. The first 10 PVs in intermediate textbooks,

4. The first 10 PVs in BNC, and

5. The first 2 PVs in elementary textbooks.

As far as the present study is concerned and to minimize the complexity with respect to classification of PVs, aspectual PVs will be considered as non-literal PVs (figurative). The discussions in Chapter 2 show that PVs have varying degrees of idiomaticity and many of them have multiple meanings with no clear-cut classification of PVs. Therefore, in the present study, PVs under investigation will be classified into just two major categories, literal and non-literal (figurative). This is to reduce the fuzziness in classification, and to facilitate my analysis so that it is in line with the research objectives (see Chapter 1). Therefore, literal PVs will consist of those for which the meanings are transparent: both elements retain their regular meanings, while those that do not fulfil such criterion will be categorized as figurative PVs.

The semantic opacity (which determines whether an item is literal or figurative) of the PVs was then established first based on my own judgment. The reason for using both literal and figurative PVs in the test is to examine the claim that most language learners have a better understanding of literal than figurative PVs (Dagut and Laufer 1985; Liao and Fukuya 2004; Yorio 1989). To avoid the subjectivity which is involved with semantic

judgments, it was important to compare my judgment with that of native speakers, who are supposed to be more confident in their semantic knowledge of PVs and more objective in deciding whether an item is literal or figurative. Therefore, the definitions for the literal and figurative PVs, as well as contextualized examples for each verb type, were given to native English language teachers (six American, four British, one Irish and one Canadian). They were asked to classify each PV as literal (inserting the letter L in the designated space) or figurative (inserting the letter F). Before starting, the twelve raters indicated that they felt comfortable with the procedure and with the notions of PVs and literal/figurative language. Based on the native English language teachers' feedback, some changes were applied to the classification of the PVs as literal or figurative. As a result of this process, 16 PVs were classed as literal and 15 as figurative. However, to have a balanced distribution between literal and figurative PVs, one PV form 'go down' was used in both its literal and figurative senses, as shown in examples (1) and (2) below:

1. After hitting the iceberg, the ship began to g…. d…. (*Move down to a lower level or position*)

2. The cost of airline tickets is ………. because of competition from budget airlines. (*Decrease in value or amount*).

In the first example, the PV is used literally, while in the second it is used figuratively. As a result, there were 16 literal PVs and 16 figurative ones.

After applying these changes, the sentences were given to two English-native PhDs in linguistics to confirm the results. They were in complete agreement with the classification of the PVs as either literal or figurative.

3.5.4 Test sentences

The test sentences used in this study were selected from *1000 Phrasal Verbs in Context*, by Errey (2007), which contains phrasal verbs specifically designed for intermediate-level learners, and *English Phrasal Verbs in Use*, by McCarthy and O'Dell (2004). Since the test was given to participants with different proficiency levels (beginner, lower intermediate, upper intermediate, advanced), controls were incorporated into the writing of the test sentences to ensure that learners' potential lack of fluency would not obstruct their ability to complete the task. These controls focused on each sentence's number of words, simplicity of vocabulary and level of complexity. All the selected sentences were taken from elementary and intermediate English vocabulary and grammar textbooks because "syntactically more complex sentences induce more syntactic processing relative to syntactically simple sentences" (Osterhout, Kim and Kuperberg 2012: 373). Sentence complexity and length are linked concepts. They influence the choices made by participants for reasons related to sentence processing. According to Schütze (2011: 211) participants will sometimes reject both lengthy sentences with simple structures and highly complex sentences "due to properties of the comprehension process that are independent of grammatical knowledge." Therefore, to minimize this possibility and make sure that processing difficulties would not affect the participants' answers, all the test sentences were controlled for their number of words and level of complexity. Dörnyei (2003) believes sentences should not exceed 20 words. Following this recommendation, the overall number of words in each sentence was between 9 and 16.

Unfamiliarity with some of the lexical items used in a sentence is another common reason for sentence-processing difficulties among L2 learners. According to Murphy (1997)

some learners considered 'a sentence difficult because they could not understand what a specific lexical item meant' (p. 44). As already mentioned, the test sentences were taken from English sources which are designed to suit lower-level learners. Despite this, to avoid lexical items that participants could be unfamiliar with – given their proficiency levels vary and because there is a correlation between vocabulary size and reading comprehension (Cameron 2002; Gallego and Llach 2009) – the vocabulary used in this study was also considered. Knowing that vocabulary size differs among learners based on their levels of proficiency (Schmitt 2000), and on the assumption that high-frequency words are acquired earlier than low-frequency words (Ellis and Beaton 1993; Hulstijn 2008), the lexical items employed in the test sentences of this study were among the 2,000 highest-frequency words used by native speakers, based on the British National Corpus, and the 2,000 words most commonly used by L2 English learners, according to the International Corpus of Learner English and the Longman Learners' Corpus. In addition, the topics used were those most common in everyday English so that the sentences would be easily comprehended by all participants.

Following all these criteria, there is still a possibility that some of the participants might have been unable to understand certain lexical items. To eliminate this problem, participants were given the freedom to ask any question regarding the meaning of any difficult words they might face. In addition, following feedback from the pilot study, certain words which caused difficulties for the participants were changed. Because of the criteria implemented in the writing of the test sentences, the effects of linguistic and nonlinguistic factors that could have decreased the reliability of the data were minimized. Moreover, these measures gave the researcher confidence that participants' answers would be based on their knowledge rather than their inability to understand the sentence.

3.5.5   Instrument and study design

The present study examined the use of PVs among undergraduate Saudi learners of EFL. It aimed to contribute to the literature by overcoming the design deficiencies of the studies discussed in Chapter 2. Therefore, as discussed in the previous section, the method for selecting the target PVs was developed to minimize the possibility that learners were ignorant of the structure of PVs and thus to attain more reliable results. In addition to that, a controlled production task was included to compare the participants' performance in productive and receptive tasks, on the one hand, and production and avoidance tasks, on the other.

Having explored learners' knowledge and use of PVs in the previous Chapter, it can be noted that studies differed in their design regarding the types of and the number of tests. Some studies used a multiple-choice (MC) test, a translation test and a memorizing (recall) test (Dagut and Laufer 1985; Ghabanchi and Goudarzi 2012; Hulstijn and Marchena 1989; Liao and Fukuya 2004); others administered an MC test and a translation test (Laufer and Eliasson 1993; Duhaish 2008) or a questionnaire (Siyanova and Schmitt 2007). Quantitative methods are the best way and the most common approach to measure learners' knowledge of PVs and avoidance phenomena. Therefore, this study will only use one type of test, MC test. An MC test have a great advantage in this type of investigation for many reasons. First, it is used extensively as a testing procedure, especially in the area of vocabulary as a good measure of lexical knowledge (Read 1997). In addition, it is the most-used test that can prove strong evidence of avoidance among the different tests used in the previous studies. Hulstijn and Marchena (1989) believe that the evidence for avoidance of PVs produced by MC tests is strong, "if learners were not to follow native speakers' preference for phrasal verbs" (p.

244). Contrary to the translation test, for instance, which would produce the weakest evidence "since we could not be absolutely sure whether learners, given a non-phrasal translation, would have actually considered (and rejected) the phrasal verb" (p. 244). Furthermore, since this study investigated both learners' knowledge (productively and receptively) and their avoidance, using one type of test was more reasonable for mainly practical reasons as it provided high objectivity and the convenience of administration as well as the ease of scoring.

Based on the test format (see 3.5.3), the researcher could calculate the overall number of test items (PV tokens) used in this study, which was 64 items. To avoid making the test too long, especially given that the participants would be taking a proficiency placement test before the main study was administered, I anticipated that participants should be able to complete the test at a rate of around 2–3 questions per minute which was later confirmed when participants completed the tests. Therefore, an MC test was the best choice as they do not take much time to administer and are easy to control. To try to eliminate (or at least reduce) the effect of fatigue, the total number of sentences to be tested was 64. This is in line with Cowan and Hatasa (1994), who argued against using more than 72 sentences, even though longer tests may increase the reliability of the results as long as the variables affecting participants' judgments are controlled. Thus, as this study has 64 sentences employed in the tests, this may decrease the reliability of the results.

Although vocabulary knowledge is multifaceted, the form-meaning link is unquestionably the most crucial lexical aspect that must be acquired when learning a word (Schmitt 2010) (see Section 2.3). Therefore, I decided to create a test that would assess the form-meaning knowledge of the PV items. The next step was to choose which of the four

form-meaning constructs, using Schmitt's (2010) terminology (form recall, form recognition, meaning recall, or meaning recognition) would be used or alternatively discarded. The form recall format (productive knowledge) and form recognition format (receptive knowledge) were chosen to be the best possible test formats for the present study.

There were two considerations when deciding to assess the form-recall level of knowledge: First, form-recall level of knowledge is considered to be the most difficult level of word knowledge (Laufer and Goldstein 2004) and successful production at the form recall level is an indication of full productive mastery of the form-meaning connection (Schmitt 2010). Schmitt (2010) considers form-recall knowledge to be the first step in the way to full productive mastery, which is the point where the item can be "confidently used in an appropriate manner in a variety of spoken and written contexts." (p. 87). When it comes to form-meaning knowledge, words are essentially learned in two stages: first, learners establish meaning recall, and then they establish form recall (Schmitt 2010). As a result, if students exhibit form-recall knowledge, it can be assumed that they also have knowledge of all other types of form-meaning knowledge. Second, due to the fact that students must have form recall knowledge in order to produce written language, this test has ecological validity. Ecological validity examines whether the results can be generalized to real-life settings (Lewkowicz 2001). Additionally, since students are limited in their answers and there are only two possible outcomes either correct or incorrect, it enables objective and straightforward marking. This does not imply, however, that aspects of word knowledge other than form-meaning have been mastered. Due to the fact that previous research revealed that the tested items were the most common phrasal verbs in English (Gardner and Davies 2007; Liu 2011), I anticipated higher scores for their overall performance.

With regard to form recognition format (receptive knowledge), the purpose of the test is to determine whether participants are able to recognize the appropriate PV from the list of possible choices to meaningfully complete the given sentences. This type of multiple-choice question, according to Schmitt (2010), are used to assess the form-meaning link at the recognition level. According to Brown et al. (2008) multiple choice tests can be used to identify form recognition. Moreover, the Vocabulary Levels Test is perhaps the most well-known test to assess learners' written receptive vocabulary knowledge using a multiple-choice format (Nation 1990). This specific test format has been shown to be effective in assessing learners' receptive knowledge of words and word sequences in earlier studies (e.g. Schmitt et al. 2004; Schmitt and Redwood 2011; Webb 2005), but it can be criticized for underestimating the complexity of receptive knowledge by only measuring it at a recognition level (for a further discussion, see Schmitt 2010: 153). Because of this, it should be noted that the receptive test used in this study only assessed learners' recognition of the target PVs (i.e. the ability to recognize a word when it is shown), not necessarily their comprehension of these items (i.e. the ability to understand a word when encountering it in a context). Furthermore, although the recognition formats typically encourage guessing behaviors and lack ecological validity because people are not given a choice of form options when they encounter unknown words in the real world, they are useful in measuring the initial stages of vocabulary acquisition Schmitt (2010). Moreover, they are helpful in identifying small, initial amounts of learning gains, which are typically missed by recall test formats. In addition, given that the participants are limited in their response options and that there are only two possible outcomes correct or incorrect, it enables objective and straightforward marking.

Thus, the tests were made up of three sections, the productive measurement instrument, the receptive measurement instrument and the avoidance measurement instrument. These will be discussed below.

3.5.5.1 *Productive measurement instrument*

To measure learner knowledge of the target PVs, a productive PV test was designed as the first part of the test. A productive test format using the cloze technique was designed to avoid guessing effects, which are typical in MC test formats (Stewart and White 2011). Cloze tests, which involve filling in gaps, are used extensively as a testing procedure, especially in the field of vocabulary, as a good measure of lexical knowledge (Read 1997). They require participants to produce the target word(s) themselves, which requires a higher level of mastery than would a receptive word recognition test (Groot 2000: 76). In the current case, participants had to insert sixteen PVs (eight literal and eight figurative) into a pen-and-paper cloze test. After receiving instructions in English and Arabic, participants were given two examples of how to answer the questions to familiarize them with the format. They were asked to provide the two-word English PV embedded in an English sentence. Each sentence contained two gaps, which corresponded to the two words that comprised each PV. To help the participants and to constrain the range of potential PVs elicited, they were given first-letter prompts for the target PVs. Example (3) below, taken from the productive test used in the current research, serves as an illustration. Note that a one-word synonym, in this case 'invent', for the targeted PV ('make up') appears in parentheses alongside the test sentence.

3. My son is really good at m..... u.... jokes and funny stories.   *(Invent)*

The full productive test is reproduced in Appendix D, Part 1. Participants were asked to take the productive test before the receptive and avoidance tests.

3.5.5.2 Receptive measurement instrument

Receptive knowledge usually precedes productive knowledge (Melka 1997; Schmitt, 2010). Therefore, it is likely that participants who could successfully *produce* a targeted item would also be likely succeed in receptive tasks with the same item. The remaining, thus far untested, 16 PVs (eight literal and eight figurative) were thus tested in the receptive task in part 2 of the MC test. After receiving instructions in English and Arabic, participants were given two examples of how to answer the questions. Then, for each question in the test, they were asked to circle the right PV from four alternatives: the correct PV and three distractors. Example (4) from the receptive test is provided below:

4. Even when I have a day off, I …………. early. I can't help waking up at 6 a.m. *(Rise after lying in bed or sitting)*

get up   **get around**   **get along**   **get ahead**

The full receptive test is reproduced in Appendix D, Part 2.

3.5.5.3 Avoidance measurement instrument

This MC task was based on 32 PVs (16 literal and 16 figurative). Thirty two sentences were created in which the verb in question was left blank. The participants were asked to fill in the blanks from four alternatives: the correct phrasal verb, an appropriate one-word equivalent and two distractors, one of these being a PV, the other a one-word verb. These choices were presented in a randomized order below each sentence as the answers to each test item. All the appropriate one-word equivalents to the PVs were provided by two English-native PhDs in linguistics. In this way, the chances were higher that all options would be natural-sounding answers. Since each item could be answered by two correct answers,

participants were asked to choose the one that they considered most suitable to complete the sentence. The participant's preference for one type of verb (one word versus phrasal) would show avoidance of the other. Unlike a normal MC test, the present test included not one but two correct answers. The participants were given the following instructions: "Choose for each sentence the verb that in your opinion best fits the context and fill in that verb. Assume that these sentences have been written in normal, colloquial English." (Hulstijn and Marchena 1989: 245). Example (5), extracted from the avoidance test, is reproduced here by way of illustration:

5. Peter's going to the dentist to have his rotten tooth …….
   removed   broke   down   stopped   taken out

The full avoidance test is reproduced in Appendix D, Part 3.

3.5.6 Test format

The next preparation stage was the writing of the tasks. A 21-page test booklet was written for this study. The first page included information and instructions for participants about the study. It also informed the participants that their answers would remain confidential and that they would only be used for research purposes. For that reason, the participants were not required to supply their names on the assignments. The second and third pages included consent forms to be completed by the participants, indicating that they understand the purpose and background of this research study, procedures, risks and confidentiality. The fourth page was a bio-data questionnaire designed to collect information on: native language, gender, age, nationality, English proficiency score, number of years attending English classes and other fluently spoken languages. The participants were also required to indicate if they had lived in an English-speaking country. Positive answers to this question led to exclusion

from the study, which study focused only on Saudi learners who studied English in an EFL environment. This information is required as they are variables investigated in the study with respect to learners' use and knowledge of PVs. Pages 5–13 of the test booklet included the Oxford Quick Placement Test, which places students on the CEFR. The participants were given 20 minutes to finish the test.

Pages 14–21 included three study tasks which were based on the 16 literal PVs and 16 figurative PVs selected for this study. Pages 14–15 presented the first task, the MC test described in Section 3.5.5.1 that aimed to assess participants' knowledge of PVs productively. In this task, as indicated above, the participants were provided with 16 sentences, each of which had a missing PV (of eight literal and eight figurative PVs). The participants were asked to read through the sentences and were requested to produce the missing PV. They were also given the first-letter prompts of the target PVs. They were given six minutes to finish this task.

Pages 16–18 provided the second task, the MC test (described in Section 3.5.5.2) to assess the participants' receptive knowledge of the target PVs. The other 16 PVs (eight literal and eight figurative) were used in this task. The participants were asked to circle the correct PV from four alternatives: the correct phrasal verb and three distractors. They were given six minutes to finish this task.

Pages 19–21 presented the third task, the MC test (described in Section 3.5.5.3) that measured participants' employment of avoidance. The task targeted all 32 PVs (16 literal and 16 figurative). The participants were required to read through 32 sentences with missing PVs and asked to complete the missing parts with their preferred choice of phrasal or single-word verbs. They were given 12 minutes to finish this task.

The test was carried out by the researcher after obtaining all the needed documents, such as the ethics clearance forms from the institution involved and permission from the instructors and students to administer the test. The instructions were explained to the participants by the researcher (or his representative) in English and Arabic to ensure that all participants understood the tasks. Examples were also given prior to starting the tasks. In addition, participants were encouraged to ask questions if they had a problem understanding any part of the test or its language, although the test sentences were taken from sources that matched the assumed level of the participants.

It is worth noting that participants in this study were given a set amount of time in which to provide responses to test sentences for each task. According to Hopkins, Stanley and Hopkins (1990), results vary among learners depending on different factors, including the time given to finish the task. Therefore, determining a limited amount of time during which participants can provide their answers is important and has advantages. According to Schütze (1996), this can minimize the possibility that the participant might become aware of the researcher's experimental purpose. In addition, according to Tremblay (2005), time restrictions make it impossible for the participant to go back and edit their initial response to the sentence. This limited time was specified based on information taken from the pilot study. For additional details on how this retracted time was decided, see Section 3.5.7.

3.5.7 Test piloting

It is generally agreed that researchers should conduct pilot tests before launching into larger-scale empirical studies, as expressed in the following quotation: "If you do not have the resources to pilot-test your questionnaire, don't do the study" (Sudman and Bradburn 1983: 283, cited in Dörnyei 2003: 64). It is important to thoroughly trial tests to assess their

validity and reliability (Dörnyei 2007), as well as to confirm that they can be completed in the time given (Schmitt 2010). These criteria raise an important question: how is it possible to assess the reliability and validity of a specific instrument before using it in an actual study? The only possible answer to this question is by giving the test to a small group of participants similar to the ones who will participate in the study, a process known as a pilot study.

Conducting a pilot study has two important advantages. First, it provides a variety of useful information about the degree of reliability and validity of the instrument. Second, it provides information which helps, in the process of developing the test and related administration procedures, to assess the clarity of the test instructions, check vocabulary difficulty, assign an appropriate time limit for completing the task, and 'iron out the main problems before the major trials' (Alderson, Clapham and Wall 1995: 74). These steps help to "avoid the loss of any potentially useful, or even irreplaceable data" (Mackey and Gass 2005: 44). With the above in mind, the instrument for the current study was subjected to a pilot study that was carried out for all of the included tasks. The following section will describe the pilot studies along with the different procedures considered for increasing the tasks' reliability and validity.

3.5.7.1 First piloting

The first pilot study was carried out as a pre-pilot exercise, basically to determine how reliable the current study was, to assess the reliability and validity of the selected data-gathering method, and to ensure that the target group of participants were capable of completing the tasks in the way the tasks' designer intended. This first pilot study would also check whether each PV form could be accurately provided with the help of the sentence contexts and given meanings and to get an idea of the time needed to complete the test.

Hence, a pilot test was conducted to check the test's validity for both the participants and purposes of the research. In the first stage, six native speakers of English were asked to review the 64 sentences used in this study. They were given 25 minutes to finish the tasks, but the researcher assumed that most would finish the test in a much shorter amount of time. All the participants were given the opportunity to ask questions prior to and after taking the test. As expected for native speakers of English, the results showed that the large majority of items were answered correctly. Most of the test takers took around 15 - 20 minutes to finish the test. At this stage, some changes were suggested in order to make the items sound more natural. In addition, all the items were reordered; items that tested students' knowledge and use of literal and figurative PVs were randomly ordered in order to avoid bias.

The second phase consisted of administering the test to ten Saudi EFL learners who were similar to the target population in every way. As with the native speakers, the participants were allowed 25 minutes and the possibility of asking questions if they needed to. In this stage, however, I anticipated that there would be a greater variation in scores due to the non-native speakers being more likely to differ in their vocabulary knowledge. However, the results assured me that the PVs could be correctly recalled when known by non-native participants. The test-taking time ranged from 20 to 30 minutes.

In this phase, however, it was difficult to know whether the results obtained were valid in reflecting the participants' knowledge. They could have been influenced by different uncontrolled factors, especially incomplete understanding of the instructions since the participants asked many questions after the instructions were given to them, indicating they did not clearly understand them. In addition, two typographical errors were found, and there

were two sentences which included two choices that were the same, although the sentences were intended to contain four different choices.

3.5.7.2 Final Piloting

Based on the highly informative feedback obtained from the initial pilot test, the testing instrument was revised. All the shortcomings associated with the initial pilot version were dealt with in this new refined version; the necessary amendments were made, and a final version of the PV test was produced.

It was found in the initial pilot test that the reliability and validity of the data were affected by how clear the instructions were. Therefore, more informative instructions were provided to avoid any errors in the learners' performance that could be attributable to task instruction-related factors (i.e. errors stemming from ambiguity or misunderstanding of the task instructions). To ensure that the participants fully understood the instructions, the test instructions were translated into participants' L1 - Arabic. Alderson (2000) and Hughes (2003) argue that the advantage of the use of L1 in testing L2 is that it ensures that the participants, regardless of their proficiency levels, have understood all parts, not one part or some parts, of the task instructions.

The revised version was piloted for a second time to further ascertain whether the tests were reliable and valid. The test was first administrated to twelve English native speakers. For reason of comparison with the results of the learners, the statistical analysis of the results of the control group will be presented in Chapter 4. In addition, the final pilot test was conducted on 40 Saudi EFL learners. It yielded results that showed the tests were valid and reliable. All the participants confirmed that they felt comfortable with the procedure and that they were not confused by any of the items. The results of this pilot test will not be

statistically described in this section because they did not engender any major revisions and because some of the data obtained were used in the main study.

It should be mentioned that since one purpose of the pilot was to determine the time required to finish the test, the participants were told when given the instructions that the test was timed. They were asked to complete the test as instructed and were given as much time as they required to complete the tasks. They finished the placement test task in 15-25 minutes, the first task in 5-7 minutes, the second task in 5-7 minutes, and the third task in 10-15 minutes depending on their level of proficiency. No editing was noticed. The average time was approximately 20 minutes for the placement test, 6 minutes for the first task, 6 minutes for the second task, and 12 minutes for the third task. These averages were set as the time limits for the experimental tasks in the main study.

Following this stage, I decided that the test was adequate and ready to be administered to other Saudi EFL learners. I set a completion time allowance of 50 minutes, 44 minutes for completing the test and 6 minutes for completing the consent form and reading the information sheet.

3.5.8 Test administration

The tests were administered in Saudi Arabia at two universities, Taif University and Taibah University, under the supervision of at least one member of the teaching staff plus the researcher. Test takers were given 44 minutes to complete the test (with an additional 6 minutes to complete the consent form), as the piloting suggested that was an appropriate duration. The reason for setting a task time limit was twofold: to curb guessing behaviors from participants and to ensure that when they are working on the third task, they do not go

back to the first or second tasks to look for answers since all the PVs in the third task are used in the first and second tasks as well.

Prior to the collection of data, I followed the ethical review procedures required by Dublin City University, including making a formal request for approval to conduct the study, see Appendix E. Once the approval was granted, I could proceed to the actual data collection process. However, as I needed to conduct the study in my home country, Saudi Arabia, several procedures first had to be completed before I could conduct the study. As my data collection involved undergraduates in two different educational institutions, approval also had to be obtained from these institutions to conduct the study.

Before all participants started taking the test, they were informed about the aims of the study, the format of the test, its completion time, its voluntary nature, and the confidentiality of the data. They were asked to read the instructions and encouraged to ask questions if they had any. In addition, to reduce their anxiety, they were told that the tests were for research purposes only, so they need not worry about their scores. In addition, as recommended by Stibbard (1998), the test instructions were translated into the participants' L1 (Arabic) to lower their anxiety level.

As the act of collecting data is often seen as an intrusion into participants' private lives (Cohen et al. 2000, 2007; Denscombe 2007), the participants were given a consent form to read and sign. This form provided them with general information about the purpose of the study, as well as exact information about the tasks they would be asked to complete and the approximate time required to finish them. The participants were told that there were no expected risks associated with this study; however, they were informed that they were free to leave the study at any time if they felt uncomfortable for any reason and that they could

request that their answers be destroyed. They were assured that all their information and answers would be treated with complete anonymity and confidentiality. Upon agreeing to take part in this experiment, participants were asked to sign and date the consent form.

The participants were next asked to complete a brief questionnaire designed to gather personal information such as their native language(s), age, gender, nationality, English proficiency score, length of time studying English in formal settings (i.e. classes), and length of residence (if any) in an English-speaking country, see Appendix F. This information was necessary to control and statistically examine the significant effects of relevant participant variables on the outcomes of the study.

After the instructions had been read and the participants had been trained on a number of examples, they were allowed to ask questions; however, very few questions were asked. The participants appeared to understand what was required and therefore looked ready to move on to the main tasks. Before they were allowed to do so, however, they were very briefly instructed on how to perform the Oxford Placement Test and informed that they had to finish this task within 20 minutes. They were reminded that they would be instructed to proceed to the next task once the time limit for the current task had been reached.

3.5.9 Measuring the Participants' Levels of Proficiency

It is not an easy task to define language proficiency (LP). There are many definitions of this construct in the literature (see Lantolf and Frawley 1988; Hulstijn 2010: 185–187), many of which discuss the complexity of the various types of skills and knowledge that LP involves and how complex the process of assessing such knowledge and skills is. According to Thomas (1994) language proficiency (LP) is "a person's overall competence and ability to perform in L2" (p. 330). Although this definition seems straightforward, it raises the question

of what competence and ability mean? According to Chomsky (1965: 4), competence is the speaker's mental knowledge of the language, and it is an abstraction, thus, assessment of competence can be achieved only indirectly through performance. Language ability, in turn, can be defined as "the ability to perform language tasks in real life and real time; that is, the ability to convey or understand a content message through the medium of spoken or written language" (Schoonen 2011, p. 701–702).[7]

All these previous definitions of LP and its closely related notions of competence, performance, and language ability represent the major hurdles to developing a valid test that can obtain reliable results for an effective measurement of LP. Indeed, there will be a considerable amount of uncertainty surrounding the results obtained from any language proficiency test.[8] Messick (1989) claimed that no ideal test exists that could efficiently measure the L2 learner's exact level of proficiency. Although this problem poses a threat to the validity and reliability of any test, however, it doesn't mean these tests should not be implemented, as these assessment tests are important for many research and educational purposes. Based on the assumption that LP involves abstract knowledge and many skill components, some researchers, for example, Klein-Braley and Smith (1985), have argued that to increase LP test validity and reliability, the best way to test LP is by using the model of testing known as the "discrete point" approach in which multiple tests are used to asses LP, each test focusing on a single type of L2 knowledge or skill. Learners' subscores are then combined to get a complete picture of their level of proficiency. However, there were many

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[7] Chomsky (1965) uses the term preference to refer to language ability; he defines performance as "the actual use of language in concrete situations" (p. 4).

[8] This uncertainty can be traced back to different internal and external variables (see Cook, 1996; Skehan, 1989).

shortcomings with this model such as the possible loss of test efficiency as a consequence of high testing costs and time-consuming administration, scoring, and analysis of results, as well as the inability to assess separate types of skills without involving others. These limitations led to the emergence of a new model called the integrative test approach. Since "language processing or use entails the simultaneous engagement of more than one language component (e.g. vocabulary, grammar, gesture) and skill (e.g. listening, speaking)" (Vecchio and Guerrero 1995: 6) the integrative test approach assumes that a single test can assess a combination of mixed knowledge and skills (both linguistic and nonlinguistic) if designed to do so. For a review of the literature on both types of LP tests, refer to Thomas (1994: 326), Alderson (2000: 206–207), and Hulstijn (2010: 188).

This previous discussion about the complexity of measuring LP and the associated difficulties with designing an ideal and efficient LP test suggests that it is not a simple task for the researcher to choose an LP test. According to Hulstijn (2010: 187) a researcher must consider the "study's goal, research questions and theoretical embedding, the researcher has to decide which construct of LP, or which LP component(s) should feature as a variable [variables] and how it [they] should be measured"). This is in line with Wistner et al. (2009), who suggested that "researchers need to choose a testing instrument that measures the aspect of proficiency that is related to a particular study" (p. 33). By following this, the chosen test can provide more meaningful information about the object of the research study and the learners' level of proficiency.

It is known that one of the most widely recognized English-language proficiency tests designed to assess L2 learners' grammatical, vocabulary, and semantic knowledge, is the commercial version of the Oxford Online Placement Test (OOPT) (Oxford University press

2015). This instrument was developed by Oxford University Press in order to provide a valid and reliable measure of learners' language knowledge and how they use this knowledge while communicating (Oxford University Press 2015). The main objective of the OOPT was not only to measure grammatical or lexical competence but to measure the communicative competence of the examinees. As Purpura (2009: 1) explains, "it measures a test taker's ability to understand a range of grammatical forms and the meanings they convey in a wide range of contexts. It also measures the extent to which learners can use these language resources to communicate in English language situations". The result of the OOPT is given as a rating that is based on the Common European Framework of Reference for Languages (CEFR). The CEFR provides six different levels for language learners ranging from basic (beginner) to advanced (proficient user/mastery level): A1, A2, B1, B2, C1, and C2 (for more information, see the Council of Europe website at http://www.coe.int/t/dg4/linguistic/Cadre1_en.asp). Research on the OOPT is still ongoing in order to keep the test up to date.

A suitable alternative widely used test among researchers is the Oxford Quick Placement Test (QPT) (2001). The test is free of charge and easy to administer; it consists of a 60-item multiple-choice test with a total score of 60 points (see Appendix G). The level of proficiency is identified according to the user's guide to classifications of proficiency levels, as illustrated in Table 3.5:

Table 3.5

Oxford Quick Placement Test: proficiency-levels classifications scale.

Level	Score range	Council of Europe level
Beginner	0-17	A1
Elementary	18-29	A2
Lower intermediate	30-39	B1
Upper intermediate	40-47	B2
Advanced	48-54	C1
Very advanced	54-60	C2

Based on the results of the Oxford Quick Placement Test, the level of proficiency of the 209 participants were classified into four levels as illustrated in Table 3.6 below, for more details on the results of the participants see Appendix H.

Table 3.6

The distribution of the participants based on their score on the Oxford Quick Placement Test.

Level	Number of participants	Council of Europe level
Beginner	9	A1
Elementary	98	A2
Lower intermediate	97	B1
Upper intermediate	5	B2

The importance of obtaining reliable results that are free from the factors that might affect the generalization(s) to be drawn from any conducted study is emphasized in the field of quantitative research (cf. Dörnyei, 2007; Henn et al. 2006; Mackey and Gass, 2005). One such factor is the sample size; it must be considered when assessing the generalizability and reliability of research findings. It is generally accepted in the fields of statistics and research methodology that the larger the sample size, the more reliable the results are likely to be, if the other factors have been controlled. Ellis (2010) points out that "a test based on a large

sample has more statistical power … than a test involving a small sample. If the sample is too small, the study will be underpowered, increasing the risk of overlooking meaningful effects". (p. 52). Thus, one can remain skeptical about the conclusions drawn from very small sample size, especially from a quantitative study (see Dorniye, 2007). Therefore, although the participants in this study were grouped into four different subgroups of proficiency levels based on their performance on the proficiency test (see Table 3.6), the results of only two groups will be compared, namely group A2 (=98 participants) and group B1 (= 97 participants). The results of the other two groups (A1 and B2) will be excluded from the analysis in order not to affect the generalizability and reliability of the findings. That is, their results will not be included in this study because the numbers of the participants in these two subgroups (A1 and B2) were very small, 9 and 5 respectively. Thus, a comparison between A2s and B1s is the most reliable comparison to make. Comparing the other groups will be left for further studies. According to the CEFR, A2 is considered as beginner level, while B1 is considered lower intermediate level. Thus, the comparison in this study will be between beginner and lower intermediate levels.

As a result, the initial number of the participants was 217. Eight learners were excluded for reasons which made them unfit for this study such as: not being Saudi or having spent a few years abroad studying. Nine A1 and five B2 learners were excluded from the analysis as their numbers were very small. The total number of the participants ultimately involved in this part of the study was 195. Table 3.7 and Table 3.8 present the distribution and the percentage of the participants based on their proficiency level.

Table 3.7

The distribution of the participants based on their proficiency level.

Proficiency level	Number of individuals	%
Beginner	98	40.5%
lower Intermediate	97	59.5%

Table 3.8

The distribution of the participants based on their gender.

Gender	Number of individuals	%
Female	79	40.5%
Male	116	59.5%

Table 3.9 presents a detailed breakdown of the distribution of participants based on their gender and proficiency level. 21% of the participants were considered female beginners, 29.2% were considered male beginners, while 19.5% of the participants were considered female lower intermediate, and 30.3% were considered male lower intermediate.

Table 3.9

The distribution of the participants based on their gender and proficiency level.

Gender	Proficiency level	Number of participants %
Female Beginner	41	21.0%
Female lower Intermediate	38	19.5%
Male Beginner	57	29.2%
Male lower Intermediate	59	30.3%

To sum up, this was an explanation in more detail of how I arrived at two proficiency levels that I would go on to use in this study. These two levels are called "beginner" and "lower intermediate" and correspond to "A2" and "B1" on the CEFR respectively (See Table 3.5).

3.5.10 Statistical Frameworks

In research, it is crucial to use statistical methods to find any data differences that are meaningful. As a result, the present study employs a variety of statistical methods. It should be noted that the type of data being analyzed affects the statistical procedure that is selected. More specifically, a researcher must take the number of variables under investigation, the types of these variables (i.e. whether they are nominal, ordinal, or continuous), and the objectives of the study into consideration when selecting a statistical technique. Descriptive and inferential statistical methods are the two main types. Despite the fact that descriptive statistics give the researcher a clear picture of his/her data, including information about the shape of the distribution, measures of average, and measures of variation (Perry 2011), they are still crucial in deciding which kind of inferential statistical procedure should be applied. Inferential statistics place a great deal of emphasis on the concept of statistical significance because it informs the researcher of "the probability of a mistake being made when inferring that the results found in a sample reflect some truth about the target population" (Perry 2011: 175). Statistical techniques are typically divided into two groups: parametric and non-parametric.

Therefore, to pave the way for running the appropriate statistical inferential procedures, the sample's normality of distribution was checked using the Shapiro test (See Appendix I). The subgroups' results in the three tasks were not normally distributed ($p > .05$) for all variables. Therefore, nonparametric procedures were used.

Accordingly, to test for significant differences between the subgroups of learners and to examine the strength and direction of the relationship between variables, nonparametric

tests are used instead of the parametric ones; for example, (a) the Mann-Whitney U test is the nonparametric alternative test to the independent samples t-test that is used when the results of two subgroups for the same variable are compared against one another, and (b) the Kruskal-Wallis test is the nonparametric alternative test to the ANOVA that is used when the results of more than two subgroups for the same variable are compared against one another. For more details refer to Dörnyei (2007). As for the correlation analysis, (c) the Pearson product–moment correlation is run with both normally and not normally distributed data to compute the correlation coefficient between two variables; it is abbreviated as r. Analyses were considered statistically significant with a 95% confidence interval and the alpha level was set at $p < 0.05$ for all of these tests; in other words, a result is considered significant if $p < 0.05$. The next Chapter illustrates precisely how these descriptive and inferential statistical procedures are put into practice.

3.6 Conclusion

This Chapter has outlined the methodology used in the current study divided into two separate sections as this study integrates both corpus work and MC tests to provide comprehensive findings regarding Saudi (EFL) learners' knowledge and use of PVs and their potential avoidance of PVs. In what follows, an attempt is made at presenting the main results obtained from the analysis of the elicited data of both the corpus-based study and MC tests.

Chapter 4: RESULTS AND DATA ANALYSIS

4.1   Introduction

This Chapter presents and analyses the results of the complementary studies described earlier in the thesis. It is divided into two parts. The first part discusses the results of the corpus analysis conducted to answer the following research questions:

- *How frequently do Saudi undergraduate learners of English use PVs?*

- *Which PVs do they use?*

- *Is there any difference in their use and knowledge of PVs depending on gender? depending on language proficiency? depending on text genre? and depending on semantic nature of PVs?*

The second part addresses the results of the multiple-choice questionnaires (MCQ), of which three were used in the current research: 1- an MCQ to test learners' productive use of PVs, 2- an MCQ to test learners' receptive knowledge of PVs, and 3- an MCQ to test learners' avoidance behavior with PVs. The three tests were carried out in order to answer the following research questions:

- *How do Saudi Learners of English use PVs in productive and receptive tasks?*

- *Is there any difference in their use and knowledge of PVs depending on gender? depending on language proficiency? and depending on semantic nature of PVs?*

- *What can we tell about Saudi undergraduate EFL learners' avoidance, if any, of PVs?*

- *Do Saudi undergraduate learners avoid using PVs?*

- *Does their avoidance, if any, reflect differences in the semantic nature of PV types (Literal vs Figurative)?*

- *Does their avoidance, if any, reflect differences in learners' proficiency level?*

4.2 Corpus results

This section will present and discuss findings based on the analysis of the Saudi Learners of English Corpus (SLEC). It begins with a description of the composition of the corpus (Section 4.2.1) before recapping on how PVs were identified in the corpus (4.2.2). It then goes on to provide a global view of the use of PVs in the corpus, before analyzing PVs according to the independent variables of interest in this study (gender, proficiency level, text genre, PV type) and the individual verbs and particles (types) that constitute the PV lemmas attested in the corpus (4.2.3).

4.2.1 Composition of SLEC

As described in Chapter 3, the SLEC is a corpus comprising a collection of written materials from learners of English in Saudi Arabia. The corpus includes 210,858 tokens (running words and punctuation) and 175,588 running words, distributed over 1,156 documents, produced by 741 students. 182 of the participants were female beginners, 220 were male beginners, while 155 of the participants were female lower intermediate, and 184 were male lower intermediate. Table 4.1 presents the frequency counts and statistics of the corpus, as calculated by Sketch Engine.

Table 4.1

Frequency counts and statistics of the corpus.

Tokens	210,858
Words	175,588
Sentences	11,688
Documents	1,156

The corpus content based on the metadata of the learners shows that those learners are all Saudi undergraduate learners of English for whom Arabic is their L1. When it comes to gender, 507 documents were produced by females while 649 are produced by males.

Figure 4.1

Distribution of tokens based on gender of the learners.
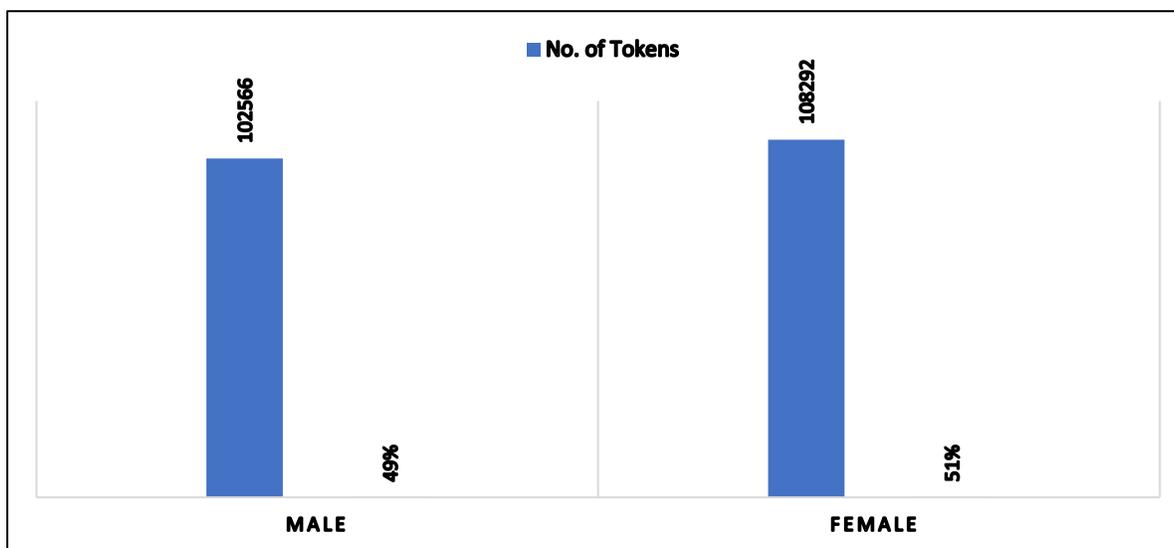
The data collected from males were 102,566 tokens, while 108,292 tokens were collected from females (Fig. 4.1). The number of years they spent learning English ranges from 6 to 9 years and the number of years they had spent in an English-speaking country is 0 years as those who had spent time in an English-speaking country were excluded. As for proficiency levels, 594 documents were produced by lower intermediate and 562 by beginner

learners of English. The data collected from beginners were 93,340 tokens, while 117,518 tokens were collected from lower intermediates. Figure 4.2 shows the current contents of the corpus per level of proficiency.

Figure 4.2

Distribution of tokens per level of proficiency of the learners.
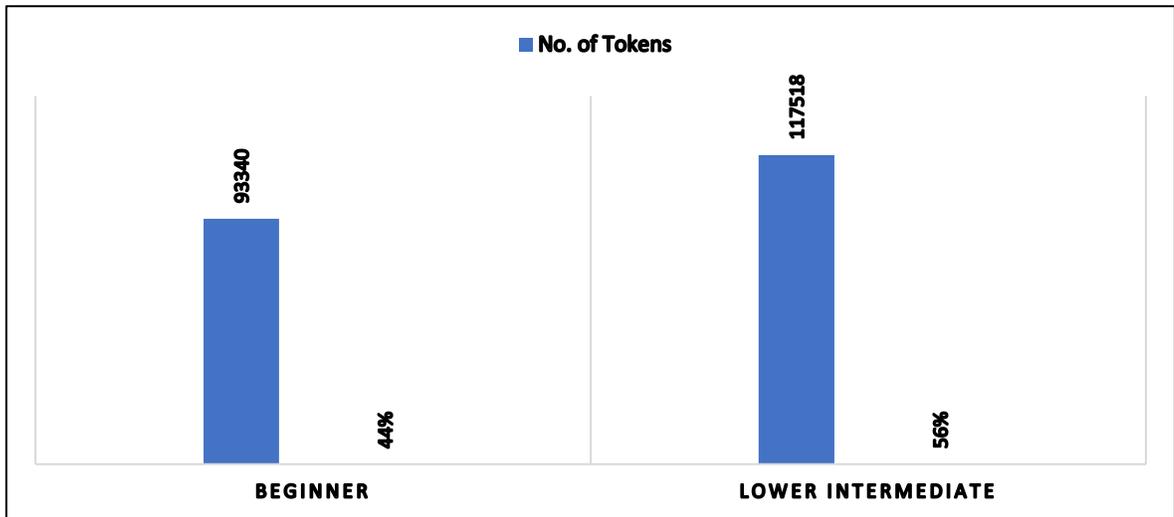
Figure 4.3

Distribution of tokens based on genres of the texts.
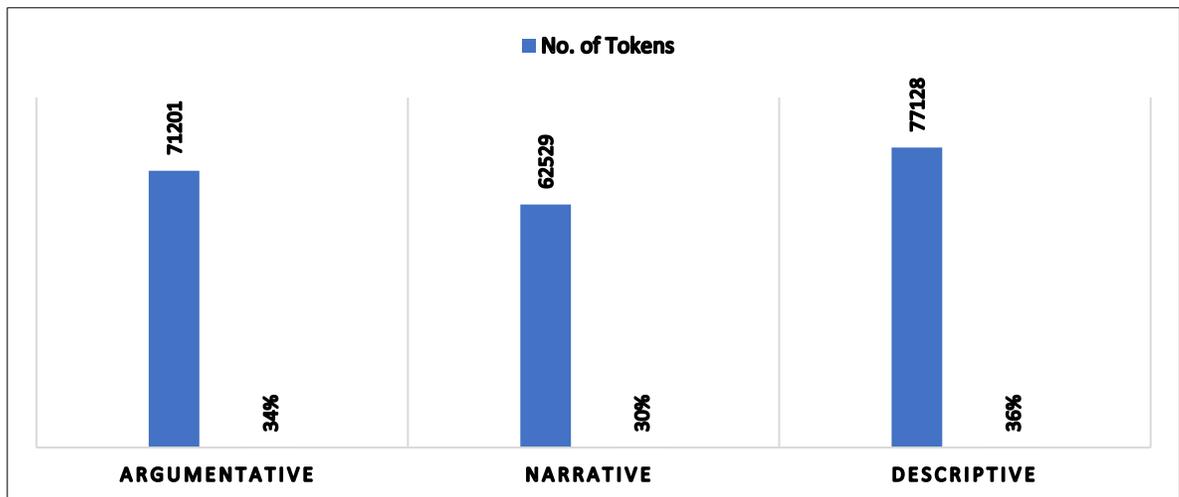
The texts produced by the learners were categorized into three different genres, Argumentative (355) texts with 71,201 tokens, Descriptive (500) texts with 77,128, and

Narrative (301) texts with 62,529 tokens. All corpus data were produced in the classroom in the western region of Saudi Arabia in a timed setting with no reference works or dictionary use. The average length of the texts is 151 words.

4.2.2   Identifying PVs in SLEC

As discussed in Chapter 2, there are various definitions of the term "PVs". The reader is reminded that PVs are understood here as being composed of a lexical verb followed by an adverbial particle that is either contiguous or noncontiguous to that verb. In the present study such sequences were retrieved from the corpus using a manual search for words forms that could potentially function as particles in PV structures and then applying standard tests to confirm PV status (see Chapter 3, Section 3.4.4 for more information). In all, 726 instances of PVs were identified in SLEC following this procedure.

4.2.3   Overall frequency of PVs in SLEC

Since the goal of this section of the study was to examine the overall use of PVs by Saudi English learners, the entire data set was thoroughly examined using the methodology outlined in Chapter 3. All PV tokens were extracted from the learner corpus (SLEC) to ensure an in-depth analysis. Given their manifold semantic, syntactic and stylistic inherent difficulties, and the different verb systems of the learners' first language and that of the target language, the initial hypothesis was that Saudi learners would employ PVs less in their writing than native speaker. The results of the quantification of all PV tokens in the data support this hypothesis. The analysis yielded a total of 726 examples of PVs distributed over the three genres in the corpus as shown in Table 4.2, corresponding to a relative frequency of 4.13 per 1000 words.

Table 4.2

The frequency of usage of each PV found across the SLEC.

Particle	PV	Male						Female						Total
		Beginner			Lower Intermediate			Beginner			Lower Intermediate			
		A	N	D	A	N	D	A	N	D	A	N	D	
out	find out	1	1	0	1	3	0	1	0	0	0	0	2	9
	go out	4	7	6	4	4	10	1	2	9	1	4	10	62
	hang out	1	0	2	0	0	2	0	0	0	0	0	2	7
	run out	0	0	0	0	1	0	0	0	0	0	0	0	1
	watch out	0	1	0	0	0	0	0	0	0	0	0	0	1
	work out	0	0	5	0	0	1	0	0	0	0	0	2	8
	drop out	0	0	0	1	0	0	0	0	0	0	0	0	1
	come out	0	0	0	0	1	0	2	1	0	0	1	0	5
	get out	0	0	0	0	4	2	0	0	3	0	0	2	11
	send out	0	0	0	0	1	0	0	0	0	0	0	0	1
	kick out	0	0	0	0	1	0	0	0	0	0	0	0	1
	pass out	0	0	0	0	1	0	0	0	0	0	0	0	1
	take out	0	0	0	1	1	1	0	0	0	0	0	1	4
	figure out	0	0	0	0	0	1	0	0	0	0	1	0	2
	throw out	0	0	0	0	0	1	0	0	0	0	0	0	1
	look out	0	0	0	0	0	0	0	3	0	0	0	0	3
	check out	0	0	0	0	0	0	0	1	0	0	0	0	1
	share out	0	0	0	0	0	0	0	0	0	0	1	0	1
	try out	0	0	0	0	0	0	0	0	0	0	1	0	1
	turn out	0	0	0	0	0	0	0	0	0	0	1	0	1
	break out	0	0	0	0	0	0	0	0	0	0	0	1	1
	breathe out	0	0	0	0	0	0	0	0	0	0	1	0	1
	clean out	0	0	0	0	0	0	0	0	0	1	0	0	1
	bring out	0	0	0	1	0	0	0	0	0	0	0	0	1
up	give up	1	1	2	2	0	4	0	0	0	1	4	5	20
	grow up	4	0	5	6	1	5	0	1	0	1	3	3	29
	show up	1	0	0	0	0	0	0	0	0	0	0	0	1
	sum up	1	0	1	1	1	3	0	0	0	2	2	1	12
	wake up	2	5	13	1	8	20	0	8	67	1	9	40	174
	get up	0	2	1	0	2	4	0	0	34	0	2	24	69
	go up	0	0	0	0	0	0	0	0	0	0	1	0	1
	end up	0	0	0	1	1	0	0	0	0	0	0	0	2
	make up	0	0	0	0	1	0	0	0	0	0	1	1	3
	save up	0	0	0	0	0	0	0	0	0	0	1	0	1
	stay up	0	0	0	0	0	0	0	0	0	2	1	0	3
	step up	0	0	0	0	0	0	0	0	0	0	1	0	1
	keep up	0	0	0	0	0	0	0	0	0	0	1	2	3
	dress up	0	0	0	0	1	0	0	0	1	0	0	2	4
	blow up	0	0	0	0	1	0	0	0	0	0	0	0	1
	pick up	0	0	0	0	0	3	0	0	2	0	0	3	8
	warm up	0	0	0	0	0	1	0	0	0	0	0	0	1
	look up	0	0	0	0	0	0	0	0	0	0	2	0	2
	put up	0	0	0	0	0	0	0	0	0	1	0	0	1
	stand up	0	0	0	0	0	0	0	0	0	2	0	0	2
	heat up	0	0	0	0	0	3	0	0	0	0	0	0	3
down	lie down	0	1	0	0	1	0	0	0	0	0	0	0	2
	calm down	0	2	0	0	0	0	0	0	0	0	0	0	2
	sit down	0	0	1	1	0	3	2	0	1	1	2	2	13
	break down	0	0	0	0	3	0	0	0	0	0	0	0	3
	fall down	0	0	0	0	2	0	0	0	0	0	0	0	2
	shut down	0	0	0	0	1	0	0	0	0	0	0	0	1
	go down	0	0	0	0	1	0	0	0	0	0	0	0	1
	write down	0	0	0	0	0	0	0	0	0	1	0	1	2
	settle down	0	0	0	0	0	0	0	0	0	0	1	0	1
back	come back	1	4	2	0	8	3	1	10	20	1	9	14	73
	go back	0	8	2	1	2	2	0	13	13	1	6	9	57
	bring back	0	1	0	0	0	0	0	0	0	0	0	0	1
	give back	0	1	0	0	0	0	0	0	0	0	1	0	2
	get back	0	0	1	0	1	1	1	0	0	0	1	3	8
	take back	0	0	0	0	1	0	0	0	1	0	0	0	2
	write back	0	0	0	0	0	2	0	0	0	0	0	0	2
	text back	0	0	0	0	0	0	0	0	1	0	0	0	1
	return back	0	0	0	0	0	0	0	0	0	1	0	0	1

Particle	PV	Male						Female						Total
		Beginner			Lower Intermediate			Beginner			Lower Intermediate			
		A	N	D	A	N	D	A	N	D	A	N	D	
off	call off	0	0	0	0	1	0	0	0	0	0	0	0	1
	turn off	0	1	0	0	2	1	0	0	0	0	1	1	6
	get off	0	0	0	0	0	0	0	0	0	0	1	1	2
along	get along	0	1	0	0	0	0	0	0	0	0	0	0	1
	take along	0	0	0	0	1	0	0	0	0	0	0	0	1
over	come over	0	1	0	0	0	0	0	0	0	0	0	0	1
through	get through	0	0	0	0	0	1	0	0	0	0	0	0	1
	go through	0	0	0	0	0	0	0	0	0	0	0	1	1
in	come in	0	0	0	0	1	2	0	0	0	0	0	0	3
	move in	0	2	0	0	0	0	0	0	0	0	0	0	2
on	go on	0	0	1	0	1	1	0	0	0	1	1	1	6
	put on	0	0	4	0	2	2	0	0	0	0	0	3	11
	turn on	0	0	0	1	1	1	0	0	0	1	0	0	4
	come on	0	0	0	0	0	0	0	0	0	1	0	0	1
by	pass by	0	0	0	1	0	0	0	0	0	0	0	0	1
forward	look forward	0	0	0	0	0	1	0	0	0	0	0	1	2
together	get together	0	1	0	0	0	3	0	0	0	0	0	0	4
	go together	0	0	0	0	1	0	0	0	0	0	0	1	2
	mix together	0	0	1	0	0	1	0	0	0	0	0	0	2
	stick together	0	0	0	0	0	0	0	0	0	0	0	1	1
	bring together	0	0	0	0	0	0	1	0	0	0	0	1	2
away	crawl away	0	0	0	0	1	0	0	0	0	0	0	0	1
	keep away	0	1	0	0	0	0	0	0	3	0	0	0	4
	fly away	0	0	1	0	0	0	0	0	0	0	0	0	1
	take away	0	1	0	0	0	0	0	0	1	0	0	0	2
	get away	0	1	0	1	0	0	0	0	0	0	0	0	2
	go away	0	0	0	0	2	2	0	0	0	0	0	0	4
	put away	0	0	0	0	0	0	0	0	0	0	0	1	1
	stay away	0	2	1	0	1	1	2	2	1	2	1	1	14
	lock way	0	0	0	0	0	1	0	0	0	0	0	0	1
Total		16	45	49	24	67	89	11	41	157	22	62	143	726

Table 4.2 depicts the frequency of usage of each one of the 93 PV types found across the SLEC. It includes the total number (726) of PV tokens found in the texts produced by both males and females at the beginner level of proficiency and at the lower intermediate level of proficiency. It considers their distribution over all three genres: argumentative (A), narrative (N) and descriptive (D) texts. The columns on the left separate the overall set of PVs with regard to the particles they are made up of, while the column on the right indicates the total number of occurrences for each one of the PVs.

Given a total of 726 PV tokens and considering the overall size of the corpus (175,588 words), the learners in question produced, on average, one PV construction in approximately every 241 words of text. This result that is a little over half of the estimates presented by Gardner and Davies (2007: 347) regarding the presence of PVs in the BNC in which PVs

occur once, on average, in every 150 words. A log-likelihood test was conducted so as to determine whether the difference between the frequency of PVs in SLEC and BNC is statistically significant. The log-likelihood test conducted using Paul Rayson's online calculator[9], showed that the difference between the frequency of PVs in SLEC and the frequency of PVS in BNC is statistically significant, LL=52.57, p <0.01. (See Table 4.3 in which O1 represents BNC and O2 the SLEC.) The difference between the two corpora cannot therefore be entirely attributed to chance. Furthermore, %DIFF was calculated in order to determine how large the difference between the frequency of PVs in SLEC and BNC is. The %DIFF value was estimated at 29.40, suggesting that PVs have 29.40% higher frequency in BNC compared to SLEC.

Table 4.3

Log-likelihood calculator between the frequency of PVs in SLEC and BNC.

Item	O1	%1	O2	%2	LL	%DIFF
Word	518923	0.54	726	0.41 +	52.57	29.40

One thing that needs to be mentioned, however, is that the BNC is 90% written and 10% spoken, while SLEC is 100% written which could influence the comparability. These results, nonetheless, suggest that the learners produced PVs much less frequently in their essays than would be expected on the basis of the distribution of PVs in the BNC, which is a pattern found in previous studies which show that L2 learners generally underuse or avoid

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[9] https://ucrel.lancs.ac.uk/llwizard.html, last accessed on 7 October 2022. Given that the log-likelihood test is more accurate than the chi-square test when analyzing small sample sizes, such as the size of the corpus used in this study, this choice of LL over the chi-square statistic in the current study seems appropriate (Stefanowitsch 2020).

PVs (Dagut and Laufer 1985; Waibel 2007; Wierszycka 2015). As already indicated, a verb type similar to English PVs does not exist in Arabic so that learners are not familiar with this type of verb from their native language.

In addition, the Table shows the most common particles composing the PVs included in the SLEC. Some of the particles occur only once, as in the case of 'forward', 'over' and 'by'. The PVs that are based on these particles 'look forward', 'come over' and 'pass by' have been included in different text genres by students of different gender and proficiency level as well as the PVs resulting from other particles combinations. Further analysis will describe more in depth the single cases in Section 4.2.3.2.

4.2.3.1 PV total frequency based on gender and proficiency level

This section aims to illustrate the total frequency of PVs in SLEC based on the participants' gender and proficiency level. In regard to the absolute number of PVs that were used, the results show that females produced more PV tokens (436 or 60% of the total of 726

Figure 4.4

The percentage of PVs based on the participants' gender and proficiency level.
tokens) than males who used 290 PV tokens (40%), see Figure 4.4.
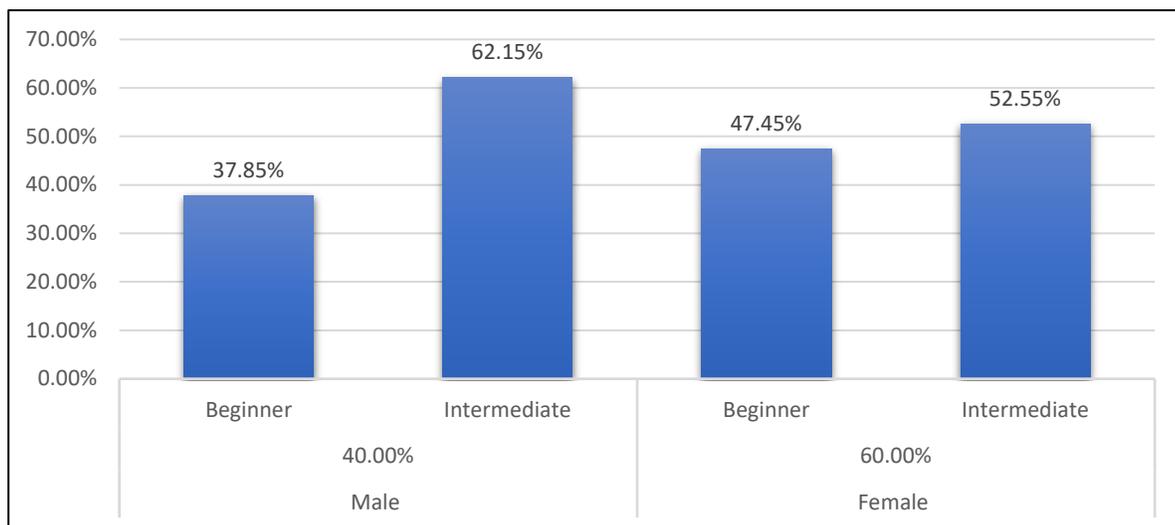
Nonetheless, regarding the relative frequency of the PVs that were used, the results shows that the relative frequency of PVs produced by females is higher than the males (4.00 vs. 2.82 per 1000 words). Table 4.4 shows the frequencies of the PVs used by males and females.

Table 4.4

Frequencies of the phrasal verb tokens produced by male and female students.

Gender		PVs	
		Absolute frequency	**Relative frequency**
Male	102,566	290	2.82
Female	108,292	436	4.00

To determine whether the difference between the number of the PVs between males and females is statistically significant, the log-likelihood test was conducted. The log-likelihood test demonstrated that the difference is statistically significant, LL=22.17, $p<0.0001$. Moreover, %DIFF was calculated in order to determine how large the difference is in relation to the frequency of PVs between males and females. The %DIFF value was estimated at 42.40. This suggests that the PVs have 42.40% higher frequency in females compared to males.

In regard to the absolute number of PVs that were used by beginners and lower intermediates, the results show that lower intermediates produced more PV tokens (407 of the total of 726 tokens) than beginners who used 319 PV tokens. Among both genders, the learners' use of PVs increases as their proficiency level increases. The lower intermediates in both genders demonstrated greater use of this structure. The male beginners used 110 PVs (37.83%), while the male lower intermediates used 180 PVs (62.10%). Similarly, among the females 209 PVs (47.93%) were produced by beginners vs. 227 PVs (52.06%) produced by

lower intermediates, (see Figure 4.4). Nonetheless, in regard to the relative frequency of the PVs that were used, the results show that the relative frequency of PVs produced by lower intermediates is higher than the beginners (3.46 vs. 3.41 per 1000 words). Table 4.5 shows the frequencies of the PVs used by males and females.

Table 4.5

Frequencies of the phrasal verb tokens produced by beginner and lower intermediate students.

Proficiency level	No. of tokens	PVs	
		Absolute frequency	Relative frequency
Beginner	93,340	319	3.41
Lower intermediate	117,518	407	3.46

To determine whether the difference between the number of the PVs between beginners and lower intermediates is statistically significant, the log-likelihood test was conducted. The log-likelihood test demonstrated that the difference is statistically significant, LL=0.03, p<0.0001. Moreover, %DIFF was calculated in order to determine how large the difference is in relation to the frequency of PVs between males and females. The %DIFF value was estimated at 1.34. This suggests that the PVs have 1.34% higher frequency in lower intermediate compared to beginners.

4.2.3.2 High frequency particles and lexical verbs in SLEC

Following Biber et al. (1999), a further aspect worth considering is how many different lexical verbs and particle types learners used in order to form PVs. The PVs extracted from the corpora were therefore divided into the two elements they consist of (the particles and the lexical verb).

As for the number of different verb types, Saudi learners used 58 different verb types (See Appendix J). The ten most productive verbs, that is those that combine with the highest number of different particles are shown in Table 4.6, where LV stands for 'lexical verb' and N. denotes the number of different particles with which it is used.

Table 4.6

The top 10 LV in the corpus.

LV	N.	LV	N.
get	8	*look*	3
go	8	*put*	3
come	5	*turn*	3
take	4	*give*	2
bring	3	*break*	2

The results from the analysis of lexical verbs correspond to the findings from Biber et al. (2007) who state that:

> the verbs that are most productive in combining with adverbial particles to form PVs are among the most common lexical verbs in their own right. These extremely common verbs—*take, get, come, put, go*— are also unusually polysemous, so that they can combine with a range of adverbial particles. (Biber et al. 2007: 412)

However, this does not necessarily mean that they are also the ones used most frequently. As can be seen from Table 4.2, 'wake up', 'grow up', 'give up', and 'sit down' are among the most frequent PVs in the corpus. It is therefore no surprise that even though 'wake', 'grow', 'give', and 'sit' are not particularly productive in PV constructions (that is,

they do not combine with many different particles), they should nevertheless feature among the ten verbs used most often as the basis for PVs.

Table 4.7 shows the overall frequency of forms ('up', 'out', 'back', etc.) in the SLEC and their frequency of use as part of a PV structure. The forms are ordered according to the number of times each occurs as an AVP in a PV. The overall total indicates that these forms function 11.51% of the time as AVPs.

Table 4.7

The most frequent particle/preposition forms in the corpus.

Form	Total *f*	As AVP	As AVP %
up	373	341	91.42%
back	224	147	65.62%
out	154	126	81.81%
away	47	30	63.82%
down	41	27	65.85%
on	732	22	3.00%
together	64	11	17.18%
off	14	9	64.28%
in	3,529	5	0.14%
along	3	2	66.66%
through	42	2	4.76%
forward	4	2	50%
over	38	1	2. 36%
by	300	1	0.33%
Total	**5,565**	**726**	

In total, 14 particles are found in the SLEC, all of which appear at least once in a PV. It might be interesting to note that Gardner and Davies (2007) found that the BNC distinguishes only 16 adverbial particle types, 11 of which have been found in the SLEC. The ones that are not found in the SLEC are 'around', 'round', 'about', 'across' and 'under'. In other words, the Saudi learners of English in this study never used these four AVPs. That

might be not so surprising in the case of 'under' 'across' and 'about' though, as they function as adverbial particles in only 0.5%, 0.1% and 6.6% of cases (Gardner and Davies 2007).

It is also noticeable from the values in Table 4.7 that certain forms are more likely to act as particles than as prepositions. In contrast, certain forms will rarely appear as particles in PV constructions. The most frequent form of interest in the SLEC is found to be 'in', occurring 3,529 times, even if it was used as AVP only in 5 cases, which is the 0.14% of total frequency of the form. In descending order of absolute frequency, the most frequent forms of interest in SLEC are: 'in' (3,529), 'on' (732), 'up' (373), 'by' (300), 'back' (224), 'out' (154), 'together (64), 'away (47), 'through' (42), 'down' (41), 'over' (38), 'off' (13), 'across' (4) 'forward' (4) and 'along' (3).

On the other hand, the most frequent of these forms used in SLEC as AVP is 'up', which appears 341 times as part of a PV out of 373 total occurrences in all the corpus, that is in 91.42% of instances. This is in accordance with Biber et al.'s (1999) and Gardner and Davies' (2007) findings. According to their research, 'up' is the most productive particle when it comes to combining with lexical verbs to form common PVs, immediately followed by 'out'. The finding from the present analysis deviates slightly from Biber et al.'s and Gardner and Davies' results in that 'out' is the third most frequent particle in the corpus. Second comes 'back', which was used as AVP 147 times out of 224 total occurrences in the corpus (65.62%); and 'out', used as AVP 126 times out of 154 total occurrences in the corpus (81.81%) These three particles, which account for only 25% of total number of the particles in SLEC, account for 87% of PV tokens in the corpus.

In contrast, the least frequent PVs, which only occurred once or twice in the whole corpus, are those made up of the particles: 'through' – 2 PVs tokens out of 42 occurrences

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(4.76%); 'over' – 1 PVs tokens out of 38 occurrences (2.63%) and 'by'– 1 PV out of 300 occurrences (0.33%). Looking at Table 4.7, the discrepancy between 'out' and 'back' can be explained easily. The three most frequent PVs with 'back' in the data are 'come back', 'go back', and 'get back'. These three PVs alone constitute 19 % of all PVs tokens in the learner corpus. The three most frequent items with 'out' – 'go out', 'get out', and 'find out' – on the other hand, make up only 11.27 %.

4.2.3.3 High frequency PVs in SLEC

Following the methodology described in Chapter 3, all PV tokens (726) were extracted from the corpus. A total of 93 PV types were identified. All PV types were then ordered according to how many times they occurred in the corpus. Table 4.8 presents the list of those PV types which proved to be the most productive in forming verb + particle constructions in the SLEC.

Table 4.8

The top 20 PVs in the corpus.

	PV	f		PV	f
1	wake up	174	10	sum up	12
2	come back	73	11	get out	11
3	get up	69	12	put on	11
4	go out	62	13	find out	9
5	go back	57	14	work out	8
6	grow up	29	15	pick up	8
7	give up	20	16	get back	8
8	stay away	14	17	hang out	7
9	sit down	13	18	turn off	6

Table 4.8 shows the top 18 PV lemmas in the corpus, listed in descending order of frequency. Each of these combinations turned out to have a frequency count of 6 or more. For the full results, see Appendix K.

Because the tagging program counted each one of these 726 occurrences as at least two words (e.g. verb and particle), the number of occurrences (726) was doubled to make a total of 1454 words. Therefore, by dividing these 1452 words by the total 175,588 words, we can see that PVs make up only 0.83% of the total number of words in the corpus from which it can be concluded that English PVs are not frequent in the language of Saudi learners. The 5 most common PVs make up 60%, and the 20 most common 83%, of all PVs, from which it can be concluded that PVs are not evenly represented. The results also show that a striking number of approximately 41 PVs out of 93 PV types appear only once (these words are called hapax legomena or hapaxes).

The most frequent PV across the corpus is 'wake up'; it occurs 174 times. 'come back' is the second most frequent PV overall with 73 occurrences, followed by 'get up' 69 times, 'go out' 62 times, 'go back' 57 times, 'grow up' 29 times, 'give up' 20 times, and 'stay away' 14 times. The explanation for these high frequencies is possibly topic dependence: these expressions are used for the description of personal experiences and activities in daily life. The fact that the great majority of PVs, such as 'wake up', 'come back', 'go out', 'get up', and 'go back', are colloquial may be an indicator that the writing of the learners is not very formal in general as these PVs are neither very formal, nor can they be expected to occur in academic or argumentative writing, while only few 'academic' PVs occur among these items (e.g. 'point out', 'find out', and 'sum up'). Similarly, topics of the essays certainly could influence which PVs will be used most frequently. Specific topics would prompt

specific PVs. Some examples of essay titles are "your daily routine!", "a nice trip", "a frightening experience" and "your first day in college" in which these titles suggest the descriptive nature of the essays, for the list of the title of the essays, see Appendix L. The texts produced by learners in the SLEC corpus are controlled by the topics given to them. This may have restricted learners' selection of lexical items and increase their tendency to produce certain lexical items commonly associated with the given topics. Thus, future research may also consider having a wider range of topics. Moreover, literal PVs such as 'wake up', 'come back' and 'go out' are more likely in some genres (e.g. descriptive writing); figurative PVs such as 'point out', and 'sum up' are often used in formal texts such as argumentative essays. The preference for literal PVs in SLEC found in this thesis is probably a consequence of genre, as SLEC contains descriptive texts in which literal uses of PVs are likely to be frequent. This helps to explain the ''field''-specific nature of the use of some PVs, an issue which has been addressed in some detail by Celce-Murcia and Larsen-Freeman (1999: 434). Celce-Murcia and Larsen-Freeman (1999) believe that certain PVs are associated with a particular field for which there are no concise alternatives. Therefore "the field-specific use is pertinent in explaining the use or non-use of phrasal verbs in certain contexts". These observations are also consistent with those in Hinkel's (2009) discussion on topic effect on features of L2 texts.

Topic or field dependence becomes immediately noticeable when the genres of the corpus are analyzed. With regard to the absolute number of PVs that were used in the three genres included in this study (argumentative, narrative, and descriptive), the results show that more than the half of the 726 PV tokens (438, or 60.33%) fall into the descriptive section. The argumentative texts are those in which Saudi learners used the PV structure least

frequently, in fact only 73 (10.04%) of all PV tokens were found among this genre. The remaining 215 (29.57%) items appear among the narrative texts. This suggests that the genre factor has a great influence on PV frequency.

Nonetheless, regarding the relative frequency of the PVs that were used, the results shows that the relative frequency of PVs used in descriptive is higher than the other two genres, followed by narrative and argumentative (5.68, 3.43 and 1.02 per 1000 words). Table 4.9 shows the frequencies of the PVs used in the three genres.

Table 4.9

Frequencies of the phrasal verb tokens produced by each text genre.

Genres	No. of tokens	PVs	
		Absolute frequency	Relative frequency
Argumentative	71,201	73	1.02
Narrative	62,529	215	3.43
Descriptive	77,128	438	5.68

To determine whether the difference between the number of the PVs in argumentative and narrative genres is statistically significant, the log-likelihood test was conducted. The log-likelihood test demonstrated that the difference is statistically significant, LL=92.83, $p<0.0001$. Moreover, %DIFF was calculated in order to determine how large the difference is in relation to the frequency of PVs in argumentative and narrative genres. The %DIFF value was estimated at -81.02. This suggests that the PVs have 81.02% lower frequency in argumentative compared to narrative genre. In addition, to determine whether the difference between the number of the PVs in descriptive and narrative genres is statistically significant. The log-likelihood test demonstrated that the difference is statistically significant, LL=38.09, $p<0.0001$. Moreover, the %DIFF value was estimated at 65.16. This suggests that the PVs have 65.16% higher frequency in descriptive compared to narrative genre.

In addition, looking closely at the most frequent PVs ('wake up' 174, 'come back' 73, 'get up' 69, 'go out' 62, 'go back' 57, 'grow up' 29, 'give up' 20, 'sit down' 13, 'sum up' 12, 'get out' 11, 'put on' 11, 'find out' 9, 'hang out' 7, 'work out' 8,'get back' 8, 'pick up' 8), it is important to mention that most of the PVs included in this analysis have only one frequent meaning sense (a literal meaning sense) based on Garnier and Schmitt's (2015) list of meaning senses. The reason for their higher frequency could be because they have only literal meaning, and they do not have competing synonyms.

In the following part, information regarding the word-senses associated with the 18 most frequent PVs in the SLEC is provided. This semantic analysis was carried out with the help of Garnier and Schmitt's (2015) list of meaning senses. It can be noticed that Saudi learners use considerably fewer meanings of the PVs with one frequent meaning sense. According to Garnier and Schmitt (2015), out of these eighteen PVs, 13 PVs have only one meaning sense, while only 5 have more than one meaning sense. Examples extracted from SLEC are presented in the concordances below:

'WAKE UP' (174)

1. Become (or make SB become) conscious again after being asleep (92 %).

Examples:

1- I always wake up at 8 o'clock. usually, my mother make my breakfast.
2- I wake up and go to gym. after that I come home, I do my homework.
3- first, I wake up at 6, wash my face then ablution and pray on time.
4- usually I wake up at 6 o'clock, but in the weekend I wake up at 9 o'clock.

'COME BACK' (73)

1. Return to a place or a conversation topic (96.5 %).

Examples:

1- my family and they are sad. after three hour, we come back to our house and I am very sad.
2- finally I come back to Taif city because the university is come.
3- We come back to the hotel at 2 a.m. in the morning we go to my mother.
4- at the end we give her a gift and come back home.

'GET UP' (69)

1. Rise or cause to rise after lying in bed or sitting/kneeling (92 %).

Examples:

1- my day usually begin at 6 a.m. I get up and do some exercise for about a hour.
2- in Saudi Arabia I get up in 6 o'clock and eat breakfast with my family.
3- I study in Tait University. I am medical student. I get up at 4 am.
4- I get up at 6 am and take a cold shower then I make myself breakfast.

'GO BACK' (57)

1. Return to a place, time, situation, activity, conversation topic (90 %).

Examples:

1- I go to my class. I go back to my home in 4 p.m. I eat my lunch after that.
2- we buy tour ticket around the city and go back to the hotel.
3- from seven o'clock until three pm. then, I go back to the house and I study.
4- I want to go to beach, but my dad is very busy, so we go back to Medina, it is nice trip.

'GROW UP' (29)

1. Gradually advance in age and maturity (98 %).

Examples:

1- to make him understand what they study and help them to grow up. a lot of research say fast food do not have nutritional value.
2- because child do not grow up enough to know how much fast food can damage them.
3- my grandfather help me to grow up when I was a child.
4- It is a beautiful day in the house where I grow up. My first car is very small.

'GIVE UP' (20)

1. Stop doing or having STH; abandon (activity, belief, possession) (80.5 %).

Examples:

1- you will be one of my patient. and you know me l do not ever give up.
2- believe in myself that I can do it and never give up so I can see the result at the end.
3- I study and I fail again but do not give up I ty again and I pass. I am very happy. I graduate with high mark.
4- if you fall in the beginning. do not give up. everything is easy. you can do everything.

'SIT DOWN' (13)

1. Move from a standing position to a sitting position (100 %).

Examples:

1- there is a lot of thing that you can do instead of sit down and watch TV. I think television is bad for child.
2- at five o'clock in the evening I sit down with my family, then I arrange my room and watch a movie.
3- I go to the house and usually take a break and sit down with my family until at4 pm and do my duty.
4- because I like build and work with my hand more than sit down do nothing. in my free time I more likely to get some work.

'SUM UP' (12)

1. Express or represent the most important/representative facts, ideas, or characteristics of

SB/STH, especially in a brief manner (97 %).

Examples:

1- however, I get it without money. so, I am so glad to have it. to sum up, this book it is a special present I have receive forever.
2- therefore, we should avoid a bad video game. to sum up, we should keep young people far away from bad video game.
3- to sum up, succeed in college is difficult, but not impossible.
4- to sum up, I would like to mention that family and career are the most important thing in life.

'GET OUT' (11)

1. Leave a container (vehicle, room, building) or make SB/STH leave a container (75.5 %).

Examples:

1- early in the morning and go to the university. I see my friend get out of the university and go into the house.
2- then I eat breakfast at 8 then get out of the house to go to the university.
3- I arrive university at 8 am and I meet my friend then I get out of the university at 2 pm then I go to home.
4- game design to be enjoy the good is simple challenge to got out of the room in 1 minute. It is smart for solve puzzle.

'FIND OUT' (9)

1. Discover STH; obtain knowledge of STH (100 %).

Examples:

1- you can learn from tv through find out what is happen around us of thing by mean of news cast.
2- entertaining program as well as news and find out what happen in the world.
3- later, the problem start from there, while I drive I find out that I was not drive to the right way.
4- I was surprised for how they treat and love dog. I find out American people they live simple life.

'HANG OUT' (8)

1. Spend time relaxing or enjoying oneself (84 %).

Examples:

1- Hana always look after me and really care about me. we hang out a lot in our free time and have fun
2- we have a lot in common and we have fun when hang out together.
3- My favorite place is a place call pool planet. me and my friend hang out a lot there because we love that place.
4- He do not have friend, he do not like hang out with friend.

'GET BACK' (8)

1. Return to a place, position, state, activity, conversation topic (78.5 %).

Examples:

1- and then I eat my lunch and I get back home. after I get home I take a nap after a long day.
2- third, remove anything in your room that could get you back smoking.
3- In the morning, we get ready to go to the school. later, we get back from school and my brother get a full mark.
4- we will do the Omrah and toaf, when we do, we will get back to Al-Medina A-monarah. That is my perfect plan for the holiday.

‘PICK UP’ (8)

1. Get or take SB/STH from a place (70.5 %)

Examples:

1- my father would always stop to pick them up and drive them anywhere they want without have to pay.
2- I pick up my lunch at the university restaurant then go back to sweet home.
3- I clean my room. then I lie on my bed. I pick up my phone and start playing and chat with my friend for a while.
4- anyway, I tell him yes let us go. so, he pick me up. we stop to get some chip and soft drink.

In all the previous examples, the PVs chosen by learners were associated with their most frequent meaning senses as reported by Garnier and Schmitt (2015), and which happen to be predominantly literal ones. However, all the PVs exemplified in the next examples below are associated with more than one sense. They are listed in descending order of their frequency. In all of them, Saudi learners preferred to use the first meaning sense which is, again, a literal one, with the exception of ‘work out’, in which the second, that is figurative, sense was preferred.

‘GO OUT’ (62)

1. Leave a room, building, car, or one's home to go to a social event (56.5 %)

2. (Go out and do STH) Used as an intensifier, to highlight the active nature of what is being done (19.5 %).

Examples:

1- you may miss important date you have to go out more and play or walk, meet your family and friend more.
2- I do work afternoon. I go to eat lunch at home. I go out with my friend in the evening. this is my typical day.
3- family and my grandparent to have a lunch at the garden. I rarely go out because I am so busy with my university.
4- especially in Makkah, it is so hot that we could not go out until the sunset.

'PUT ON' (11)

1. Display or attach STH (e.g. to a wall) so it can be seen (23 %)

2. (+ *with*) Be willing to accept STH unpleasant or not desirable; tolerate (19 %)

3. Build or place STH somewhere (18 %)

Examples:

1- after that, I do some exercise then I put my clothes on and prepare my school bag.
2- play your favorite music or put your favorite movie on and enjoy your cup of tea.
3- I eat breakfast at 6 am. I get dress. I brush my hair, put on my make-up. I pack my bag and leave my house.
4- when I get in the car my brother put the seatbelt on me.

'WORK OUT' (8)

1. Plan, devise or think about STH carefully or in detail (33 %)

2. Exercise in order to improve health or strength (23 %)

3. (+ well/badly) Happen or develop in a particular way (15 %)

4. Prove to be successful (12.5 %)

Examples:

1- I take a nap. at 4 pm, I work out in my room.
2- then I go to do my homework and study. then I do some work out to refresh my body. then I go to eat dinner.
3- study three week before the exam. try to work out because that will help your brain.
4- after that, you have to work out. later, try not to think about smoking.

'Turn off' (6)

1. Stop a piece of equipment working temporarily or a supply flowing by turning a tap, pressing a button, or moving a switch (69.5 %).

2. Cause to feel intense dislike (20.5 %).

Examples:

1- The sound from the back part of the plane. after that the light is turn off.
2- the charger head get hot while I was sleep., she come and turn it off to not explode.
3- and the road light turn off. I see something move in front of me so fast.
4- We watch the television; we hear a door open and then we turn off the TV.

The results also indicate that Saudi learners produced higher numbers of lexical verb (LV) + Adverbial particle (AVP) compared to lexical verb + X + Adverbial particle. This suggests that Saudi learners are familiar with the most basic structure of PVs. The use of LV + X + AVP form in some examples with 'get out', 'take out', 'kick out', 'try out', 'give up' and 'pick up' indicate that learners aware of the possibility of these PVs can be used with this form. Another important finding is that the majority number of the examples with this form was used by lower intermediate level learners compared to beginner learners. This could suggest that as the level of the learners increases, their use of the various forms of PVs

improves, which relates to the concept of "separability." Here are some examples of the PVs in both structures, as extracted from the SLEC corpus:

1- I study and I fail again but do not <u>give up</u> I ty again and I pass.

2- on the other hand, there are some easy process or step to <u>give</u> it <u>up</u>.

3- usually, I <u>wake up</u> half a hour before the time.

4- so I go to my mother and <u>wake</u> her <u>up</u> and tell her that there is a fire.

In addition, the results show that for example, the PVs 'come back' and 'go back' which are intransitive appears only in LV + AVP structure in the corpus indicating the learners at both levels of proficiency are aware of the fact that it is impossible to separate between the elements of this PV. However, in another observation from the results, even though the PV 'get up' for example can appear in both structure, separable and inseparable, there was not any instance of this PV appearing in the separable structure. One possible explanation could be that learners are not aware of or familiar with other forms of this PV.

Another interesting observation from the figures shown in Table 4.2 is that the number of occurrences of the PVs 'pick up', 'come back', 'grow up' and 'find out' produced by lower intermediate learners are approximately 4 times, two times, three times, three times respectively larger than those at beginner level, suggesting that these PVs are produced by learners at higher level of proficiency as these PVs are common PVs (see Liu 2011) and useful for learners, It should receive more focus in language classrooms and possibly be introduced to students much earlier in their language learning.

To conclude, the analysis of the most frequent PVs shows that highly colloquial PVs such as 'wake up, 'get up', and 'go out' occur most often. This occurrence may, on the one

hand, be due to the fact that the proficiency level of students is low (beginner and lower intermediate) and it is difficult for them to write and use academic writing style. On the other hand, the high frequency counts of these PVs could be motivated by the topics used to collect the data already mentioned. Thus, a further finding is the influence of topic sensitivity and genre dependency which could influence learners' choices of PVs.

4.2.3.4 PV frequency based on PV type

As indicated in Chapter 3, PVs are also classified in this research based on their 'type', with possible values being 'literal' and 'figurative'. They were classified as literal if the meaning was entirely literal, and as figurative if the meaning of the whole phrase was figurative, or if the meaning of the whole phrase was non-compositional in the sense that the meaning could not be deduced from summing the literal meanings of the verb and the particle.

Semantic judgements may involve some degree of subjectivity. So, to perform this classification, and to minimize research bias, my judgement was compared with that of two English native speaker raters, both of whom are teachers and were confident in their semantic knowledge of the items. They were asked to classify the PVs into one of the two groups and to indicate next to each meaning sense whether they considered it literal (inserting the letter 'L' in the designated space) or figurative (inserting the letter 'F'). Below is an example (Table 4.10) of the form of the scale the raters were presented with:

Table 4.10

An example of the form used to judge the type of PV.

doc#965 go to sleep. next you should drink a lot of water. then you have to **work out** every day. you should quit and fight for your goal, d	
…..	…..

For each PV, the scores were calculated, which enabled us to classify it as being literal or figurative. The PVs listed in Tables 4.11 and 4.12 are the most frequent in each category. The full lists of literal and figurative PVs are contained in Appendix M and Appendix N.

Table 4.11

The most frequent literal PV in the corpus.

N.	PVs	f	N.	PVs	f
1	wake up	174	9	get out	11
2	come back	73	10	put on	11
3	get up	69	11	find out	9
4	go out	62	12	pick up	8
5	go back	57	13	get back	8
6	grow up	29	14	turn off	6
7	stay away	14	15	come out	5
8	sit down	13			

As for the number of literal PVs, Saudi learners used 650 literal PVs, see Appendix M. Table 4.11 shows the most frequent literal PVs in the corpus.

Table 4.12

The most frequent figurative PV in the corpus.

N.	PVs	f	N.	PVs	f
1	give up	20	6	look out	3
2	sum up	12	7	make up	3
3	work out	8	8	break down	3
4	hang out	7	9	figure out	2
5	go on	6	10	look up	2

As for the number of figurative PVs, Saudi learners used 76 figurative PVs, see Appendix N. Table 4.12 shows the 10 most frequent figurative PVs in the corpus. These results indicated use of literal PVs was higher than the figurative PVs which could be due to that figurative PVs are more difficult for learners to use. Consequently, they tend to use fewer figurative PVs (Liao and Fukuya 2004). This, however, was expected as literal PVs are very transparent in meaning in comparison to the figurative ones. The data in Table 4.14 and Table 4.15 confirm that the Saudi learners who contributed to SLEC use figurative PVs less than literal ones. These data reinforce the hypothesis that learners have difficulties with producing figurative PVs. Interestingly, however, although most of the highly frequent figurative PVs are indeed underused by all learners, other figurative PVs are overused, i.e. 'give up' and 'go on'. This could be due to teaching as can be seen in Section 3.5.3 that PVs such as 'go on', 'give up', 'hang out', 'make up' and 'look out' are among the 20 most frequent PVs in secondary textbooks.

In terms of genres, Table 4.13 shows the number of literal and figurative PVs used in each genre. Again, in a repeating pattern, the majority of literal and figurative PVs were used in the descriptive writings, followed by narrative and argumentative.

Table 4.13

The number of figurative and literal PVs used in each genre.

Genre	Literal	Figurative	Total PVs
Descriptive	402	36	438
Narrative	188	27	215
Argumentative	60	13	73

4.2.4 Comparison of list of PVs with lists of Gardner and Davies (2007) & Liu (2011)

The PVs found in the corpus were compared to lists of most frequently used PVs found by both Gardner and Davies (2007) and Liu (2011) in their corpus studies. Gardner and Davies' study counted 518,923 instances of lexical verbs functioning in PVs within the British National Corpus (BNC), a corpus comprising approximately 100 million words of spoken and written data. In 2011, Liu conducted another corpus study to build and expand upon Gardner and Davies' list, as well as to comparatively investigate whether a similar query into an American corpus from a more recent time period would yield similar results. Liu actually integrated two additional corpora: The Corpus of Contemporary American English (COCA), a mega-corpus comprising 386.89 million words containing "five subcorpora: spoken, fiction, magazine, newspaper, and academic writing, with each subcorpus contributing an equal amount of data (4 million words per subcorpus per year)." (Liu 2011), as well the 40-million-word Longman Spoken and Written English (LSWE), which the spoken part of it consists primarily of spoken one-on-one conversations in multiple registers and counts for 16% of the corpus (cf. Biber et al. (1999: 25). Both studies followed similar definitions of PVs and methodology. They searched for instances where lexical verbs were followed by adverbial particles, with intervening words between the two to allow for inclusion of separable PVs (up to six were allowed in Gardner and Davies' study, and two in Liu's). The results of both studies show that a very small group of PVs account for a very large proportion of total PV use. In Gardner and Davies' study, the top 100 PVs identified were found to constitute 51.8% of the total PV occurrences found in the BNC; Liu's top 150 PVs cover 62.95% of the total 512,305 PV occurrences found. Therefore, it could be argued

that the high-frequency PV lists resulting from these studies are representative of the total frequency of PVs, making them quite meaningful lists of words for learners.

For this reason, a comparison was carried out between the most frequent PVs in SLEC and both the top 100 PVs found in Gardner and Davies' (2007) BNC corpus study and the top 150 forms noted in Liu's (2011) study, for a list of Gardner and Davies' top 100 forms and a list of the top 150 identified by Liu, see Appendix B. Other corpora were considered to be used for comparison such as LOCNESS, however, as this corpus contains only argumentative and literary essays written by British and American university students and A-level students, it was considered incomparable to the present corpus. SLEC contains three different genres written by beginner and lower intermediate learners of English, and the argumentative part was the least of the three in terms of size, so LOCNESS was excluded. Numerous studies have demonstrated that factors like the mode, the nature of the topic, and the genre can have an impact on the outcomes (see Chen 2013). Thus, a common platform of comparison needs to be established so as we can make accurate comparisons between different corpora. Another option considered was the PVs found in the textbooks of the learners created in the first part of the thesis. However, it was also excluded for the fact that it was not evident and confirmed if the PVs included in these textbooks were the most PVs used by native speakers as nothing mentioned if the design of these textbooks was following specific standards to include the most frequent PVs. In addition, the learners under investigation are undergraduate students, which means that they have potentially accessed materials in the first years of their university studies which went beyond what they had learned at secondary school level. Supporting this point is the fact after analyzing the writings of Saudi learners, it has been found that there are some used PVs which were out of the list

of PVs found in the textbooks but still can be found in Liu's list of 150 most frequent PVs, such as 'blow up', 'bring back', 'bring out', 'keep on', 'lie down', 'settle down' and 'throw out' (see Table 4.2). This means that the list of PVs in the textbooks might not be suitable for use as a reference list to be compared with. In addition, this suggests that Saudi learners have access to sources other than those likely encountered in the EFL classroom, as they were able to produce PVs not in their textbooks.

It should be noted here, however, that although the list of PVs found in the textbooks was not used for comparative purposes in the corpus study reported on in this thesis, it was used to inform the instruments used in the multiple-choice tests in other main component of the research, where avoidance of presumably previously encountered PVs was at issue.

While BNC, COCA and SLEC are not directly comparable, analysis of the PVs has revealed a number of interesting and useful findings with respect to the patterns of PVs found in the SLEC corpus. Comparison with Liu (2011) list of PVs revealed that out of 150 PV types, 54 were found in SLEC. The frequency information is reported in Table 4.14, with the PVs listed in descending order of their frequency in SLEC. To allow for an easy comparison of the PVs' frequency in SLEC with their frequency in the Gardner and Davies (2007) and Liu (2011) lists, their frequency and rank order information is also provided (in the second column).

Table 4.14

Comparison of the PVs' frequency in SLEC with their frequency in the Gardner and Davies (2007) and Liu (2011) lists.

Rank in SLEC	Rank in BNC and COCA	PV	f in SLEC	Rank in SLEC	Rank in BNC and COCA	PV	f in SLEC	Rank in SLEC	Rank in BNC and COCA	PV	f in SLEC
1	35	wake up	174	26	21	figure out	2	51	33	go up	1
2	3	come back	73	27	72	take back	2	52	81	bring out	1
3	23	get up	69	28	18	end up	2	53	97	send out	1
4	8	go out	62	29	20	look up	2	54	66	shut down	1
5	5	go back	57	30	30	stand up	2				
6	10	grow up	29	31	109	lie down	2				
7	16	give up	20	32	119	write down	2				
8	22	sit down	13	33	128	give back	2				
9	130	sum up	12	34	56	get off	2				
10	13	get out	11	35	90	move in	2				
11	87	put on	11	36	103	run out	1				
12	6	find out	9	37	89	come over	1				
13	29	work out	8	38	49	check out	1				
14	2	pick up	8	39	58	throw out	1				
15	19	get back	8	40	12	turn out	1				
16	86	hang out	7	41	114	break out	1				
17	1	go on	6	42	27	show up	1				
18	106	turn off	6	43	99	blow up	1				
19	7	come out	5	44	43	put up	1				
20	24	take out	4	45	26	go down	1				
21	46	look out	3	46	139	settle down	1				
22	17	make up	3	47	44	bring back	1				
23	57	keep up	3	48	117	get through	1				
24	55	break down	3	49	76	go through	1				
25	14	come in	3	50	25	come on	1				

Table 4.14 shows the 54 PV types that appear at least once in SLEC are also included in Gardner and Davies' (2007) and Liu's (2011) lists of the 100/150 most frequent PVs. This means that 36 % of the PVs found across SLEC are among the top 150 in Gardner and Davies' (2007)

and Liu's (2011) combined lists. However, 19 of these PVs has been used only once and 10 PVs only twice in SLEC.

This means that there are 85 PV types on Liu's list that are not attested at all in the learner productions suggesting that learners may have a serious disadvantage of communicative skills. This might be attributed to that learners have been introduced to out-of-date, non-corpus-based teaching materials. However, we should also take into consideration the range of possible text genres present in the BNC and COCA contrasted with just three genres used in SLEC, an issue that may have had an influence on the types of PVs used. Table 4.15 shows the lists of these PVs.

Table 4.15

PVs on Liu's (2011) list that are not attested in SLEC.

N.	R in Liu's		N.	R in Liu's		N.	R in Liu's		N.	R in Liu's	
1	9	point out	24	64	set out	47	96	put back	70	133	pass on
2	15	take on	25	65	clean up	48	100	carry on	71	134	take in
3	28	take off	26	67	turn over	49	101	set off	72	135	set down
4	31	come down	27	68	slow down	50	102	keep on	73	136	sort out
5	32	go ahead	28	69	wind up	51	105	shut up	74	137	follow up
6	34	look back	29	70	turn up	52	107	bring about	75	138	come through
7	36	carry out	30	71	line up	53	108	step back	76	140	come around
8	37	take over	31	73	lay out	54	111	stand out	77	141	fill in
9	38	hold up	32	74	go over	55	112	come along	78	142	give out
10	39	pull out	33	75	hang up	56	113	play out	79	143	give in
11	40	turn around	34	77	hold on	57	115	go around	80	145	break off
12	41	take up	35	78	pay off	58	116	walk out	81	146	put off
13	42	look down	36	79	hold out	59	118	hold back	82	147	come about
14	47	bring in	37	80	break up	60	120	move back	83	148	close down
15	48	open up	38	82	pull back	61	121	fill out	84	149	put in
16	50	move on	39	83	hang on	62	122	sit back	85	150	set about
17	51	put out	40	84	build up	63	123	rule out			
18	52	look around	41	88	get down	64	124	move up			
19	54	go in	42	91	start out	65	125	pick out			
20	59	reach out	43	92	call out	66	126	take down			
21	60	go off	44	93	sit up	67	129	hand over			
22	62	turn back	45	94	turn down	68	131	move out			
23	63	pull up	46	95	back up	69	132	come off			

These results suggest that Saudi learners tend to use highly colloquial and informal PVs (e.g. 'wake up', 'get up', 'come back', etc.) frequently and they tend to use fewer academic PVs such as 'point out', 'carry out', 'set up', and 'turn out'. The majority of the highly frequently used PVs in the learner writing turn out to be less frequently used in academic writing, which could be due to the lower level of formality in the essays as descriptive and narrative essays constitute 69% of the written texts. In addition, the results show that the learners rely on a more limited range of verb and particle types in the formation of PVs. Thus, these results show that Saudi learners have difficulty using PVs which could be due to the semantic complexity and the idiomaticity of these PVs, and lack of a mother tongue equivalent.

After this initial, mostly quantitative analysis, the study will now move on to the in-depth error and analytical studies of the phenomena which seem to represent recurrent difficulties for Saudi learners of English. It's crucial to point out that although an error analysis was done for the qualitative part of the study, no attempt was made to quantify errors of any type. This decision was made primarily due to the fact that errors and their potential causes in the context of learner language do not easily lend themselves to taxonomic classification. For example, it can be challenging to determine whether a given verb is used in the proper context and/or with the correct collocates in the case of some verb types, such as phrasal verbs, which often have polysemous meanings, making any decision highly subjective. Additionally, the distinctions between error sources are not always obvious, such as between L1 interference and formal similarity with another verb; in these situations, subjective interpretation and judgment are usually required. As a result, no attempt has been made to overall quantify error types. With no goal of being exhaustive, the discussion that

follows will cover some broad types of deviations and creativity seen in learners' usage of PVs. A few chosen samples of each error type will be shown for illustrative purposes.

4.2.5   Erroneous, inappropriate and unnatural usages in the context of PVs

The analysis of the chosen PVs has produced a number of interesting and practical findings regarding the PV patterns found in the SLEC corpus. A particularly important finding that could be a possible contributing factor to the inappropriate use of these PVs is related to the influence of the learners' L1 (Arabic). Furthermore, there is a lack of lexical knowledge as well as a lack of awareness of the regular patterns of PVs of learners (e.g. common collocates), which would be other possible factors. These findings further support those discussed in Chapter 2 that Saudi learner of English face particular difficulty in using PVs.

Given the earlier mentioned fact that Arabic has no PV structure, the influence of L1 has considerable impact on learners' performance. The L1's influence can have both positive and negative effects. Positive influence is referred to as "transfer," while negative influence is often referred to as "interference". L1 interference was expected mainly to take place in the form of underuse of these verb types, as well as wrong choice or omission of the particle. The use of PVs in inappropriate contexts was also expected. These expectations are borne out in the data. The data suggests that the Saudi learner investigated have problems with the use of these verb types. Some deviations have been found in the data such as redundant uses of particles with one word verb, preference of using some verbs in combination with a particle in which the use of a simple verb would be more appropriate to use, formation of a new PVs, syntactical problems such as the confusion between the use of transitive and intransitive PVs.

The assessment of the PVs for correctness was done by three native speakers of English. Two of them were teachers of English as a second language. Thirty two instances of errors (PV tokens) distributed over 29 PV types were found in the corpus and excluded from the analysis. It follows that none of the examples (1-15) of PVs in this section are included in the counts in Table 4.2 above, as they were used incorrectly by the learners. The frequencies of the LVs and the particles in the erroneous examples are presented in Table 4.16, followed by some examples of these errors.

Table 4.16

The frequency of lexical verbs and the particles discarded from the corpus.

Lexical verb	*f*	The particle	*f*
take	5	up	9
get	3	in	7
bring	3	out	6
come	2	on	4
set	2	down	2
catch	2	back	1
pass	2	around	1
look	2	off	1
make	2	over	1
wrap	1		
turn	1		
hang	1		
hand	1		
raise	1		
fright	1		
bog	1		
cut	1		
grow	1		

There are some instances of an additional use of particles where the influence of the learners' L1 is noticeable but not all the additional uses of particles found in the learner data can be accounted for by L1 interference. For example,

1- I haven't see before, and on the middle it note from my friend <u>wrap up</u> on
   a box. Inside the box it have a perfume from a very expensive one.

2- I was born in Madinah and <u>raise up</u> in it.

Additional particles were also found even with verbs that are high in frequency, as the following sentences illustrate, where the correct verb should merely be 'come' and 'make':

3- and we usually go to the mall every weekend. yesterday, we <u>make up</u> a
   party for my mom retirement.

4- so they choose a place and time to meet. when the time <u>come up</u>, my dad
   come and take me and give him his money.

5- I finish, I will create my own business. My aim is to <u>make</u> money <u>out</u> and
   help my society to be more powerful.

The additional particles used with 'wrap', 'raise', 'come' and 'make' in these contexts cannot be explained by L1 interference. One of the possible explanations of why learners add an additional particle after selecting the right verb could be that learners are aware of the aspectual meanings the particles add to the verbs they combine with, or that they are aware of the established patterns for creating aspectual phrasal verbs. 'Out' and 'up' are one of the most productive particles for creating PVs by joining with common verbs such as 'come', 'go', 'make', and 'take'. They give these verbs additional aspectual meanings. This fact might have triggered the learners to use these particles in order to put some emphasis on the actions. Thus, 'up' and 'out' in sentences 1 to 5 do not have their directional meaning – 'to or in a higher position somewhere' and 'moving away from the inside of a place'; rather,

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they add a sense of completion (a detailed treatment of the aspectual meaning of 'up' and 'out' can be found in Bolinger 1971: 98-102). For example, in sentence 4, the particle 'up' in 'come up' adds the aspectual meaning of completion of an action by turning an activity verb into an accomplishment (Celce Murcia and Larsen-Freeman 1999: 433), so the learner in (4) turned the activity verb 'come' into an accomplishment verb. Bolinger (1971) described the productivity of the particle 'up' most effectively by claiming that 'up' is almost as freely used as the prefix re-, and that if we heard a sentence like "Let's barter up" we wouldn't describe it as being deviant but rather "as something unknown" (p. 101). According to Bolinger, the only circumstance in which the combination of 'up' and a verb will be seen as deviant is "if the verb proper does not admit of any relevant directional or aspectual meaning". Thus, in the case of the learner who came up with sentence (4) for example, it is reasonable to assume that he/she drew on his/her knowledge of the pattern that already existed in the target language.

These examples of using additional particles by the learners can be seen as an indicator of the learners' underlying awareness of particles and their role in forming PVs or as a wish to use these particles in their language. However, in contrast to the additional use of particles, learners' omission of these units when using PVs is also another type of erroneous use of PVs found in the learner data. This expected deviation is due to the learners' L1s lack of these units. For example:

6- on your right you will see my room. I have my painting hang on the wall.

This sentence (6) illustrates a case of particle omission in the use of most frequent PV in the SLEC corpus 'up'. The intended verb by the learner could be actually a phrasal verb

'hang up' but the particle was missing. This instance of omission can be interpreted as a sign of the learner's incomplete lexical knowledge.

There is one more type of erroneous use of PVs which is connected to the notion of omission. It is probably caused either by lack of lexical knowledge or by confusion between transitive and intransitive PVs. There were some examples in which the objects of transitive PVs were left out, resulting in incorrect uses of transitive verbs as intransitive ones as in:

7- It is hard to bring us in a good way. he help us a lot to bring up and educate well.

8- It is right to claim that parent is the good teacher because well bring up begin at home.

'bring up' is PV which is transitive and needs an object (e.g. bring us up, bringing children up well). Whereas in some other cases intransitive PVs are used as transitive ones as in:

9- we make my mom relax and we do everything. I grow up habit is say (Besm Allah), at the end, people change.

In all these cases, the result is a contextually inappropriate use of an existing PV. One might hypothesize that this error is caused by the fact that students aren't always explicitly taught the distinction between transitive and intransitive verbs during the teaching process. Another possible reason could be the formal similarity of the PVs 'grow up' and 'bring up' in Arabic. Both of them can have the same meaning as the word 'يربي' in Arabic, 'to educate'. As a result, the learners' extension of the phrasal verb's scope to inappropriate contexts may have been caused by a lack of necessary contextual knowledge for the PVs 'grow up' and

'bring up' combined with the influence of the L1, which could make the learner think that both PVs can also be used as interchangeably as their meanings can in their L1.

Another deviation found in the learner data is the incorrect choice of PV itself or one of its constituents, i.e. substitution errors. For example in sentence 10, instead of writing that they 'grew up' in Madinah, the learner made an incorrect choice of the lexical verb and wrote 'raise up'.

10- I was born in Madinah and <u>raise up</u> in it.

In another example, sentence 11, the learner got the lexical verb right but had difficulty in choosing the appropriate particle.

11- I get so frustrate because that day was the last day to <u>hand out</u> the research accord to the teacher.

In this sentence, it seems the learner has confused 'hand out' with 'hand in'. The substitution of particle in this case cannot be accounted for by L1 interference. Consequently, the learner made the decision to combine this particle with the verb for no apparent reason. The learners' lack of lexical knowledge of the two types of verbs may have resulted in the confusion between the use of 'hand out' and 'hand in' in the above context. Perhaps the learner is not aware that 'hand out' and 'hand in' have different meanings and cannot be used interchangeably.

In another case, it happens that the learner made an incorrect choice of the entire PV. For instance, 'look around' although it exists as a PV in English, does not fit the context. Given the intended meaning in this example, 'explore' would be the appropriate verb.

12- I always visit more than that to have new experience, <u>look around</u> different culture. Checking the noun phrase following the verb 'different culture' in the learner's example, the chosen verb 'look' by the learner can be related to the Arabic verb 'يطلع على'. The Arabic equivalents of 'different culture' [الثقافات الأخرى] collocate habitually with the verb 'يطلع على/الثقافات الأخرى [lit. trans. Look on other cultures].

Another type of deviation is collocational deviation. It is related to the collocational aspects of PV use and the choice of the PV's collocates, i.e. whether students can utilize PVs in the right context and to combine them with the correct sort of context words. An example of a PV combined with inappropriate collocates is sentence 13:

13- people never live the moment; they always <u>catch up</u> their phone and start take photo instead live in it.

The deviation observed in sentence 13 can be accounted for by L1 interference as this combination is a conventional one in Arabic. Since this PV can be used with both animate and inanimate objects, it is likely that the difficulty this verb presents to learners is in identifying the contexts in which it should not be used. This verb co-occurs frequently with animate objects in COCA (i.e. personal pronouns, friends, competitors, etc.). Although such unusual combinations typically succeed in conveying the intended meaning, they give the reader the impression that they are not idiomatic.

The examples presented here at this point so far confirm the fact that PVs pose difficulties for this particular learner group. However, despite the difficulties they pose, some deviations from the norm, such as redundant use of particles, can be interpreted as a wish from the part of the students to employ PVs. As was previously mentioned, there are instances

in the data where a native speaker would prefer a "simple" (i.e. one-word) verb but the learner attempted to use a PV unsuccessfully.

> 14- then I arrange my room and watch a movie. I <u>set up</u> a dinner for my family. this is the daily routine in the day of work.

> 15- and we usually go to the mall every weekend. yesterday, we <u>make up</u> a party for my mom retirement.[10]

Sentences 14 and 15 can be used as a further example of how learners tend to choose PVs when native speakers would prefer to use the one-word verb 'organize' or 'hold' or 'do' rather than 'set up a dinner' and 'make up a party'. It is important to mention here the "simplified use of phrasal verbs" in this context, as described by Waibel (2007). It refers to the tendency of learners to express their intended meaning in overly general words in situations where a different expression would actually be more appropriate (p. 137). Waibel claims that such "simplified" uses result from a lack of relevant vocabulary knowledge and that their use is one of the reasons causing learner language to sound unnatural. Thus, if the substitution of less frequent and more explicit one-word verbs with common, high-frequency verbs with particles can be considered a simplification process, so is the use of 'make up' in sentence 15 for example can be considered as a "simplified" use since the single verb 'organize' (the targeted verb) is lower in frequency compared to 'make' (along with other verbs with similar meanings that can be seen as fit in this context, for 'hold' and 'host').

To conclude, on the basis of all the above findings, it can be suggested that the PVs discussed here seem to pose a major difficulty for Saudi learners. The way the learners use the PVs demonstrates a noticeable departure from the norms used by native speakers to a

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[10] This is a repetition of example 3 above.

great extent. In terms of the deviation types, PVs were used with redundant or inappropriate particles, and or with unusual collocates. While these unnatural combinations did not always prevent the reader from understanding the intended meaning, they did contribute to a lack of nativeness by giving the reader the impression that the language is not being used in the context in which it should be. Moreover, there were examples of transitive uses of intransitive PVs or vice versa in the data, which shows that learners lack syntactical knowledge. It should be noted that because there are frequently overlaps between the categories of deviation, it has been challenging to carefully classify the deviations and deal with them entirely separately.

A support for the underlying influence of L1 can be seen in the fact that L1 interference has become apparent in nearly all deviation types. Redundant uses of particles in the data are interesting given the fact that they are absent from the learners' L1 (Arabic). Given that these particles are crucial for creating PVs, it could be argued that learners' additional particle usage represents a conscious attempt to use them. There are times when substitution errors are attributed to the presence of verbs that are formally and semantically similar. Regarding the unusual combinations, a mix of L1 influence and incomplete (contextual) knowledge of the L2 lexicon could have led to the learners inappropriately extending the collocational range of a given PV. The learners' partial mastery of the L2 lexicon is evident in most of the deviations reported in this section. Their inability to form or produce standard, or native-like, PVs in appropriate contexts results from their incomplete lexical knowledge.

As a result of these corpus findings, it is hoped that teachers and students will be more aware of the value of PVs in enhancing communicative competence and addressing usage issues that learners may have, leading to better treatment of this language form in Saudi

language classrooms. Finally, as far as the research methodology is concerned, the use of corpus data to investigate PV use among language learners in Saudi Arabia illustrates the opportunities and significance of corpus linguistics in this type of research.

4.2.6 Conclusion

The aim of this section was to provide a detailed presentation of the results obtained from analyzing the corpus (SLEC) data. The extraction of PVs revealed that Saudi learners produced, on average, one PV construction in approximately every 241 words of text. It was discovered that learners not only used fewer PVs, but also employed a smaller variety of these constructions than native speakers, based on estimates from Gardner and Davies (2007). The results show that females performed marginally better than males, relative to the number of participants in each group. In terms of the relative frequency of PVs, PVs produced by females was higher than the males (4.00 vs. 2.82 per 1000 words), thus, the results were statistically significant and there was significant relationship between gender and the students' overall performance on the PVs. In terms of proficiency level, the results show that lower intermediate students performed better than beginner students and that there is also a significant relationship between proficiency level and the students' overall performance on the PVs. In terms of genres, the results showed that there is a statistically significant difference in mean scores for the different text types, which suggests that there is a relationship between text types and the students' overall performance on the PVs.

The analysis of the most frequent PVs shows that highly colloquial PVs such as 'wake up', 'get up', and 'go out' occur most often. This occurrence is on the one hand due to the fact that the proficiency level of students is low (beginner and lower intermediate) and it is difficult for them to write in an academic style. On the other hand, the majority of the highly

frequently used PVs in the learner writing turn out to be less frequently used in academic writing, which could be due to the lower level of formality in the essays as descriptive and narrative essays constitute 66% based on the number of tokens in SLEC. In addition, the results show that the learners rely on a more limited range of verb and particle types in the formation of PVs. Thus, these results show that Saudi learners have difficulty using PVs, which could be due to the semantic complexity and the idiomaticity of these PVs, and lack of a mother tongue equivalent.

In addition, the most frequent PV across the corpus is topic dependent and used for the description of personal experiences and activities in daily life.

It is also important to mention that most of the PVs included in this analysis have only one frequent meaning sense (literal meaning senses) based on Garnier and Schmitt's (2015) list. The preference for literal PVs in SLEC found in this study is probably a consequence of genre, as SLEC contains descriptive and narrative texts in which literal uses of PVs are likely to be frequent. Furthermore, the analysis of the chosen PVs has produced a number of interesting and practical findings regarding the PV patterns found in the SLEC corpus. A particularly important finding which could be a contributing factor to the inappropriate use of these PVs is most often related to the influence of learners' L1 (Arabic). In addition, the lexical knowledge as well as the lack of awareness of regular patterns of PVs of learners (e.g. common collocates) could be other possible factors causing the inappropriate use of PVs. These findings further support those discussed in Chapter 2 that Saudi learners of English face particular difficulty in using PVs.

In short, the above findings provide empirical evidence with respect to Saudi learners' knowledge of PVs, and a number of useful findings which will be discussed further in Chapter 5.

4.3 Multiple choice test results

This section is devoted to the analysis of the data gathered using the second instrument applied in this study, the multiple-choice (MC) test.

4.3.1 Introduction

The primary goal of this second section of Chapter 4 is to present the findings of the analysis of the data gathered using the second instrument applied in this study, the multiple-choice (MC) test. The MC test focuses on learners' productive and receptive use and knowledge of PVs, and their potential employment of the avoidance strategy, in order to determine the reasons behind the under- or overuse of PVs in learners' EFL productions. The MC test was thus split into three main sections – productive, receptive, and avoidance tasks – and results are presented in turn for each of these sections below.

The first section analyzes the results for the Saudi undergraduate English learners' productive skills; in other words, the focus is on their active use and knowledge of the PVs gathered from the productive task given. The second section is focused on their receptive skills, or the ability to recognize and memorize the PVs in a passive and receptive way, which have been analyzed through the results of the receptive task. The third section presents the results of the avoidance task. This task measured Saudi undergraduate English learners' PV avoidance behavior to answer the research question on the factors that can influence the Saudi learners' use of PVs relative to their proficiency level, and above all the semantic nature of

PVs (literal-figurative), to determine to what extent these two variables can affect the avoidance phenomenon.

This research involved a total number of 195 undergraduate Saudi learners of English between 18 and 24 years, including males and females. The participants provided a variety of demographic information useful to carrying out the analysis, including their native language, gender, years of studying English, and exposure to English classes. Their level of proficiency in English, measured using a specific proficiency assessment task, ranged from beginners to lower intermediate.

A major variable of this research was identified in the typology of PVs to be included in the research. 31 PVs were thus selected for the MCQs, 16 of which have been classified as literal and 15 as figurative. However, to maintain a balanced distribution between literal and figurative PVs, one of the literal PVs (*go down*) has been used figuratively as well. These PVs were taken from the textbooks used by the students at their elementary, intermediate and secondary schools. In addition, they are all found within the list of 150 most frequently used PVs of Liu's (2011) study, which was based on BNC and COCA. It is assumed that most of the learners participating in this study should have been exposed to and be familiar with these PVs in the process of learning English as they are taken from their textbooks and from the most frequent PVs according to the two most well-known corpora.

As depicted in Table 4.17, 116 participants were male while 79 were female. Out of the total number of males who participated, Table 4.18 demonstrates that 57 were beginners while 59 were lower intermediates in terms of English proficiency. Among the females, there was a slight majority of beginners at 41 participants, while the remaining 38 were lower intermediates. There is no overlap between the participants in the MC tests and those whose

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written compositions are included in SLEC. It appears that among all of the participants in the research, (51.1%) comprised students at a beginner level and, of these students, the majority were males (30.3% males vs. 21.0% females). On the other hand, the total percentage of lower intermediate students was 48.8%, and here too the majority (30.3%) were males, while 19.5% of all participants were female.

Table 4.16

Number of participants based on gender.

Gender	Number of individuals	%
Female	79	40.50%
Male	116	59.50%
Total	195	100%

Table 4.17

The distribution of participants in terms of gender and proficiency level.

Gender	Proficiency level	Number of participants	%
Female	Beginner	41	21.0%
	Lower Intermediate	38	19.5%
Male	Beginner	57	29.2%
	Lower Intermediate	59	30.3%
Total		195	100%

In the next sections, I will provide a detailed description of the results for the three aforementioned tasks relative to the three main variables (the type of PV, gender, proficiency level). The students' scores in the three MC tasks were calculated to address both primary research questions about the actual use of PVs (productive and receptive knowledge) and the kinds of problems Saudi undergraduate learners of English face using PVs (avoidance behavior).

4.3.2 Productive knowledge

4.3.2.1 *Reliability of the test*

To measure the reliability of the test, Cronbach's alpha was used. It is a common measure of internal consistency (a measure of reliability) to determine the extent to which the items on a scale are measuring the same underlying dimension. The Cronbach's alpha reliability of the test was .875 as shown in Table 4.19. These results indicate a high level of internal consistency for our scale with this specific sample. What makes a good level of internal consistency differs depending on what source you refer to, although all recommended values are 0.7 or higher (DeVillis 2003; Kline 2005).

Table 4.18

Reliability Statistics for productive task.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.875	.870	16

4.3.2.2 *Overall results*

The analysis of the results with respect to the productive knowledge are discussed here and situated in relation to the main variables under investigation: type of PV, gender, and learners' level of English proficiency. Of a total of 21 pages in the test booklet used in this study, 2 pages (pages 14-15) are dedicated to the assessment of participants' productive knowledge of PVs. The task in question included 16 fill-in-the-gap sentences with one missing PV each, with a randomized sequence of 8 figurative and 8 literal missing items. To reduce the range of potential PVs to be used in the test students were given first-letter prompts for the target PVs. For more details, see Section 3.5.5

Table 4.19

The results for all participants on the productive test.

PVs	Productive Knowledge											
	Male						Female					
	Beginner			L. Intermediate			Beginner			L. Intermediate		
	R	M	SD	R	M	SD	R	M	SD	R	M	SD
pick up	9	.16	.368	35	.59	.495	9	.22	.419	22	.58	.500
wake up	49	.86	.350	59	1.00	.000	38	.93	.264	38	1.00	.000
take up	14	.25	.434	30	.51	.504	7	.17	.381	21	.55	.504
go out	42	.74	.444	56	.95	.222	30	.73	.449	35	.92	.273
get in	17	.30	.462	49	.83	.378	11	.27	.449	34	.89	.311
take out	12	.21	.411	40	.68	.471	9	.22	.419	30	.79	.413
get out	42	.74	.444	58	.98	.130	30	.73	.449	37	.97	.162
go down	52	.91	.285	58	.98	.130	35	.85	.358	37	.97	.162
make up	22	.39	.491	51	.86	.345	13	.32	.471	33	.87	.343
find out	24	.42	.498	56	.95	.222	28	.68	.471	37	.97	.162
put in	5	.09	.285	30	.51	.504	3	.07	.264	25	.66	.481
come up	12	.21	.411	33	.56	.501	8	.20	.401	25	.66	.481
set up	6	.11	.310	41	.69	.464	4	.10	.300	29	.76	.431
go on	43	.75	.434	52	.88	.326	33	.80	.401	32	.84	.370
give up	12	.21	.411	34	.58	.498	8	.20	.401	31	.82	.393
turn out	4	.07	.258	26	.44	.501	5	.12	.331	24	.63	.489

Table 4.20 summarizes the results of all the participants in relation to the productive test, displaying the descriptive statistics for all groups including the total sum of the right answers *R*, means and the standard deviations for each of the PVs included in the test (8 literal and 8 figurative) distributed based on gender and proficiency level variables.

The means, median and standard deviations of the scores of all groups including the total sum of the right answers, and the standard deviations are presented in Table 4.21.

Table 4.20

Descriptive statistics of the participants' test scores.

N	Mean	Median	Sum	Std. Deviation	Minimum	Maximum
195	9.41	10.00	1834.00	3.97	2.00	16.00

As we can see, the mean of the scores was relatively modest ($M = 9.41$, $SD = 4.00$). The spread of correct answers ranged from 2 to 16 on this task.

With regard to the control group results, they performed as expected. They all answered all the sentences correctly. The descriptive statistics of their results are presents in Table 4.22

Table 4.21

Descriptive statistics of the control group's test scores.

N	Mean	Median	Sum	Std. Deviation	Minimum	Maximum
12	16.00	16.00	192	.000	16.00	16.00

Productive scores in native speakers were statistically significantly different from Saudi participants. Overall total number of PVs answered was higher for native speakers (Mdn = 16) than the Saudi participants (Mdn = 10), U = 42.00, z = 5.64, $p < .001$.

4.3.2.3 Male vs. Female

The chart in Figure 4.5 demonstrates that among males, the lower intermediate group has performed noticeably better than the beginners in terms of the productive use of PVs. The chart also demonstrates that in only one case, 'wake up', out of the 16 PVs given, the lower intermediate males got the full score, but in many other cases, such as 'go out', 'get in', 'get out', 'go down', 'make up', 'find out', 'go on', they got close to the maximum score as well, with a percentage that surpasses 80% correct for half of the PVs included in the test.

For the remaining 8 items, the male lower intermediate students never fell below a score of 40% of correct answers, obtaining the lowest score respectively for 'turn out' (44.06%), 'take up' (50.80%), 'put in' (50.84%). We can conclude that for 13 PVs, more than the half of the male lower intermediate students answered the majority of the items given correctly, indicating a strong productive knowledge and use of the PVs under investigation.

Figure 4.5

Males' results in the productive task.
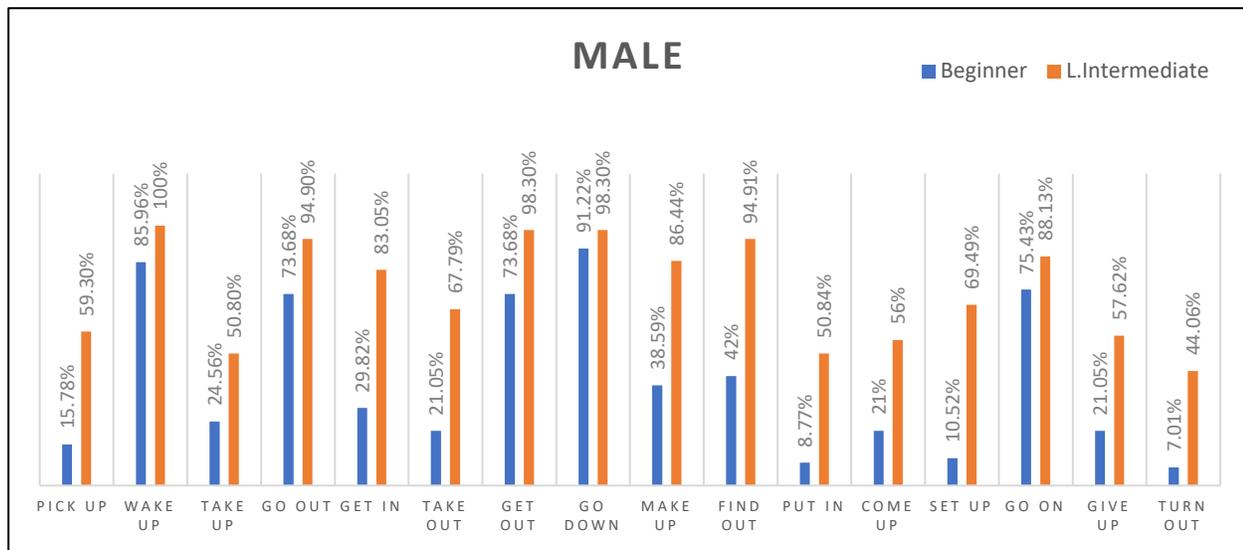
The situation appears totally different if one examines the beginner component of this gender section. The scores are on average under 50% of correct answers in 10 cases out of 16. In ascending order, they are: 'put in' (7.31%), 'set up' (9.75%), 'turn out' (12.19%), 'take up' (17.07%), 'come up' (19.51%), 'give up' (19.51%), 'pick up' (21.95%), 'take out' (21.95%), 'get in' (26.82%), 'make up' (31.7%). In only 6 cases did participants get the right answer more than 50% of the time. As depicted in this graph (Figure 4.5), the analysis

suggests that the beginner males are less likely to use PVs productively than the lower intermediates.

Figure 4.6

Females' results in the productive task.
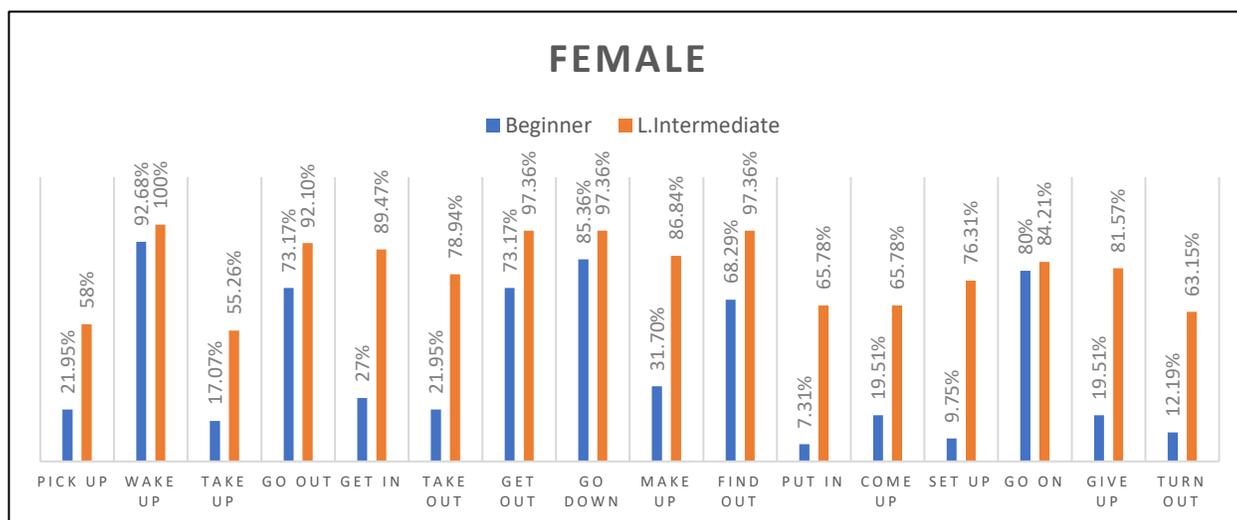
The results for the female participants on the productive task are presented in the chart in Figure 4.6. It provides evidence of a higher level of knowledge and use of the 16 PVs included in the test compared to the males with the same level of proficiency. There is no PV for which female lower intermediate students returned correct answers in under (50%) of cases; and they received the same full score for the PV 'wake up' as the lower intermediate males did. Beginner females exhibited more difficulties with 10 out of the 16 PVs, returning correct answers in fewer than (30%) of cases. A significant score of right answers was achieved by beginner females for 6 more PVs than was the case with beginner males. The chart in Figure 4.6, like the previous one, also reveals that at the lower intermediate level of proficiency, the females also performed better than their beginner counterparts, and are more likely to master the productive use of PVs. At beginner proficiency level, males received a

higher score than females, but the situation is reversed at the lower intermediate level, where the better performers are the female gender regarding the productive knowledge and use of PVs. Further analysis was carried out to examine whether there is any significant difference between males and females.

Table 4.22

Independent-Samples Mann-Whitney U Test between male and female participants.

Total N	195
Male Median	9.50
Female Median	11.00
Mann-Whitney U	4336.00
Wilcoxon W	11122.00
Standardized Test Statistic Z	.638
Asymptotic Sig. (2-sided test)	.523

A Mann-Whitney U test was run to determine if there were differences in the score between males and females in Table 4.23. Distributions of the scores for male and female were similar, as assessed by visual inspection, see Appendix I, part 1. The score was not statistically significantly different between male (Mdn = 9.50) and female (Mdn = 11.00), U = 4336, z = .638, p = .523, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient (r = .047) indicated a low effect size suggesting that the differences in scores were not statistically significant, and that there is no significant relationship between the gender variable and the students' overall performance on the PVs tested. Results of the test are shown in Table 4.24 below.

Table 4.23

Relationship between productive knowledge and gender.

Correlations			Total	Gender
TOTAL	**Pearson Correlation**		1	.047**
	Sig. (2-tailed)			.510
	N		195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.2.4 Beginner vs. Lower intermediate

The proficiency levels of the participants involved in this research were not equivalent. They have been separated into two groups to reflect their different levels of knowledge of EFL: beginners and lower intermediate. The total number of PVs included in the productive test are compared between the two groups in Figure 4.7. It suggests a noticeable relationship between the students' scores and their proficiency level. The results reveal that the learners with the higher proficiency level obtained better scores than the beginners for all the items in the productive test. For example, the graph shows that for all the PVs included in the test, the lower intermediate students got high percentages of right answers, all over 50%. On the other hand, Figure 4.7 also presents noticeably lower scores for use of PVs among beginner students. An outstanding score has been recorded, in fact, only in relation to a few PVs (which are also among the high-scoring PVs in the higher proficiency group): 'go down' and 'wake up' are at the first positions in terms of high performance (88.8%), and following, in descending order, are 'go on' (77.60%), and 'go out'

(73.50%). However, in terms of the lower scores, 'put in', 'turn out' and 'set up' elicited the worst performance with participants returning correct answers in or under 10% of cases.

Figure 4.7

Beginners and lower intermediate results in the productive task.
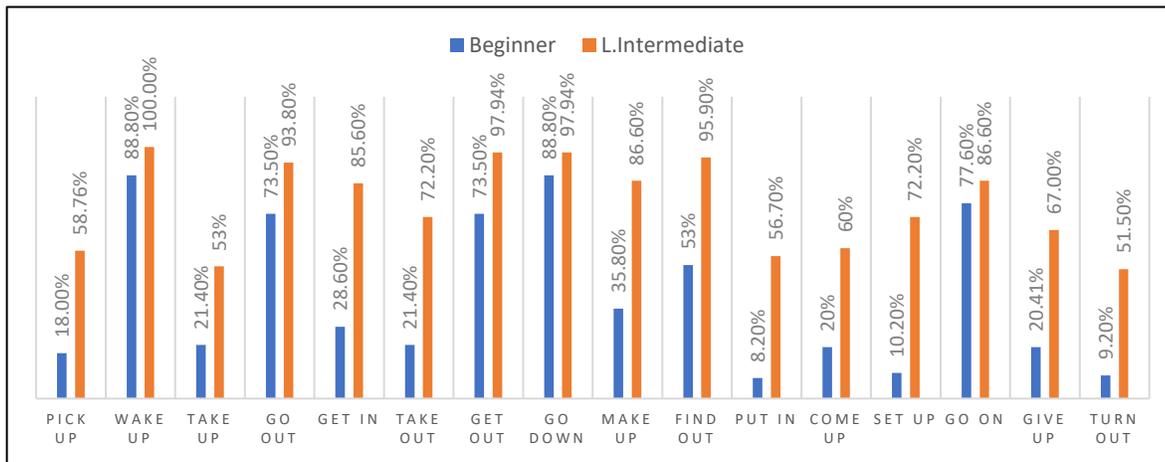
Figures 4.8 and 4.9 below analyze both levels of proficiency across both genders. Figure 4.8 shows that in the beginner group males performed better than females in 11 cases out of 16, even if the majority of the PVs present a similar percentage of correct answers from both genders. This means that at the beginner level gender cannot be considered a relevant variable

Figure 4.8

Beginners' results in the productive task.
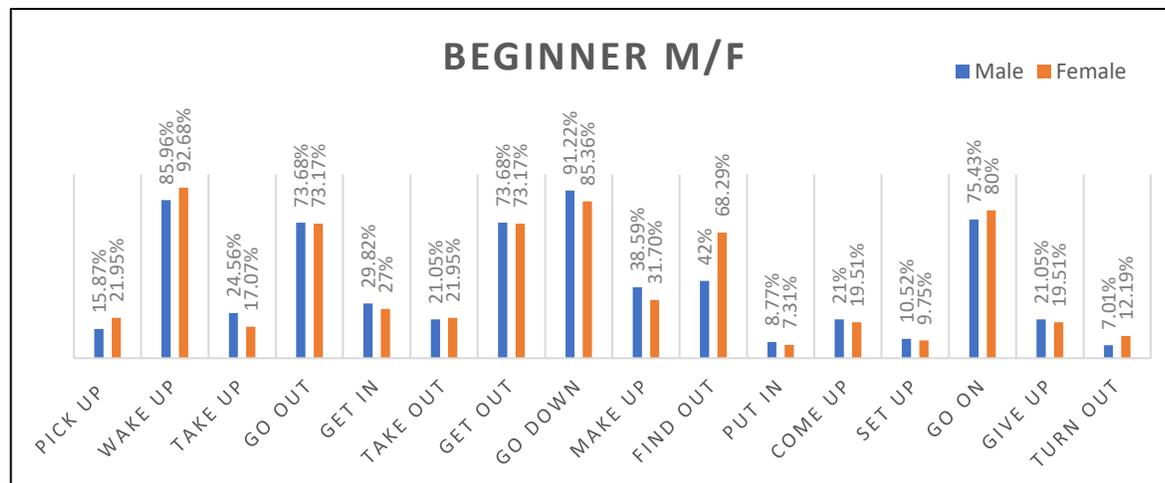
in the productive knowledge tasks of the research, since the percentages rarely differ by more than 10% by gender.

A similar situation can be found in Figure 4.9 in which male and female answers are analyzed in relation to the lower intermediate proficiency level. The findings show that this time females scored better than males, but it is also important to note that the discrepancy in results here is even less remarkable than before. In three cases there was a noticeable advantage for females over the opposite gender: 'give up' (81.57% vs. 57.62%) 'turn out' (44.06% vs. 63.15%) and 'put in' (50.84% vs. 65.78%). The percentages presented in the graphs help to confirm this: regardless of the level of proficiency, gender does not affect the use of PVs since the percentages of correct answers are, on average, fairly equal for males and females.

Figure 4.9

Lower intermediate results in the productive task.
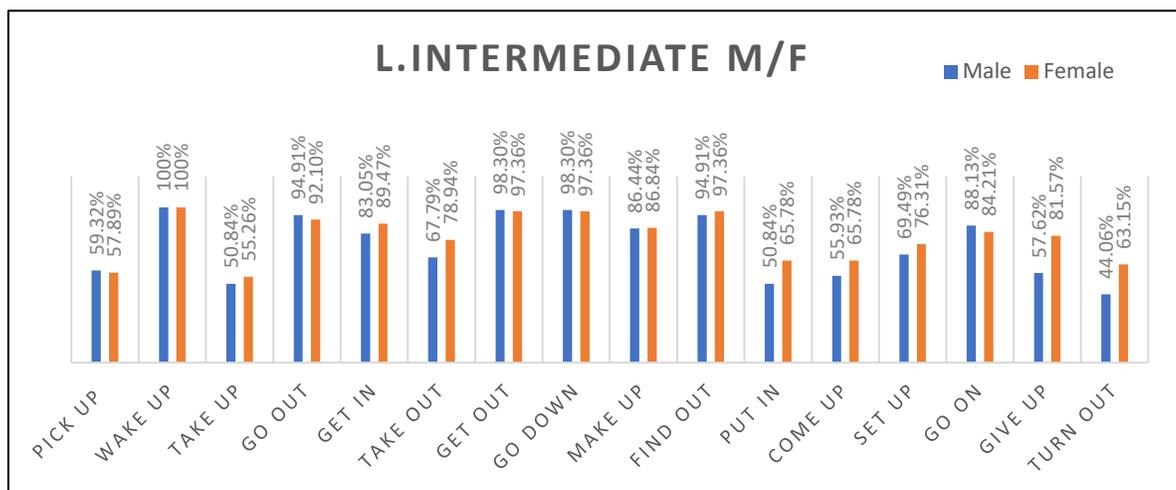
As discussed previously, Figures 4.8 and 4.9 break down each one of the proficiency levels under investigation according to the students' gender. As expected, the findings of this section demonstrate that the higher level of students' proficiency means learners have a better

understanding and use of PVs that, on the other hand, is not affected in a noticeable way by gender differences.

Further analysis was conducted to determine whether there is any significant difference across different levels of language proficiency (beginner and lower intermediate). The results are presented in Table 4.25 and Table 4.26 below.

Table 4.24

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants.

Total N	195
Beginner Median	5.50
Lower intermediate Median	12.00
Mann-Whitney U	754.00
Wilcoxon W	5605.00
Standardized Test Statistic *Z*	-10.187
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score between beginner and lower intermediate participants in Table 4.25. Distributions of the scores for beginners and lower intermediates were similar, as assessed by visual inspection, see Appendix I, part 1. The score was statistically significantly different between beginner (Mdn = 5.50) and lower intermediate (Mdn = 12.00), $U = 754.00$, $z = -10.187$, $p = .005$, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient ($r = .739$) in Table 4.26 below indicated a large effect size. Cohen (1988) suggests that $r = .50$ to 1.0 indicates large correlation (pp. 79-81). So, the correlation value above suggests that there is a strong relationship between the proficiency level and students'

productive knowledge of PVs which implies that the higher the level of students' proficiency, the better would be their performance.

Table 4.25

Relationship between productive knowledge and proficiency level.

		Total	Proficiency level
TOTAL	**Pearson Correlation**	1	.739**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.2.5 Literal vs. figurative

A third analysis of the participants' productive use of PVs was conducted to determine whether there is any significant difference in the scores due to the type of PV. As discussed in Chapter 2, many factors influence learners' difficulties in mastering PVs, and the level of semantic transparency of this construction is one of them. This feature, in fact, can prevent a straightforward understanding of a PV when its meaning cannot be inferred from the meanings of its individual components. For this reason, this section will analyze the results to describe the use of PVs in relation to two main semantic categories: literal and figurative PVs, according to their higher or lower level of semantic transparency.

Table 4.26

Descriptive Statistics for literal and figurative PVs.

	N	Mean	Std. Deviation	Median	Minimum	Maximum	Sum
LITERAL	195	5.35	1.84	6.00	1.00	8.00	1078
FIGURTAIVE	195	4.04	2.43	4.00	.00	8.00	796

Table 4.27 indicates that participants performed better on literal PVs (*M* = 5.35, *SD* = 1.84, *Mdn* = 6) than on figurative PVs (*M* = 4.04, *SD* = 2.43, *Mdn* = 4). The results suggest that students have a better knowledge of literal PVs than figurative ones. This, however, is not surprising as literal PVs are very transparent in meaning compared to figurative ones. Further analysis was conducted to determine whether there is any significant difference between the use of literal and figurative PVs. The results are presented in Table 4.28.

Table 4.27

Independent-Samples Mann-Whitney U Test between literal and figurative PVs.

Mann-Whitney U	13001.5
Wilcoxon W	32111.5
Standardized Test Statistic *Z*	-5.448
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the use between literal and figurative PVs. Distributions of the scores for literal and figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 1. The score was statistically significantly different between literal PVs (Mdn = 5.35) and figurative ones (Mdn = 4.04), U = 13001.5, z = --5.448, p = .005, using an exact sampling distribution for U (Dineen and Blakesley 1973).

4.3.2.6 Literal vs. figurative and language proficiency

Figure 4.10 displays the detailed results for the productive task, focusing on the literal PVs. PVs like 'wake up' and 'go down' received the highest number of correct answers, demonstrating students' capability to logically associate the meaning of the single verb (*wake /go*) with the action (*up /down)* suggested in its particle. This finding is validated by the score

gained by the students of both proficiency levels. It remains a fact that lower intermediates performed generally better than beginners, for both literal and figurative PVs as already discussed; however, the discrepancy between the two proficiency levels increases with decreasing PV transparency.

Figure 4.10

Beginners and lower intermediate results in the use of literal PVs.

BEGINNER VS. L.INTERMEDIATE USE OF LITERAL PVS
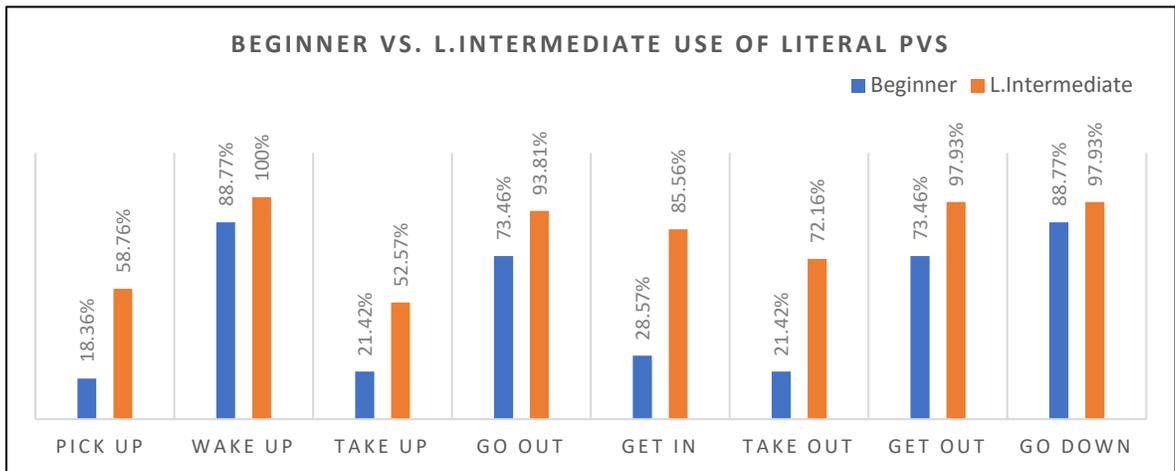
Figure 4.11

Beginners vs. Lower intermediate use of figurative PVs.

BEGINNER VS. L.INTERMEDIATE USE OF FIGURURATIVE PVS
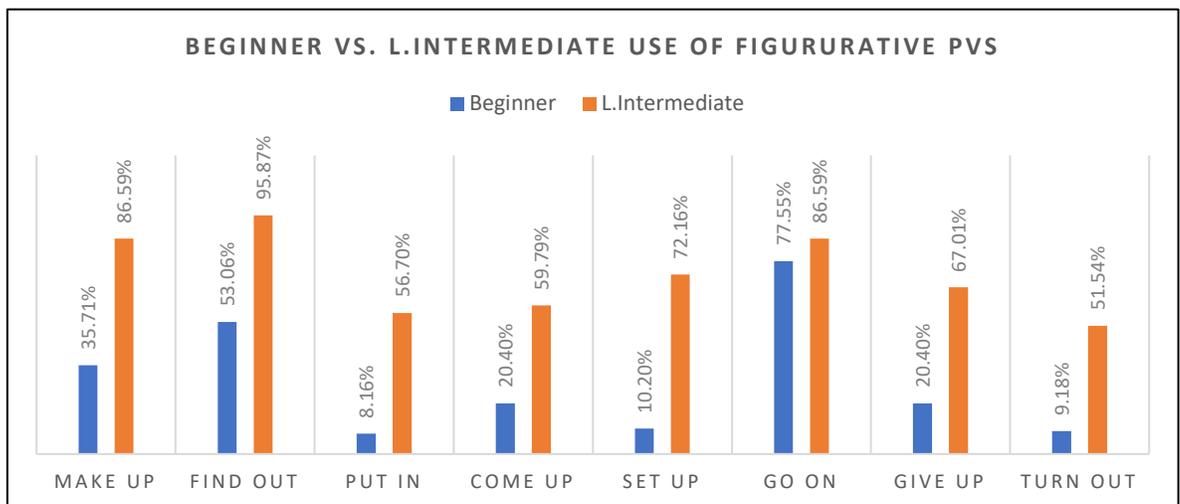
Figure 4.11 breaks down the results for figurative PVs according to students' proficiency level. As one can observe, there is a very noticeable difference in scores between lower intermediates and beginners, whereas differences appeared more moderate in the case of literal PVs in Figure 4.10. This suggests a strong influence of the type of PV on their actual usage by Saudi learners of EFL.

Proficiency level seems to be a significant variable when the meaning of the PV is figurative and non-compositional. For this reason, the results of Figure 4.10 and Figure 4.11 can be also described by stating that an increase in students' proficiency is accompanied by a gradual move towards the use of more figurative and non-compositional PVs. An analysis was carried out to investigate whether there is a difference in the score for literal PVs between students of different language proficiency levels. The results of the analysis are presented in Table 4.29.

Table 4.28

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants in the use of literal PVs.

Beginner Median	4.00
Lower Intermediate Median	7.00
Mann-Whitney U	1147.5
Wilcoxon W	5998.5
Standardized Test Statistic _Z_	-9.273
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score of literal PVs between beginner and lower intermediate students. Distributions of the scores for literal PVs were similar, as assessed by visual inspection, see Appendix I, part 1. The

score was statistically significantly different between beginner (Mdn = 4.00) and lower intermediate (Mdn = 7.00), U = 1147.5, z = -9.273, p = .005, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient (r = .666) below confirms that there is a relationship between the results for the literal PVs tested and students' proficiency level indicating a large effect size. Thus, this implies that students in the two different groups differ in their use of literal PVs.

Table 4.29

Relationship between Literal PVs and proficiency level.

		Proficiency level	**Literal PVs**
Proficiency level	**Pearson Correlation**	1	.666**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.30

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants in the use of figurative PVs.

Beginner Median	2.00
Lower Intermediate Median	6.00
Mann-Whitney U	918.5
Wilcoxon W	5769.5
Standardized Test Statistic Z	-9.825
Asymptotic Sig. (2-sided test)	.0005

Following this, an analysis was carried out to examine whether there is also a difference in the score for figurative PVs between students in the two different groups; the results are presented below in Table 31. A Mann-Whitney U test was run to determine if

there were differences in the score of figurative PVs between beginner and lower intermediate students. Distributions of the scores for figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 1. The score was statistically significantly different between beginner (Mdn = 2.00) and lower intermediate (Mdn = 6.00), $U = 918.5$, $z = -9.825$, $p = .005$, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient ($r = .702$) in Table 4.32 below confirms that there is a relationship between the results for the figurative PVs tested and students' proficiency level indicating a large effect size. This implies that high proficiency students may have a better command of figurative PVs than the beginners. In other words, students of different proficiency levels tend to show different levels of production with respect to figurative PVs.

Table 4.31

Relationship between figurative PVs and proficiency level.

		Proficiency level	Figurative PVs
Proficiency level	**Pearson Correlation**	1	.702**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

In brief, the present findings also reveal that learners in the high proficiency group are better at using the PVs tested as a whole, but also make better use of both literal and figurative PVs.

4.3.2.7 Literal vs. figurative and gender

Figures 4.12 and 4.13 summarize the correct use of literal and figurative PVs by males and females respectively and suggest that the difference between males and females is insignificant. It was already determined that the division between males and females does

not significantly affect the findings of the productive task; however, exact percentages are

presented here to provide sufficient details for the research.

Figure 4.12

Literal and figurative PVs use by Male participants.
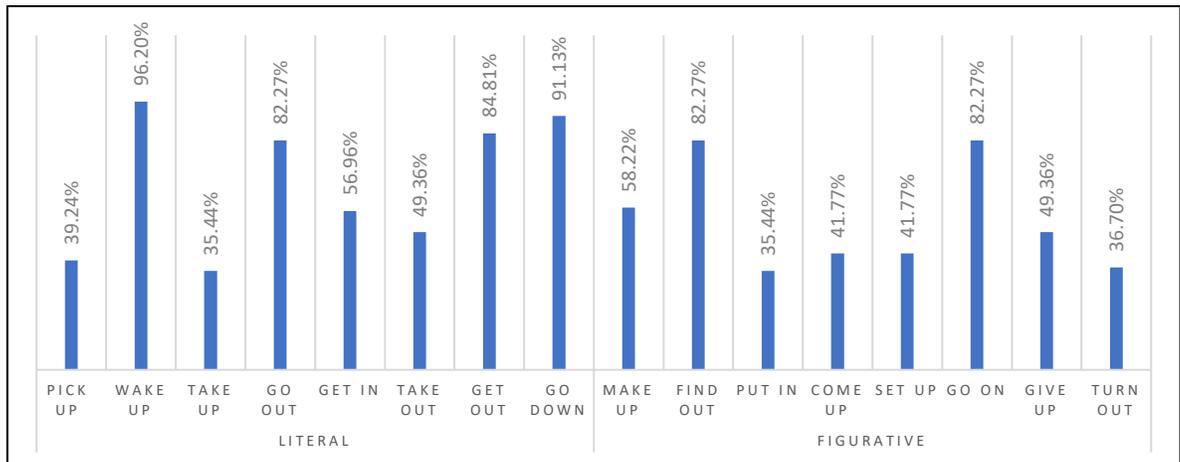
Figure 4.13

Literal and figurative PVs use by Female participants.
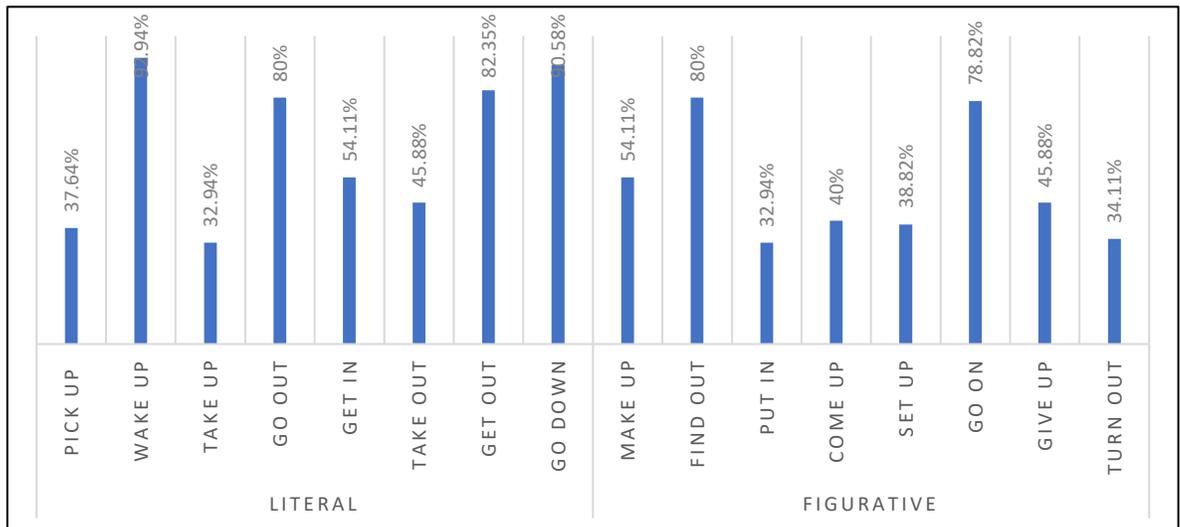
243

The next statistical analysis was conducted to investigate whether there is a difference in the score for literal PVs among male and female students. The results of the analysis are presented below in Table 33.

Table 4.32

Independent-Samples Mann-Whitney U Test between Mean score between male and female students with literal PVs.

Male Median	6.00
Female Median	6.00
Mann-Whitney U	4573.5
Wilcoxon W	7733.5
Standardized Test Statistic Z	-.022
Asymptotic Sig. (2-sided test)	.982

A Mann-Whitney U test was run to determine if there were differences in the score of literal PVs between male and female students. Distributions of the scores for literal PVs were similar, as assessed by visual inspection, see Appendix I, part 1. The score was not statistically significantly different between male (Mdn = 6.00) and female (Mdn = 6.00), U = 4573.5, z = -.022, p = .982, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient (r = .002) in Table 4.34 below confirms that there is no relationship between the literal PVs and gender.

Table 4.33

Relationship between literal PVs and Gender.

		Gender	**Literal PVs**
Gender	**Pearson Correlation**	1	.002**
	Sig. (2-tailed)		.977
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

Following this, a Mann-Whitney U test was carried out to check whether there is a difference in the score of figurative PVs between gender. The results of this analysis are presented below in Table 35.

Table 4.34

Independent-Samples Mann-Whitney U Test between male and female students with figurative PVs.

Total N	195
Male Median	4.00
Female Median	4.00
Mann-Whitney U	4169.5
Wilcoxon W	10955.5
Standardized Test Statistic Z	-1.076
Asymptotic Sig. (2-sided test)	.282

A Mann-Whitney U test was run to determine if there were differences in the score of figurative PVs between male and female students. Distributions of the scores for figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 1. The score was not statistically significantly different between male (Mdn = 4.00) and female (Mdn = 4.00), $U = 4169.5$, $z = -1.076$, $p = .282$, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient ($r = .079$) which further suggests that the gender variable has a relatively small effect on the students' overall use of the figurative PVs tested.

Table 4.35

Relationship between figurative PVs and Gender.

		Gender	Figurative
Gender	**Pearson Correlation**	1	.079**
	Sig. (2-tailed)		.274
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.3 Receptive knowledge

4.3.3.1 Reliability of the test

The Cronbach's alpha reliability for the receptive test was (.807), which indicates a high level of internal consistency for our scale with this specific sample. Higher values of Cronbach's alpha are better. All recommended values are 0.7 or higher (DeVillis 2003; Kline 2005).

Table 4.36

Reliability Statistics for the receptive task.

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.807	.825	16

4.3.3.2 Overall results

In this section, the analysis of the results with respect to the receptive knowledge task is presented in relation to the main variables under investigation: the type of PVs, gender, and learners' level of proficiency. As previously noted in prior Chapters, receptive knowledge implies the ability to identify the communicative value of a lexical item used in speech and writing texts. In the second section (pages 14–16 of the booklet), 16 of the 32 PVs in the entire study that had not yet been tested were used to assess participants' receptive knowledge. They were asked to choose, for each sentence, the right item from among four options. For more details, see Chapter 3, Section 3.5.5.

Table 4.37

Results for all the participants on the receptive test.

PVs	Receptive Knowledge											
	Male						Female					
	Beginner			B1			Beginner			B1		
	R	*M*	*SD*	*R*	*M*	*SD*	*R*	*M*	*SD*	*R*	*M*	*SD*
get up	46	.81	.398	58	.98	.130	35	.85	.358	38	1.00	.000
come back	53	.93	.258	59	1.00	.000	36	.88	.331	38	1.00	.000
go back	49	.86	.350	59	1.00	.000	32	.78	.419	38	1.00	.000
grow up	51	.89	.310	59	1.00	.000	34	.83	.381	38	1.00	.000
point out	12	.21	.411	38	.64	.483	10	.24	.435	27	.71	.460
get back	46	.81	.398	59	1.00	.000	34	.83	.381	38	1.00	.000
come out	31	.54	.503	54	.92	.281	22	.54	.505	36	.95	.226
end up	13	.23	.423	46	.78	.418	14	.34	.480	35	.92	.273
hold up	14	.25	.434	14	.24	.429	10	.24	.435	16	.42	.500
hang out	33	.58	.498	52	.88	.326	26	.63	.488	33	.87	.343
put out	31	.54	.503	50	.85	.363	22	.54	.505	32	.84	.370
take on	26	.46	.503	46	.78	.418	16	.39	.494	33	.87	.343
come in	39	.68	.469	57	.97	.183	29	.71	.461	37	.97	.162
look up	26	.46	.503	47	.80	.406	20	.49	.506	33	.87	.343
check out	18	.32	.469	39	.66	.477	16	.39	.494	25	.66	.481
go down	43	.75	.434	58	.98	.130	29	.71	.461	38	1.00	.000

Table 4.38 presents a summary of the participants' receptive knowledge task results. It shows the descriptive statistics for all the groups, including the total number of right answers, the means, and standard deviations for each of the PVs included in the test 8 literal and 8 figurative items) distributed based on gender and the proficiency level variables.

The means, median and standard deviations of the scores of all the groups, including the total number of right answers, means and the standard deviations, are presented in Table 4.39.

Table 4.38

Descriptive statistics of the participants' test scores.

N	Mean	Median	Sum	Std. Deviation	Minimum	Maximum
195	11.52	12.00	2246.00	3.080	4.00	16.00

As seen, the mean of the scores for the receptive knowledge task was marginally higher than the mean for the productive knowledge task (M = 11.52, SD = 3.08). For this task, the scores for the correct answers ranged from 2 to 16.

With regard to the control group results, they performed as expected. They all answered all the sentences correctly. The descriptive statistics of their results are presents in Table 4.40.

Table 4.39

Descriptive statistics of the control group's test scores.

N	Mean	Median	Sum	Std. Deviation	Minimum	Maximum
12	16.00	16.00	192	.000	16.00	16.00

Receptive scores in native speakers were statistically significantly different from Saudi participants. Overall total number of PVs answered was higher for native speakers (Mdn = 16) than the Saudi participants (Mdn = 12), U = 96.00, z = 5.40, p < .001.

4.3.3.3 Male vs. female

After discovering that gender did not produce any significant variations in the scores for the productive knowledge task, it was also necessary to verify the extent to which gender affected the participants' receptive knowledge of PVs.

Figure 4.14

Males' results in the receptive task.
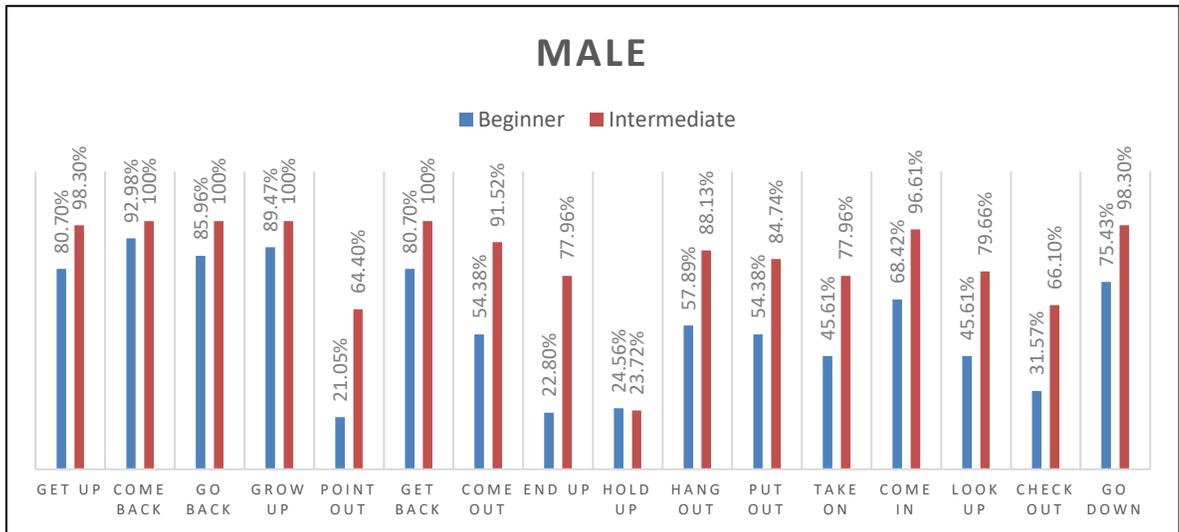
The chart in Figure 4.14 shows the males' scores for the 16 given items in the receptive knowledge test at both proficiency levels. At first glance, the participants with a lower intermediate level of proficiency demonstrated a better understanding of the PVs, consistent with the findings that have already been obtained: lower intermediate male participants answered 15 of the 16 items correctly more than 60% of the time. The PV 'hold up' was the only one to cause some uncertainty among this group (23.72%). Looking at the wide range of scores, males generally had difficulty identifying the meaning of this PV, which also had a low percentage of correct answers in the beginner group (24.65%). However, there is nearly an exact correspondence between the two groups regarding the best scored PVs: the males in both the beginner and lower intermediate proficiency levels showed some similarity in their level of receptive understanding of the given PVs. The PVs that elicited the best performance among the lower intermediate level participants (100%) were: 'come back', 'go back', and 'get back' and 'grow up'; followed by 'get up' and 'go down' (98.30%). Moreover, the beginner level participants had the best scores for the same PVs: 'come back' (92.98%); 'grow up' (89.47%); 'go back' (85.70%); 'get back' (80.70%); 'get up' (80.70%); 'go down'

(75.43%). It is worth noting that, with the exception of 'go down' (75.43% for beginners and 98.30% for lower intermediates), which was used figuratively, the PVs that elicited the best performances in both groups were all of the literal type.

Figure 4.15

Females' results in the receptive task.
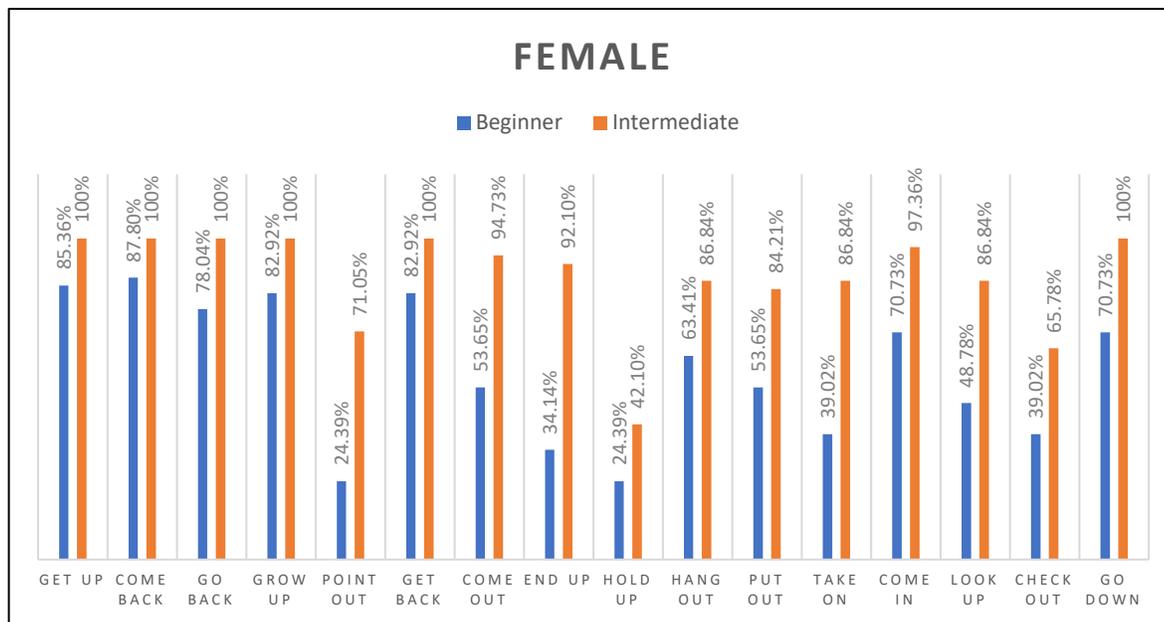
The chart in Figure 4.15 shows the results for the female group of learners. As previously found for the males, a better proficiency level meant a better performance in the receptive knowledge test. In fact, the lower intermediate level participants scored 100% on the PVs 'get up', 'come back', 'go back', 'grow up', 'get back', and 'go down' (the same five PVs that elicited the higher correct scores among the males); the beginner females also followed this pattern, by obtaining their best scores for these PVs out of the 16 given items. Furthermore, similarities were found for the negative pattern, as revealed for 'hold up', which elicited only 24.39% of the correct answers among the female beginners and 42.10% of the correct answers among the female lower intermediates, respectively, generating the worst

scores for each group. As for the males, 'end up' and 'point out' were again the two PVs for which the level of knowledge grew with increasing proficiency of the students. In conclusion, for the receptive knowledge task, gender did not result in many differences in the findings, even if females performed slightly better at both levels of proficiency.

Table 4.40

Independent-Samples Mann-Whitney U Test between male and female participants (Receptive task).

Total N	195
Male Median	12.00
Female Median	13.00
Mann-Whitney U	4252.5
Wilcoxon W	11038.5
Standardized Test Statistic *Z*	-.857
Asymptotic Sig. (2-sided test)	.391

A Mann-Whitney U test was run to determine if there were differences in the score between males and females in Table 4.41. Distributions of the scores for male and female were similar, as assessed by visual inspection, see Appendix I, part 2. The score was not statistically significantly different between male (Mdn = 12.00) and female (Mdn = 13.00), U = 4252.5, z = --.857, p = .391, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient (r = .034) indicated a low effect size suggesting that the differences in scores were not statistically significant, and that there is no significant relationship between gender variable and the students' overall performance on the PVs tested. Result of the test are shown in Table 4.42 below.

Table 4.41

Relationship between receptive knowledge and gender.

Correlations		Gender	Total
Gender	**Pearson Correlation**	1	.034**
	Sig. (2-tailed)		.634
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.3.4 Beginner vs. Lower intermediate

Figure 4.16 presents the percentage of correct answers for all PVs included in the receptive test broken down according to proficiency level. The results reveal that the learners with the higher proficiency level obtained better scores than the beginners for all items in the receptive test. All lower intermediates got the correct answer 100% with the PVs 'come back', 'go back', 'grow up' and 'get back'; the next highest scoring PVs were: 'get up' and 'go down' (98.96%); 'come in' (96.90%); 'come out' (92.78%); 'hang out' (87.62%); 'put out' (84.53%); 'end up' (83.50%); 'look up' (82.47%); 'take on' (81.44%); 'point out' (67.01%) and 'check out' (65.97%). 'Hold up' elicited the lowest percentage of correct answers among lower intermediates (30.92%) and is the only PV that scored under 50% among this cohort. The beginners' lowest scores, meanwhile, were associated with 'point out' (22.44%) and 'hold up' (24.48%). Among the beginners and lower intermediates there is overlap between the seven "top-performing" PVs, namely: 'get up', 'come back', 'go back', 'grow up', 'get back', 'come in' and 'go down'.

Figure 4.16

Beginners and lower intermediate results in the receptive task.
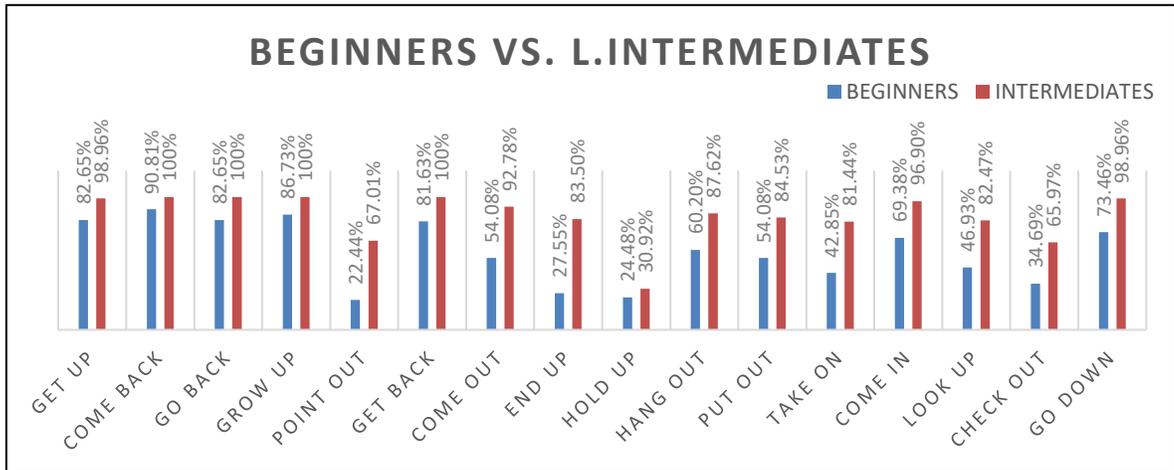
Further analysis was conducted to determine whether there is a significant difference in the score across different levels of language proficiency (beginner and lower intermediate). The results are presented in Table 4.43 below.

Table 4.42

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants (Receptive task).

Beginner Median	10.00
Lower Intermediate Median	13.00
Mann-Whitney U	674.5
Wilcoxon W	5525.5
Standardized Test Statistic *Z*	-10.416
Asymptotic Sig. (2-sided test)	.0005
Beginner Mean Rank	56.38
Lower Intermediate Mean Rank	140.05

A Mann-Whitney U test was run to determine if there were differences in the score between beginner and lower intermediate participants in Table 4.43. Distributions of the scores for

beginners and lower intermediates were not similar, as assessed by visual inspection, see

Appendix I, part 2. The scores for lower intermediate (mean rank = 140.05) were statistically

significantly higher than for beginner (mean rank = 56.38), $U = 674.5$, $z = -10.416$, $p = .005$,

using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson

correlation coefficient ($r = .710$) indicated a large effect size (see Table 4.44).

Table 4.43

Relationship between receptive knowledge and proficiency level.

		TOTAL	**Proficiency level**
TOTAL	**Pearson Correlation**	1	.710**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.3.5 Literal vs. figurative

This section will analyze the results to describe the use of PVs in relation to two main

semantic categories: literal and figurative PVs.

Table 4.44

Descriptive Statistics for literal and figurative PVs.

	N	Mean	Std. Deviation	Median	Minimum	Maximum	Sum
LITERAL	195	6.35	1.690	7.00	2.00	8.00	1238
FIGURTAIVE	195	5.17	1.698	5.00	1.00	8.00	1008

Table 4.45 shows that the participants performed better on literal PVs ($M = 6.35$, SD

$= 1.69$, Mdn $= 7.00$) than on figurative ($M = 5.17$, $SD = 1.7$, Mdn $= 5.00$) PVs. The results

suggest that students have a better knowledge and use of literal PVs than figurative ones.

Further analysis was conducted to determine whether there is any significant difference between the use of literal and figurative PVs. The results are presented in Table 4.46.

A Mann-Whitney U test was run to determine if there were differences in the use between literal and figurative PVs. Distributions of the scores for literal and figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 2. The score was statistically significantly different between literal PVs (Mdn = 6.35) and figurative ones (Mdn = 5.17), $U = 11412.00$, $z = --6.936$, $p = .005$, using an exact sampling distribution for U (Dineen and Blakesley 1973).

Table 4.45

Independent-Samples Mann-Whitney U Test between literal and figurative PVs.

Mann-Whitney U	11412.00
Wilcoxon W	30522.00
Standardized Test Statistic *Z*	-6.936
Asymptotic Sig. (2-sided test)	.0005

4.3.3.6 Literal vs. figurative and language proficiency

Figures 4.17 and 4.18 display the results for literal and figurative PVs, respectively, for the two proficiency levels in the receptive task.

Figure 4.17

Beginner and lower intermediate results in the use of literal PVs (receptive task).
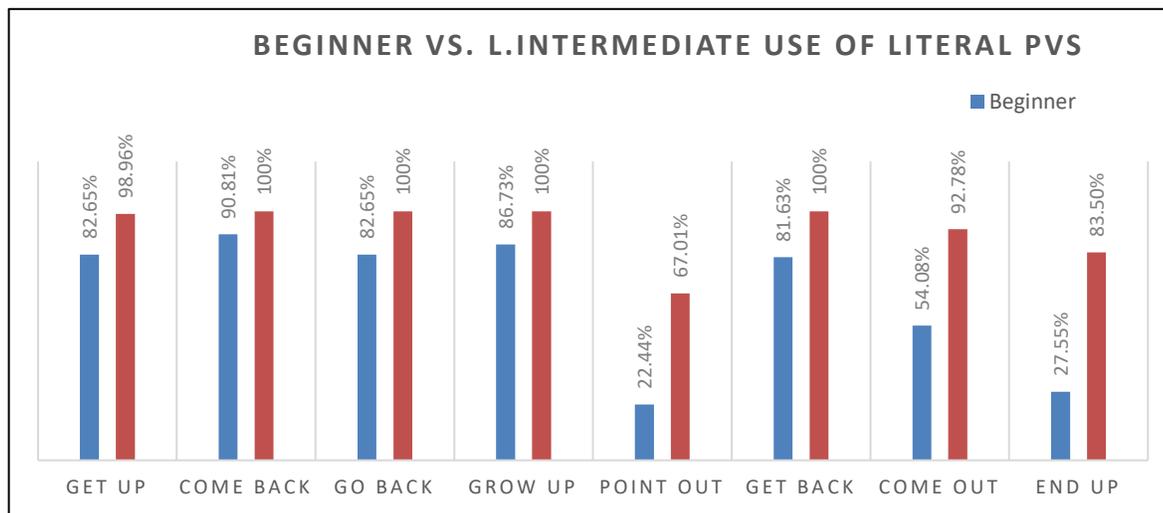
Figure 4.17 confirms that the lower intermediate level participants always had a higher score than the beginners, even if the beginners also demonstrated a good receptive knowledge of the literal PVs, performing well by giving correct answers more than 50% of the time for 6 out of 8 items. The exceptions here are the PVs 'end up' and 'point out'. 'Point out' was the only item that had a significantly lower score than other PVs for the participants in both groups, with 22.44% of beginners and 67.01% of lower intermediates getting the right answer (the worst performance for any of the literal PVs). 'come back' was the literal PV that had the highest score for most of the participants (100% for lower intermediates and 90.81% for beginners). It is important to note that the lower intermediates got the same score 100% for 'go back', 'grow up' and 'get back'.

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Figure 4.18

Beginners vs. lower intermediate use of figurative PVs (receptive task).
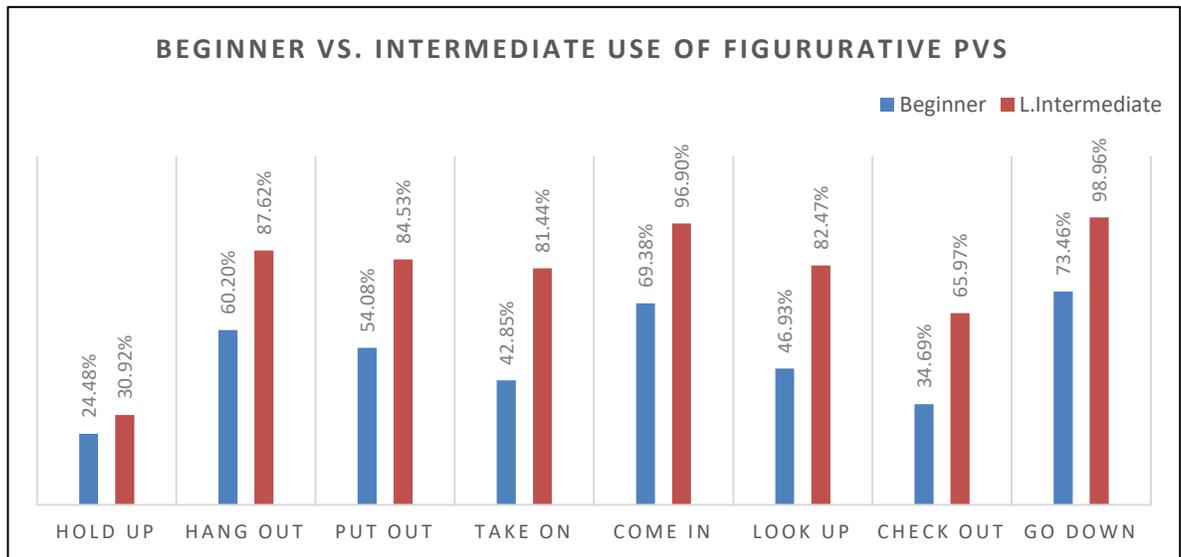
Figure 4.18 shows some variation regarding the participants' receptive knowledge of the figurative PVs. The score continued to be lower for the beginners than the lower intermediates; however, the percentages of correct answers for the beginners decreased dramatically to, on average, 50%. 'go down' received the highest score from both groups (98.96% for lower intermediates and 73.46% for beginners), even though it was used as a PV with a figurative meaning, while 'hold up' seems to be the PV that caused most difficulties for participants in both groups (30.92% for lower intermediates and 24.48% for beginners).

An analysis was carried out to investigate whether there is a difference in the score of literal PVs among students of different language proficiency levels. The results of the analysis are presented below.

Table 4.46

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants in the use of literal PVs. (Receptive task).

Total N	159
Beginner Median	5.00
Lower Intermediate Median	8.00
Beginner Mean Rank	61.83
Lower Intermediate Mean Rank	134.55
Mann-Whitney U	1208.00
Wilcoxon W	6059.00
Standardized Test Statistic Z	-9.256
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score of literal PVs between beginner and lower intermediate students. Distributions of the scores for literal PVs were not similar, as assessed by visual inspection, see Appendix I, part 2. The scores for lower intermediate participants (mean rank = 134.55) were statistically significantly higher than for beginner participants (mean rank = 61.83), $U = 1208.00$, $z = -9.256$, $p = .005$, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient ($r = .634$) indicated a large effect size (see Table 4.48). Thus, this implies that students in the two different groups differ in their use of literal PVs.

Table 4.47

Relationship between Literal PVs and proficiency level.

		Proficiency level	Literal PVs
Proficiency level	**Pearson Correlation**	1	.634**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

Following this, an analysis was carried out to examine whether there is also a difference in the score for figurative PVs between students in the two different groups; the results are presented below.

Table 4.48

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants in the use of figurative PVs. (Receptive task).

Total N	195
Beginner Median	4.00
Lower Intermediate Median	6.00
Beginner Mean Rank	60.52
Lower Intermediate Mean Rank	135.87
Mann-Whitney U	1079.50
Wilcoxon W	5930.50
Standardized Test Statistic *Z*	-9.491
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score of figurative PVs between beginner and lower intermediate students. Distributions of the scores for figurative PVs were not similar, as assessed by visual inspection, see Appendix I, part 2. The scores for lower intermediate participants (mean rank = 135.87) were statistically significantly higher than for beginner participants (mean rank = 60.52), U = 1079.50, z = -9.491, p = .005, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient (r = .658) indicated a large effect size (see Table 4.50). This implies that high proficiency students may have a better command of figurative PVs than the beginners. In other words, students of different proficiency levels tend to show different levels of understanding with respect to figurative PVs.

Table 4.49

Relationship between figurative PVs and proficiency level.

		Proficiency level	Figurative
Proficiency level	**Pearson Correlation**	1	.658**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

In brief, both productive and the receptive findings reveal that learners in the higher proficiency group not only show a better use of PVs test as a whole but also demonstrate a better use of both literal and figurative PVs.

4.3.3.7 Literal vs. figurative and gender

For the literal PVs, the first 8 items in Figure 4.19, females had the higher percentage of correct answers with the PV 'come back' (93.67%) followed by 'get up' (92.40%), 'grow up' and 'get back' (91.13%); 'go back' (88.60%); 'come out' (73.41%) 'end up' (62.02%) and 'point out' (46.83%). Also, among the males, the higher score was obtained with the PV 'come back' (96.55) followed by 'grow up' (94.82%); 'go back' (93.10%); 'get back' (90.51%); 'get up' (89.65%); 'come out' (73.27%); 'end up' (50.86%) and 'point out' (43.10%). This shows that 'come out', 'end up' and 'point out', in that order, are associated with the worst performances. Figure 4.19 shows that females performed slightly better than males with 'get up', 'point out', 'get back', 'come out' and 'end up' while males performed better than females with 'come back', 'go back' and 'grow up'.

There is variation in the receptive use of figurative PVs however, which can be summarized as follows: In three cases, the females always got higher scores: 'hold up', 'come in' and 'look up'. In one case, 'go down, the males performed better at both proficiency levels (beginners and lower intermediates). For the four remaining PVs, the outcomes were mixed based on gender. The analysis results help us to conclude that, independently of proficiency, females performed slightly better than males. This finding is more evident in the scores for the literal PVs than in the scores for the figurative PVs. This is demonstrated in the chart 4.19, which is based only on gender distinctions.

Figure 4.19

Literal and figurative PVs use by Male and Female participants (receptive task).
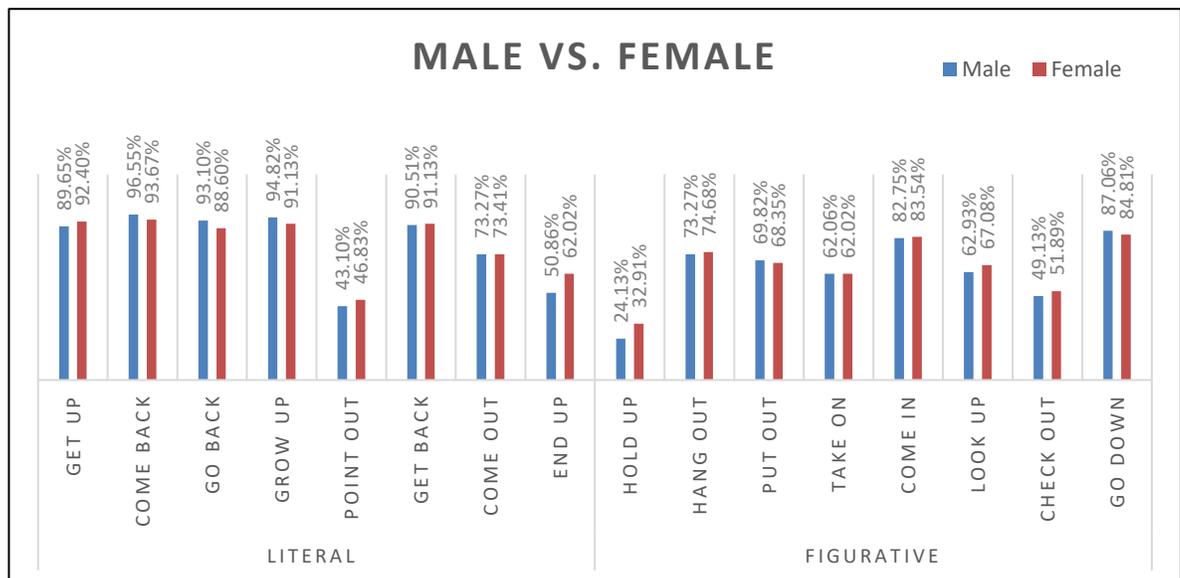
The next statistical analysis was conducted to investigate whether there is a difference in the score of literal PVs among male and female students. The results of the analysis are presented below.

Table 4.50

Independent-Samples Mann-Whitney U Test between male and female students with literal PVs (receptive task).

Total N	195
Male Median	7.00
Female Median	7.00
Mann-Whitney U	4329.00
Wilcoxon W	11115.00
Standardized Test Statistic Z	-.673
Asymptotic Sig. (2-sided test)	.501

A Mann-Whitney U test was run to determine if there were differences in the score of literal PVs between male and female students. Distributions of the scores for literal PVs were similar, as assessed by visual inspection, see Appendix I, part 2. The score was not statistically significantly different between male (Mdn = 7.00) and female (Mdn = 7.00), U = 4329.00, z = -.673, p = .501, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient (r = .021) indicated a low effect size (see Table 4.52).

Table 4.51

Relationship between literal PVs and Gender.

		Gender	Literal
Gender	Pearson Correlation	1	.021**
	Sig. (2-tailed)		.767
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

Following this, a Mann-Whitney U test was carried out to check whether there is a difference in the score of figurative PVs between gender. The results of this analysis are presented below in Table 4.53.

Table 4.52

Independent-Samples Mann-Whitney U Test between male and female students with figurative PVs (receptive task).

Total N	195
Male Median	5.00
Female Median	5.00
Mann-Whitney U	4334.50
Wilcoxon W	11120.50
Standardized Test Statistic *Z*	-.651
Asymptotic Sig. (2-sided test)	.515

A Mann-Whitney U test was run to determine if there were differences in the score of figurative PVs between male and female students. Distributions of the scores for figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 2. The score was not statistically significantly different between male (Mdn = 5.00) and female (Mdn = 5.00), *U* = 4334.50, *z* = -.651, *p* = .515, using an exact sampling distribution for *U* (Dineen and Blakesley 1973). The Pearson correlation coefficient (*r* = .041) indicated a low effect size (see Table 4. 54).

Table 4.53

Relationship between figurative PVs and Gender.

		Gender	FIGURTAIVE
Gender	**Pearson Correlation**	1	.041**
	Sig. (2-tailed)		.570
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.4 Avoidance behavior

4.3.4.1 Overall results

The results regarding Saudi learners' avoidance behaviors addressed in the third part of the test are discussed here as they relate to the main variables under investigation: gender, learners' level of proficiency, and type of PV.

The responses to each of the 32 multiple choice questions were analyzed to assess the options chosen by participants, that is, to assess their ability to select a PV to complete a target sentence, for the purpose of answering the research question about the tendency to adopt avoidance strategies. For more details, see Section 3.5.5.

The frequency distributions and percentages were calculated for each item in the multiple-choice test. Table 4.55 shows the type of the PV and the descriptive statistics for all the PVs, including the number of times and percentage at which each PV was chosen by participants, along with the means and standard deviations for each of the PVs included in the test (16 literal and 16 figurative).

Table 4.54

Descriptive statistics for all the PVs in the Avoidance task.

Type of PV	PVs	PV		One word		Wrong	
		N	%	N	%	N	%
L	get in	172	88.2%	2	1.0%	21	10.8
L	take out	62	31.8%	108	55.4%	25	12.8%
L	get out	169	86.7%	19	9.7%	7	3.6%
L	go down	20	10.3%	170	87.2%	5	2.6%
L	get up	132	67.7%	36	18.5%	27	13.8%
L	come back	157	80.5%	29	14.9%	9	4.6%
L	go back	132	67.7%	58	29.7%	5	2.6%
L	grow up	138	70.8%	23	11.8%	34	17.4%
L	point out	55	28.2%	98	50.3%	42	21.5%
L	pick up	91	46.7%	90	46.2%	14	7.2%
L	wake up	165	84.6%	13	6.7%	17	8.7%
L	take up	31	15.9%	134	68.7%	30	15.4%
L	go out	157	80.5%	26	13.3%	12	6.2%
L	get back	115	59.0%	69	35.4%	11	5.6%
L	come out	142	72.8%	27	13.8%	26	13.3%
L	end up	88	45.1%	78	40.0%	29	14.9%
F	set up	51	26.2%	123	63.1%	21	10.8%
F	go on	60	30.8%	132	67.7%	3	1.5%
F	give up	33	16.9%	140	71.8%	22	11.3%
F	turn out	106	54.4%	70	35.9%	19	9.7%
F	hold up	68	34.9%	87	44.6%	40	20.5%
F	hang out	60	30.8%	121	62.1%	14	7.2%
F	put out	70	35.9%	98	50.3%	27	13.8%
F	make up	152	77.9%	29	14.9%	14	7.2%
F	find out	106	54.4%	64	32.8%	25	12.8%
F	put in	65	33.3%	81	41.5%	49	25.1%
F	come up	125	64.1%	32	16.4%	38	19.5%
F	take on	112	57.4%	41	21.0%	42	21.5%
F	come in	134	68.7%	36	18.5%	25	12.8%
F	look up	96	49.2%	86	44.1%	13	6.7%
F	check out	168	86.2%	18	9.2%	9	4.6%
F	go down	68	34.9%	105	53.8%	22	11.3%

A total of 195 students completed the multiple-choice test. The total number of possible answers was 6,240 (195 students x 32 items): 3,300 PVs were chosen, that is 53% of the total score, and 2,243 answers 36% were made up of a (correct) one word verb.

Table 4.56 provides more detailed information, listing the choices of each group of students (male vs. female and beginner vs. lower intermediate) between the phrasal verbs (PVs) and the single-word verbs. The first 16 items in the PV column are literal, while the 16 remaining are figurative; 'go down' was included twice, once per group. The Table shows only the correct answers, whether they are PVs or one-word verbs, analyzing the number of students who avoided the PV structure. For example, in the male beginner's column, the PV 'come back' was chosen by 44 students 77.2% out of a total of 57, while 8 students 14% avoided the PV structure, selecting the corresponding one-word verb.

Table 4.55

The results of all the participants on the Avoidance test.

	PVs	Avoidance															
		Male								Female							
		Beginner				Lower Intermediate				Beginner				Lower Intermediate			
		PV		VERB		PV		VERB		PV		VERB		PV		VERB	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1	get in	44	77.2	0	0	56	94.9	1	1.7	34	82.9	1	2.4	38	100	0	0
2	take out	19	33.3	29	50.9	18	30.5	35	59.3	13	31.7	21	51.2	12	31.6	23	60.5
3	get out	45	78.9	8	14.0	56	94.9	2	3.4	32	78.0	7	17.1	36	94.7	2	5.3
4	go down	3	5.3	51	89.5	6	10.2	53	89.8	5	12.2	34	82.9	6	15.8	32	84.2
5	get up	26	45.6	16	28.1	54	91.5	3	5.1	19	46.3	13	31.7	33	86.8	4	10.5
6	come back	44	77.2	8	14.0	52	88.1	7	11.9	29	70.7	8	19.5	32	84.2	6	15.8
7	go back	42	73.7	12	21.1	36	61.0	23	39.0	31	75.6	8	19.5	23	60.5	15	39.5
8	grow up	30	52.6	11	19.3	53	89.8	1	1.7	18	43.9	11	26.8	37	97.4	0	0
9	point out	12	21.1	21	36.8	18	30.5	37	62.7	11	26.8	16	39.0	14	36.8	24	63.2
10	pick up	14	24.6	37	64.9	41	69.5	18	30.5	9	22.0	24	58.5	27	71.1	11	28.9
11	wake up	44	77.2	4	7.0	56	94.9	2	3.4	30	73.2	5	12.2	35	92.1	2	5.3

		Avoidance															
		Male								Female							
		Beginner				Lower Intermediate				Beginner				Lower Intermediate			
		PV		VERB		PV		VERB		PV		VERB		PV		VERB	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
12	take up	13	22.8	28	49.1	3	5.1	53	89.8	10	24.4	21	51.2	5	13.2	32	84.2
13	go out	40	70.2	11	19.3	53	89.8	4	6.8	28	68.3	9	22.0	36	94.7	2	5.3
14	get back	25	43.9	27	47.4	42	71.2	17	28.8	17	41.5	18	43.9	31	81.6	7	18.4
15	come out	31	54.4	14	24.6	54	91.5	3	5.1	21	51.2	9	22.0	36	94.7	1	2.6
16	end up	16	28.1	25	43.9	33	55.9	25	42.4	13	31.7	17	41.5	26	68.4	11	28.9
17	set up	17	29.8	27	47.4	11	18.6	47	79.7	15	36.6	19	46.3	8	21.1	30	78.9
18	go on	11	19.3	44	77.2	25	42.4	34	57.6	9	22.0	31	75.6	15	39.5	23	60.5
19	give up	12	21.1	37	64.9	5	8.5	50	84.7	8	19.5	25	61.0	8	21.1	28	73.7
20	turn out	17	29.8	28	49.1	40	67.8	19	32.2	19	46.3	16	39.0	30	78.9	7	18.4
21	hold up	12	21.1	24	42.1	23	39.0	32	54.2	12	29.3	16	39.0	21	55.3	15	39.5
22	hang out	11	19.3	38	66.7	22	37.3	36	61.0	11	26.8	25	61.0	16	42.1	22	57.9
23	put out	16	28.1	24	42.1	27	45.8	31	52.5	11	26.8	22	53.7	16	42.1	21	55.3
24	make up	32	56.1	14	24.6	55	93.2	3	5.1	28	68.3	11	26.8	37	97.4	1	2.6
25	find out	24	42.1	18	31.6	37	62.7	22	37.3	20	48.8	11	26.8	25	65.8	13	34.2
26	put in	14	24.6	19	33.3	20	33.9	32	54.2	15	36.6	10	24.4	16	42.1	20	52.6
27	come up	22	38.6	13	22.8	52	88.1	5	8.5	16	39.0	11	26.8	35	92.1	3	7.9
28	take on	25	43.9	11	19.3	41	69.5	13	22.0	19	46.3	9	22.0	27	71.1	8	21.1
29	come in	33	57.9	15	26.3	47	79.7	6	10.2	21	51.2	13	31.7	33	86.8	2	5.3
30	look up	15	26.3	35	61.4	39	66.1	17	28.8	13	31.7	26	63.4	29	76.3	8	21.1
31	check out	47	82.5	7	12.3	55	93.2	4	6.8	30	73.2	5	12.2	36	94.7	2	5.3
32	go down	21	36.8	27	47.4	21	35.6	34	57.6	10	24.4	23	56.1	16	42.1	21	55.3

With regard to the control group results, they performed better than Saudi participants. Their results are presented in Table 4.57 The total number of possible answers was 384 (12 Native speakers x 32 items): 326 PVs were chosen, that is 84.89% of the total score, and 58 answers 15% were made up of a (correct) one word verb.

Table 4.56

Descriptive statistics of the control group's Avoidance test scores

Group	N	Phrasal Verb Type	Total Number of PVs	Total Number of PVs Chosen	One-Word Verbs Chosen Mistakes	Mistakes
Native speaker	12	In total	384	326	58	0
		Literal	192	169		-
		Figurative	192	157		-

A Mann-Whitney U test was run to determine if there were differences in the score between native speakers and Saudi learners in choosing PVs over their equivalent one-word verb. The score was statistically significantly different between native speakers (Mdn = 27.00) and Saudi learners (Mdn = 17.00), $U = 39.00$, $z = -5.65$, $p = .001$.

4.3.4.2 Male vs. female

As shown in the chart presented in Figure 4.20, the blue line represents the percentage of participants that chose the PV, while the red line represents the participants who chose the one-word equivalent verb. The results for all 32 PVs included in the avoidance task are depicted.

Among the male beginner group, the most avoided PV was 'go down', in its literal meaning, with 89.5% of students choosing its equivalent single-word verb. At the same time, some students demonstrated knowledge of some PVs, both literal and figurative, by not avoiding them in the test: 'check out' was the PV chosen (82.5%) of the time by male beginners to complete the sentence in question. This was followed in frequency by 'get out' (78.9%), 'come back' and 'get in' and 'wake up' (77.2%); 'go back' (73.7%); 'go out' (70.2%); 'come in' (57.9%); 'make up' (56.1%); 'come out' (54.4%) and 'grow up' (52.6%).

The rest of the items, a considerably higher number (21), were chosen by less than 50% of the male beginner students. In other words, the students in this group appeared to have minimal knowledge of most PVs, which resulted in the employment of avoidance. Another interesting point to consider is the category in which the PVs belong. Out of the 10 items avoided with the least frequency, 7 were literal; this finding shows that for the male beginner group, the avoidance behavior was stronger with figurative PVs. The PV that the beginner males noticeably avoided was 'go down', with only 4.7% of students answering with the correct PV, and 90.4% of students choosing the single-word verb with an equivalent meaning.

Figure 4.20

Male beginners' choices of PV or one-word verb.
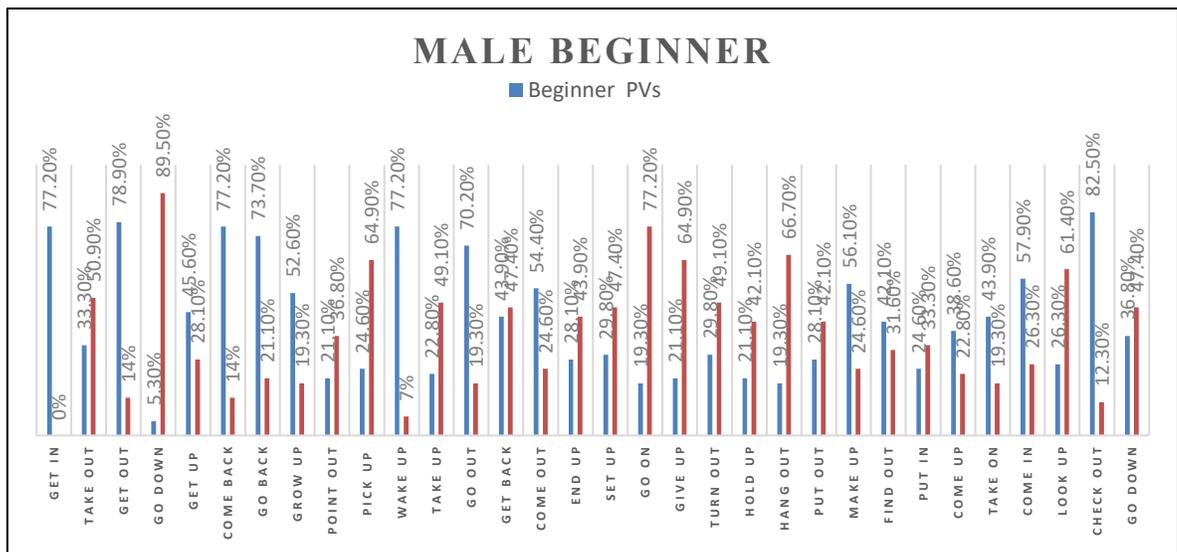
The chart shown in Figure 4.21 displays the avoidance task results among the male lower intermediates. The most relevant finding for this group is that their knowledge and use of the PVs was proven in significant numbers. In 20 out of 32 sentences each containing a missing PV, the majority >50% of the male lower intermediates answered with the expected

correct PV: 'wake up'; 'get in' and 'get out' (94.9%); 'check out' (93.2%); 'get up' and 'come out' (91.5%), 'grow up' and 'go out' (89.8%), 'come back' and 'come up' (88.1%); 'come in' (79.7%); 'get back' (71.2%); 'pick up' (69.5%); 'take on' (69.5%); 'turn out' (67.8%); 'look up' (66.1%); 'find out' (62.7%); 'go back' (61%) and 'end up' (55.9%). Among this group of frequently selected PVs, 12 had literal meanings and 8 figurative. The PVs that lower intermediate male students employed avoidance strategies with most often were 'take up', with only 5.1% of students answering with the PV and 89.8% of students choosing the correspondent single-word verb; 'give up', with 8.5% of students choosing the PV and 84.7% of students choosing its single-word equivalent verb; and 'go down', with 10.2% selecting the PV and 89.8% selecting its single-word verb equivalent which makes it the most avoided PV.

Figure 4.21

Male lower intermediates' choices of PV or one-word verb.
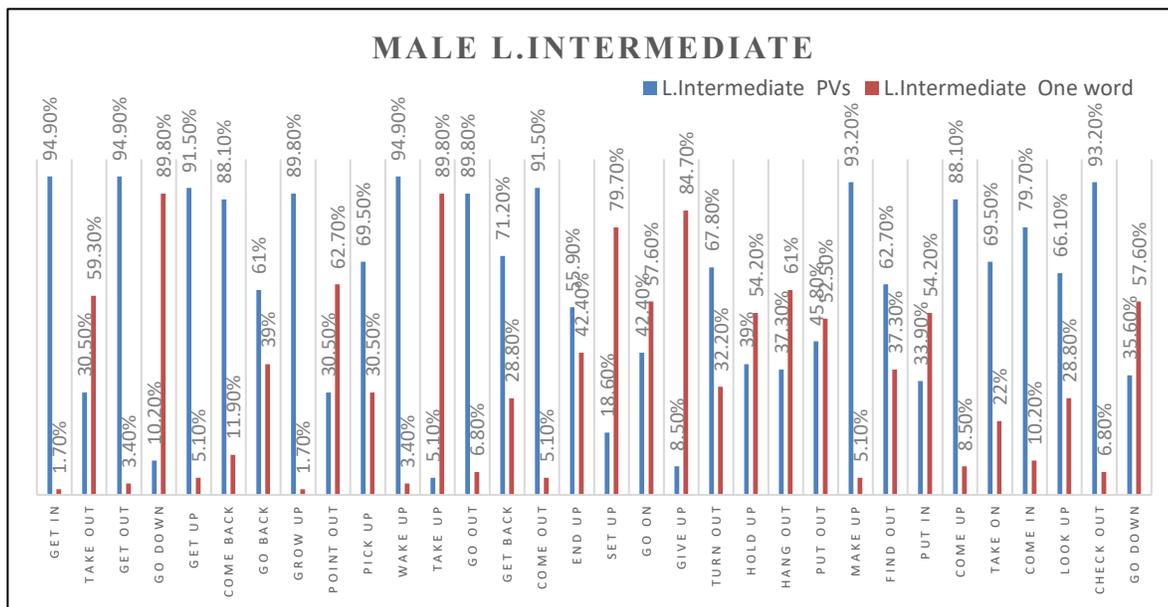
Turning to females, the chart presented in Figure 4.22 displays the female beginners' tendency to avoid certain items from the test. As with the graph for their male counterparts, here the graph shows that from the pool of 32 PVs, literal and figurative, 10 items were selected by at least half of the students (≥ 50%); 'get in' (82.9%); 'get out' (78%); 'go back' (75.6%); 'wake up' and 'check out' (73.2%); 'come back' (70.7%); 'go out' and 'make up' (68.3%); (65.9%); 'come out' and 'come in' (51.2%). This group of students employed avoidance to a noticeable degree, in many cases choosing the equivalent single-word verb, for the remaining 22 PVs. Of the 9 less avoided PVs, 7 were literal, and 2 were figurative.

Figure 4.22

Female beginners' choices of PV or one-word verb.
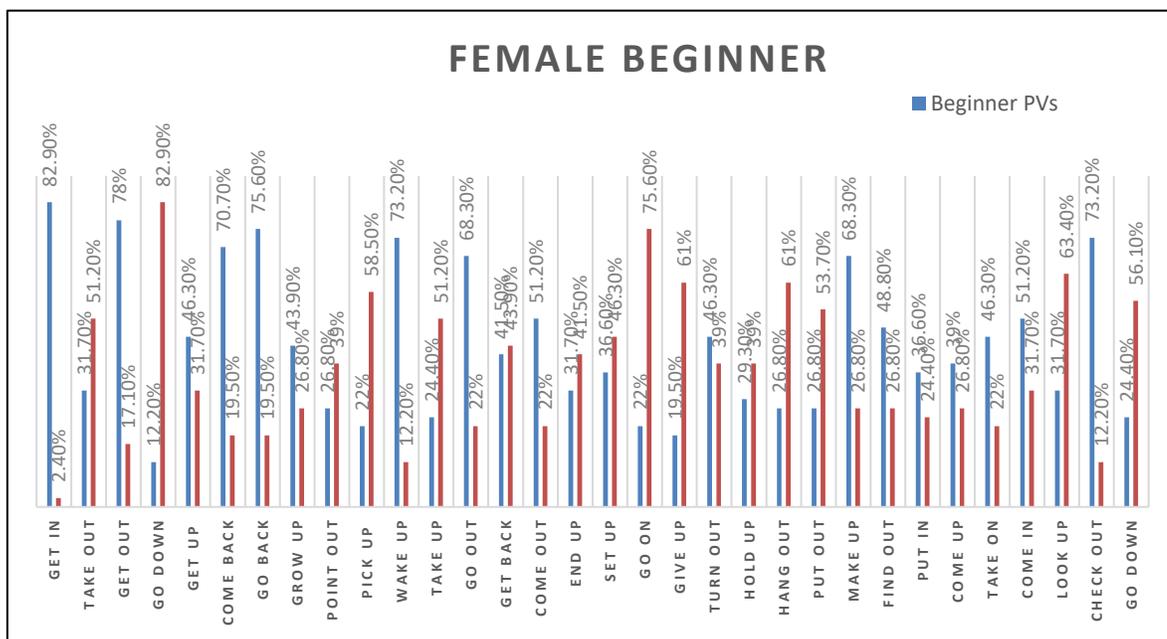
These results can be compared with those obtained from the male beginners, for whom 7 literal and 3 figurative PVs were among those on which they performed best. Furthermore, 'go down' again was associated with a high rate of avoidance 82.9% for beginner females as well as for beginner males.

Figure 4.23

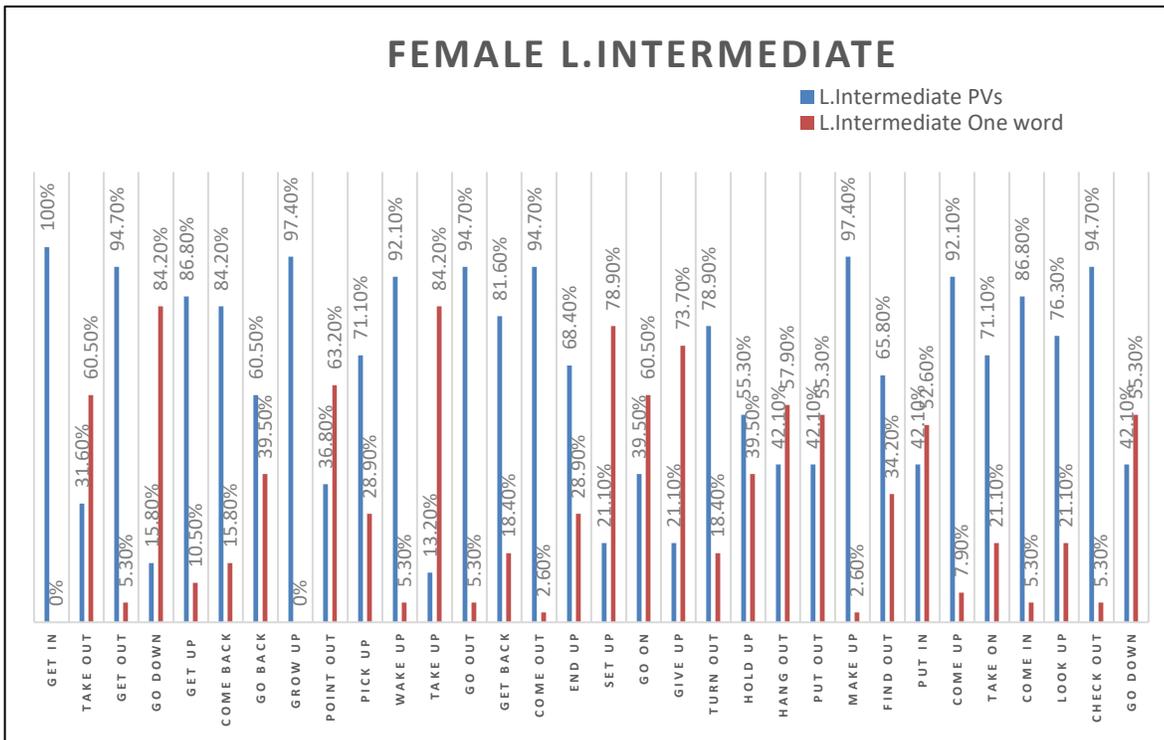*Female lower intermediates' choices of PV or one-word verb.*

Figure 4.23 presents the results for the female lower intermediates on the avoidance task. A total of 21 PVs were chosen in the test by more than half (> 50%) of the students of this group, indicating their preference for these items: 'get in' (100%); 'grow up' and 'make up' (97.4%); 'come out', 'get out', 'check out', 'go out', and (94.7%); 'come up', and 'wake up' (92.1%); 'get up' and 'come in' (86.8%); 'come back' (84.2%); 'get back' (18.6%); 'turn out' (78.9%); 'look up' (76.3%); 'pick up' and 'take on' (71.1%); 'end up' (68.4%); 'find out' (65.8%); 'go back' (60.5%); and 'hold up' (55.3%). As these numbers demonstrate, males and females showed a similar preference for PVs at the lower intermediate level since they chose at a high number of PVs (20 and 21, respectively), which were also the same as they were for the beginners, except for 'hold up' (which received a score of (39%) among males). Many PVs were chosen by females at slightly higher percentages than they were by males, however, showing a stronger knowledge of these items by the former. The PVs selected least often in the test, which produced the higher percentages for avoidance, were

'go down' and 'take up' and 'take up' (84.2%). In general, the females demonstrated a better outcome than the males if considering the percentages at which the PVs were selected in the test: 'take up' was selected by 5.1% of males vs. 13.2% of females; 'go down' was selected by 10.2% of males vs. 15.8% of females.

Further analysis was carried out to confirm whether there is any significant difference between males and females in choosing PVs over their equivalent one-word verb. Table 4.58 below describes the test score broken down according to students' gender.

Table 4.57

Independent-Samples Mann-Whitney U Test between male and female participants (Avoidance task).

Total N	195
Male Median	17.00
Female Median	18.00
Mann-Whitney U	4987.5
Wilcoxon W	8147.500
Standardized Test Statistic Z	1.050
Asymptotic Sig. (2-sided test)	.294

A Mann-Whitney U test was run to determine if there were differences in the score between males and females in choosing PVs over their equivalent one-word verb in Table 4.58. Distributions of the scores for male and female were similar, as assessed by visual inspection, see Appendix I, part 3. The score was not statistically significantly different between male (Mdn = 17.00) and female (Mdn = 18.00), $U = 4987.5$, $z = 1.050$, $p = .294$, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient ($r = .073$) indicated a low effect size suggesting that the differences in scores were not

statistically significant and that there is no significant relationship between gender variable and the students' overall performance on the PVs tested (see Table 4.59).

Table 4.58

Relationship between Avoidance and gender.

		Avoidance	GENDER
Avoidance	**Pearson Correlation**	1	.073**
	Sig. (2-tailed)		.300
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

The findings of the analysis of gender influence on avoidance are that this variable did not significantly affect the students' outcomes. Both male and female students had similar preferences for certain structures and that they tended to avoid others, and they were less familiar with items with figurative meanings than those with literal meanings. Despite that, it is also true that, at the lower intermediate level of proficiency, females slightly outperformed the males, achieving a slightly higher percentage than the males with respect to the frequency with which the PVs were selected.

### 4.3.4.3 Beginner vs. Lower intermediate

This section provides an overview of the students' performance on the avoidance task according to their proficiency level. The results for the two groups on the avoidance test are compared to analyze their performance. The charts in Figures 4.25 and 4.26 presents the results for both proficiency levels involved.

Figure 4.24 displays the results of the avoidance test completed by the beginners. The students at this proficiency level avoided using the correct PV in the sentences provided, choosing instead the similar one-word verb, 16 times out of 32, or on exactly half of the items

presented in the test. The cases in which beginners replaced PVs with their equivalent one-word verb (red column) are listed in descending order: 'go down' (literal meaning), the verb most commonly replaced with its one-word equivalent (by 86.7% of students); 'go on' (76.5%); 'hang out' (64.3%); 'give up' (63.3%); 'pick up' and 'look up' (62.2%); 'take out' and 'go down' (figurative meaning) (51%); take up (50%); 'put out' and 'set up' (46.9%); 'get back' (45.9%); 'turn out' (44.9%); 'end up' (42.9%); 'hold up' (40.8%); and 'point out' (37.8%). For these items, the students selected the single-word verb more often than the correct PV. Out of these 16 PVs, 7 were literal and 9 were figurative, making figurative PVs the more avoided type. In other words, beginner students avoided more figurative than literal PVs, avoiding figurative PVs 9/16 times, while PVs with literal meanings were avoided 7/16 times.

**Figure 4.24**

Beginners' PV or one-word verb choice.
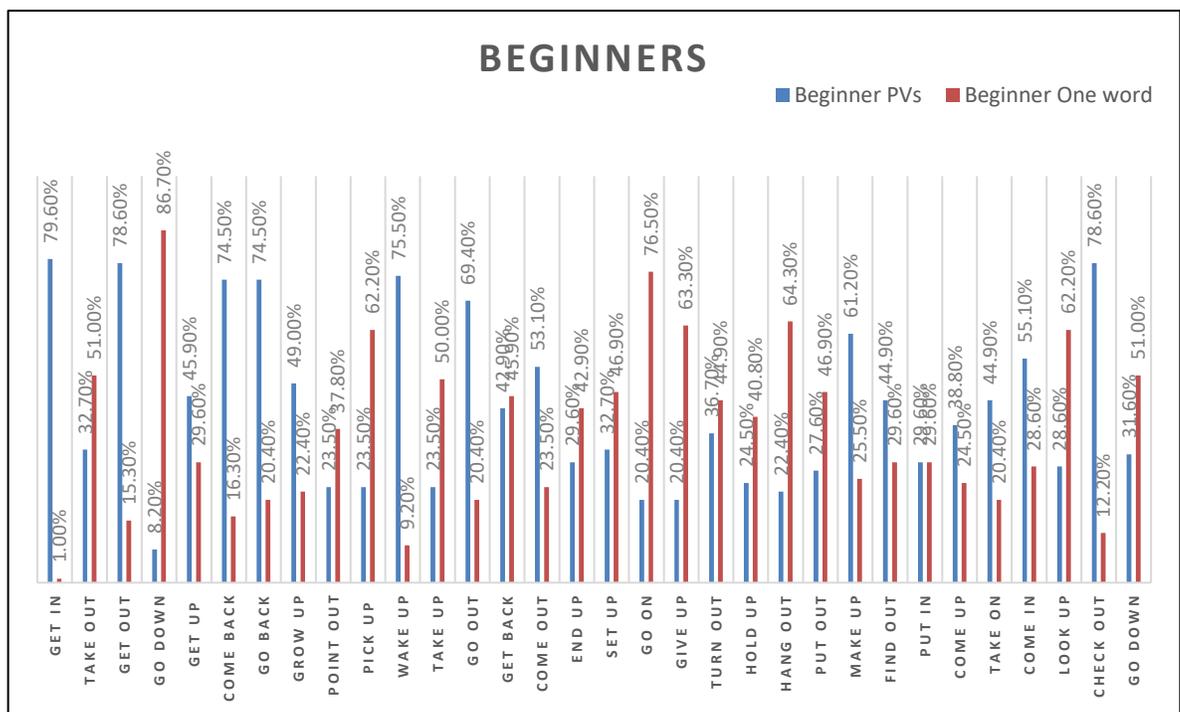
In the same way, the cases in which beginners selected the correct PV in higher percentages (also 16) are in descending order from the most selected item (blue column): 'get in' (79.6%); 'check out' and 'get out' (78.6%); 'wake up', (75.5%); 'come back' and 'go back' (74.5%); 'go out' (69.4%); 'make up' (61.2%); 'come in' (55.1%); 'come out' (53.1%); 'grow up' (49%); 'get up' (45.90%); 'find out' and 'take on' (44.9%); 'come up' (38.8%); and 'turn out' (36.7%). Out of these 16 items, the most selected between literal and figurative were those with literal meanings (9 literal vs. 7 figurative). In other words, beginner students selected more literal than figurative PVs, selecting literal PVs 9/16 times, while selecting figurative for 7/16 PVs. The analysis of this proficiency level shows that the majority of avoided PVs had figurative meanings, while the majority of preferred PVs had literal meanings.

In the case of the lower intermediate level group, the chart in Figure 4.25 describes the percentages of lower intermediates who chose the PVs and those who avoided them by selecting the one-word equivalent verb. The avoidance test completed by the lower intermediates shows that students at this proficiency level avoided use of the correct PV in the sentences given, choosing instead the similar one-word verb, 12 times out of 32. The PVs for which students demonstrated a lower level of understanding, thus choosing a similar single-word verb, were as follows: 'go down' (literal meaning) and 'take up' avoided in 87.6% of cases (see the red column in Figure 4.26); 'give up' (80.4%); 'set up' (79.4%); 'point out' (62.9%); 'hang out' and 'take out' (59.8%); 'go on' (58.8%); 'go down' (figurative meaning) (56.7%); 'put in' and 'put out' (53.6%); and 'hold up' (48.5%). Out of these PVs, 8 have figurative meanings and 4 have literal meanings; in other words, one-word

verbs were substituted for figurative PVs included in the test (8/16) more often than they were for literal PVs (4/16).

Figure 4.25

Lower intermediates' PV or one-word verb choice.
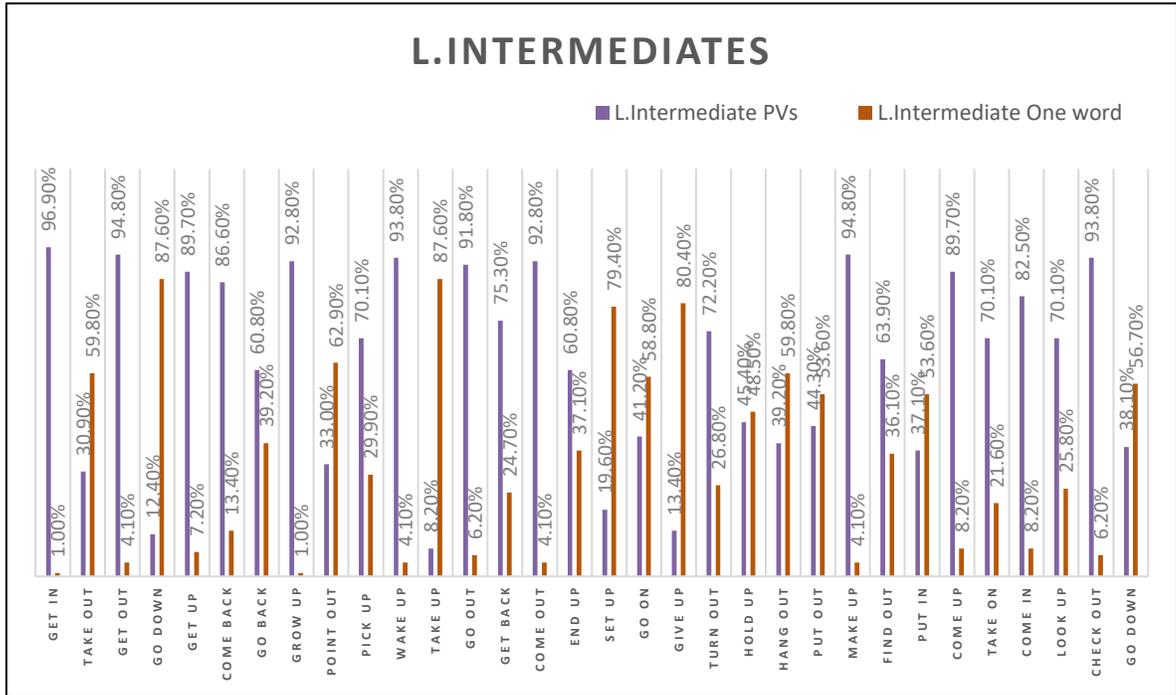
The number of the PVs avoided by lower intermediates and replaced with their similar one-word verb was lower than the number of the correct PVs chosen. This finding demonstrated that at this proficiency level, mastery of PVs improved in comparison to the beginners. In descending order, the 20 PVs with results that demonstrated students' preference for PVs (blue columns) were as follows: 'get in' (96.9%); 'get out' and 'make up' (94.8%); 'wake up' (93.8%); 'check out' (93.8%); 'come out' and 'grow up' (92.8%); 'go out' (91.8%); 'get up' and 'come up' (89.7%); 'come back' (86.6%); 'come in' (82.5%); 'get back' (75.5%); 'turn out' (72.2%); 'take on', 'pick up' and 'look up' (70.1%); 'find out' (63.9%); 'go back' and 'end up' (60.8%). Out of these 20 items, the meanings of 8 are

figurative and of 12, literal, which means that lower intermediate students selected more PV verbs from among the 16 literal PVs in the test than they did from among the 16 figurative PVs in the test. The analysis of the lower intermediates' performance pertaining to PV preference or avoidance demonstrated that at this proficiency level, the majority of PVs avoided were figurative, while the majority of correct PVs selected were literal.

The comparison with the beginners' results also demonstrates that as the proficiency level increases, so does preference for PVs (16 correct PVs for beginners vs. 20 correct PVs for lower intermediates) and consequently, the use of PVs improved at the lower intermediate level compared to the beginner proficiency level. A positive pattern was revealed for the avoidance tendencies also, as avoidance decreased with higher proficiency (16 avoided PVs for beginners vs. 12 avoided PVs for lower intermediates).

Further analysis was conducted to determine whether there is any significant difference in the score across different levels of language proficiency (beginner and lower intermediate) in choosing PVs over their equivalent one-word verb. The results are presented in Table 4.60 and Table 4.61 below.

Table 4.59

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants (Avoidance task).

Total N	195
Beginner Median	13.00
Lower Intermediate Median	20.00
Mann-Whitney U	1307.5
Wilcoxon W	6158.5
Standardized Test Statistic Z	-8.763
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score between beginner and lower intermediate participants in choosing PVs over their equivalent one-word verb in Table 4.60 Distributions of the scores for beginners and lower intermediates were similar, as assessed by visual inspection, see Appendix I, part 3. The scores for lower intermediate (Mdn = 20.00) were statistically significantly higher than for beginner (Mdn= 13.00), $U = 1307.5$, $z = -8.763$, $p = .005$, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation coefficient ($r = .635$) indicated a large effect size (see Table 4.61) suggesting that there is a strong relationship between the proficiency level and students' preference for PVs. The result shows that the correlation is positive, which implies that the higher the level of students' proficiency, the better would be their performance.

Table 4.60

Relationship between Avoidance and proficiency level.

		Avoidance	Proficiency level
Avoidance	**Pearson Correlation**	1	.635**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

The following section will focus in more depth on the role that the (literal or figurative) type of PV plays in the use of avoidance.

4.3.4.4 Literal vs. figurative

As discussed in Chapter 2, many factors influence learners' difficulties in mastering PVs and their choice to avoid using them; the level of semantic transparency of the construction is one of those factors. In this section, the PV type variable is analyzed to describe the use of PVs in relation to two main semantic categories—literal and figurative—

and to describe the influence of semantic transparency on students' choices during the avoidance test.

Table 4.61

Descriptive statistics of the participants' test scores on literal and figurative PVs.

LITERAL						
N	Mean	Std. Deviation	Median	Sum	Minimum	Maximum
159	9.36	2.542	9.00	1826.00	4.00	16.00
FIGURATIVE						
N	Mean	Std. Deviation	Median	Sum	Minimum	Maximum
159	7.56	2.845	8.00	1474.00	1.00	15.00

Table 4.62 shows that the participants performed better on literal PVs ($M = 9.36$, $SD = 2.54$ Mdn = 9.00) than on figurative ($M = 7.56$, $SD = 2.84$, Mdn = 8.00) PVs. The results suggest that students have a stronger preference for using literal PVs than figurative ones. Further analysis was conducted to determine whether there is any significant difference between the choice of literal and figurative PVs. The results are presented in Table 4.63.

Table 4.62

Independent-Samples Mann-Whitney U Test between literal and figurative PVs in the Avoidance Task.

Mann-Whitney U	12266
Wilcoxon W	31376
Standardized Test Statistic Z	-6.095
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the use between literal and figurative PVs. Distributions of the scores for choosing literal and figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 3. The

score was statistically significantly different between literal PVs (Mdn = 9.00) and figurative ones (Mdn = 7.00), U = 14280.5, z = -6.153, p = .005, using an exact sampling distribution for U (Dineen and Blakesley 1973).

4.3.4.5 Literal vs. figurative and language proficiency

In this section, the effect of proficiency level on the use and avoidance of PVs is measured by comparing differences in the scores for literal and figurative PVs between students at different language proficiency levels.

Table 4.63

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants in the use of literal PVs. (Avoidance task).

Total N	195
Beginner Median	8.00
Lower Intermediate Median	11.00
Mann-Whitney U	1408.5
Wilcoxon W	6259.5
Standardized Test Statistic Z	-8.556
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score of choosing literal PVs between beginner and lower intermediate students, Table 4.64. Distributions of the scores for literal PVs were similar, as assessed by visual inspection, see Appendix I, part 3. The score was statistically significantly different between beginner (Mdn = 8.00) and lower intermediate (Mdn = 11.00), U = 1408.5, z = -8.556, p = .005, using an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation

coefficient *(r = .606)* indicated a large effect size (see Table 4.65). Thus, this implies that students in the two different groups differ in their avoidance of literal PVs.

Table 4.64

Relationship between Literal PVs Avoidance and proficiency level.

		Proficiency level	LITERAL
Proficiency level	**Pearson Correlation**	1	.606**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

The same applies to the figurative PVs: the results in Table 4.66 show that there is a significant difference in the score of choosing figurative PVs between beginners (Mdn =5.00) and lower intermediate students (Mdn = 9.00).

Table 4.65

Independent-Samples Mann-Whitney U Test between beginners and lower intermediate participants in the use of figurative PVs. (Avoidance task).

Total N	195
Beginner Median	5.00
Lower Intermediate Median	9.00
Mann-Whitney U	1696.5
Wilcoxon W	6547.5
Standardized Test Statistic Z	-7.802
Asymptotic Sig. (2-sided test)	.0005

A Mann-Whitney U test was run to determine if there were differences in the score of figurative PVs between beginner and lower intermediate students. Distributions of the scores for figurative PVs were similar, as assessed by visual inspection, see Appendix I, part 3. The scores for lower intermediate participants (Mdn = 9.00) were statistically significantly

higher than for beginner participants (Mdn = 5.00), U = 1696.5, z = -7.802, p = .005, using

an exact sampling distribution for U (Dineen and Blakesley 1973). The Pearson correlation

coefficient (r = .559) indicated a large effect size (see Table 4.67). These results suggest that

semantic factors, such as idiomaticity, play a key factor in students' avoidance of PVs. This

implies that lower intermediate students may have a better use of both literal and figurative

PVs than the beginners. In other words, students of higher proficiency levels tend to avoid

literal and figurative PVs less than the beginners.

Table 4.66

Relationship between Figurative PVs Avoidance and proficiency level.

		Proficiency level	FIGURATIVE
Proficiency level	**Pearson Correlation**	1	.559**
	Sig. (2-tailed)		.000
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.4.6 Literal vs. figurative and gender

In order to investigate the possibility of gender influence on Saudi learners' use and

avoidance of PVs, the next statistical analysis was conducted to investigate whether there is

a difference in the preference to use literal and figurative PVs by dividing the results by

gender. The mean scores for choice of literal and figurative PVs among male and female

students are presented below.

Table 4.67

Independent-Samples Mann-Whitney U Test between male and female students with literal PVs (avoidance task).

Total N	195
Male Median	9.00
Female Median	10.00
Mann-Whitney U	4397
Wilcoxon W	11183
Standardized Test Statistic *Z*	-.482
Asymptotic Sig. (2-sided test)	.630

Table 4.68

Independent-Samples Mann-Whitney U Test between male and female students with figurative PVs (avoidance task).

Total N	195
Male Median	7.00
Female Median	8.00
Mann-Whitney U	4014.5
Wilcoxon W	10800.5
Standardized Test Statistic *Z*	-1.475
Asymptotic Sig. (2-sided test)	.140

A Mann-Whitney U test was run to determine if there were differences in the score of literal PVs between male and female students. Distributions of the scores for literal PVs were similar, as assessed by visual inspection, see Appendix I, part 3. The score was not statistically significantly different between male (Mdn = 9.00) and female (Mdn = 10.00), U = 4397, z = -.482, p = .630. Following this, a Mann-Whitney U test was carried out to check whether there is a difference in the score of figurative PVs between male and female students. Distributions of the scores for figurative PVs were similar, as assessed by visual inspection,

see Appendix I, part 3. The score was not statistically significantly different between male (Mdn = 7.00) and female (Mdn = 8.00), U = 4014.5, z = -1.475, p = .140. The Pearson correlation coefficients (r = .030 and r = .102 respectively) indicated a low effect size suggesting that the differences in scores were not statistically significant (see Tables 4.70 and 4.71) and that the gender variable has a relatively small effect on the students' overall preferences for the literal and figurative PVs tested.

Table 4.69

Relationship between Literal PVs avoidance and gender.

		GENDER	LITERAL
GENDER	**Pearson Correlation**	1	.030**
	Sig. (2-tailed)		.679
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.70

Relationship between Figurative PVs avoidance and gender.

		GENDER	FIGURATIVE
GENDER	**Pearson Correlation**	1	.102**
	Sig. (2-tailed)		.154
	N	195	195

**. Correlation is significant at the 0.01 level (2-tailed).

4.3.5 Conclusion

The aim of the present Chapter was to provide a detailed presentation of the results obtained from analyzing the elicited data.

The results of the PV test above indicate that, in general, the learners under investigation show a moderate level of receptive and productive knowledge of PVs as 72% of them performed well for the receptive and 59% for the productive PV test, indicating an

average performance. It was also found that learners show better knowledge of literal PVs in comparison to the figurative PVs, which is consistent with the findings of Liao and Fukuya (2004), Dagut and Laufer (1985), and Hulstijn and Marchena (1989) with respect to the avoidance of PVs: that avoidance was very noticable with figurative PVs. Therefore, the present finding further supports the view that non-compositional PVs are more difficult for learners than the literal ones. In addition, it has been found that proficiency level influences the learner's knowledge of PVs as the lower intermediate group outperformed statistically the beginner group on the three tasks.

In short, the above findings provide empirical evidence with respect to Saudi learners' knowledge of PVs, and a number of useful findings. The following Chapter is devoted to the discussion of these results in relation to the existing research on the variables under investigation.

Chapter 5: DISCUSSION

5.1 Introduction

The large number of previous studies (e.g. Dagut and Laufer 1985; Liao and Fukuya 2004; Ben Duhaish 2008; Kamarudin 2013; as discussed in Chapter 2) which pointed out that L2 English learners, specifically those whose L1 is non-Germanic, face difficulties in the use of English PVs, motivated the present research. Moreover, PVs are regarded as one of the most challenging aspects of learning English for different reasons, such as their structural oddity and meaning complexity (Darwin and Gray 1991), as well as their semantic opacity (Dagut and Laufer 1985). Despite these challenges related to PVs and extensive research on them, especially in relation to English learners whose L1 is Chinese, Swedish, and Finnish, Saudi learners of English have not been sufficiently studied. Accordingly, the purpose of this research was to assess Saudi EFL students' use and knowledge of English PVs.

To refresh our memory, the guiding research questions which were presented in Section 1.4 are repeated here:

1- How do Saudi Learners of English use PVs in productive and receptive tasks?

a- *How frequently do Saudi undergraduate learners of English use PVs?*

b- *Which PVs do they use?*

c- *Is there any difference in their use and knowledge of PVs depending on gender?*

d- *Is there any difference in their use and knowledge of PVs depending on language proficiency?*

e- *Is there any difference in their use and knowledge of PVs depending on text genre?*

f- Is there any difference in their use and knowledge of literal and figurative PVs?

2- What can we tell about Saudi undergraduate EFL learners' avoidance, if any, of PVs?

a- Do Saudi undergraduate learners avoid using PVs?

b- Does their avoidance, if any, reflect differences in the semantic nature of PV types (Literal vs Figurative)?

c- Does their avoidance, if any, reflect differences in learners' proficiency level?

The previous Chapter presented the main findings of this study. The main aim of this Chapter is to situate these findings in the light of the existing research about PV use and avoidance behavior. This Chapter is divided into two sections. The first Section 5.2 presents a discussion of learners' use of PVs in the corpus and the factors which could influence learners' performance (proficiency level, semantic nature of PVs gender and text genre). Section 5.3 discusses the results of MCQ in terms of the learners' productive and receptive knowledge of PVs and PV avoidance. In addition, it discusses the factors which could influence learners' performance namely proficiency level, semantic nature of PVs and gender.

5.2   Corpus findings

5.2.1   Learners' use of PVs

Overall, the frequency of occurrence of all PVs can give an overview of PV distribution, and study of high-frequency PVs can help us to get more valuable in-depth analyses. Thus, the frequencies of occurrence and types of all PVs in the SLEC were

identified (see Section 4.2.3), and also the results were compared with lists of most frequently used PVs found in Liu list (2011).

It seems that Saudi EFL students are not hesitant to use PV constructions despite the claim that non-native learners prefer to use one-word verbs over PVs. The analysis yielded a total of 726 instances (tokens) of PVs of the 93 PV types found across the SLEC and distributed over the three genres in the corpus. However, the results indicate that the learners in question produced, on average, one PV construction in approximately every 241 words of text. This result can be compared with Gardner and Davies' (2007) finding that PVs occur once, on average, in every 150 words. Moreover, the log-likelihood test showed that the difference between the frequency of PVs in SLEC and the frequency of PVs in BNC is statistically significant. In addition, PVs make up only 0.83% of the total number of words (tokens) in the corpus from which it can be concluded that English PVs are not frequent in this sample of the language of Saudi learners. The five most common PVs make up 60%, and the 20 most common 83%, of all PV tokens, from which it can be concluded that PVs are not evenly represented. The results also show that approximately 41 PVs out of 93 PV types are hapaxes. It can thus be concluded that, overall, Saudi learners underused PVs in comparison to their native speaker counterparts to a great extent.

In addition, these results suggest that the learners produced PVs less frequently than native speakers might be expected to in their essays, which is a pattern found in previous studies showing that L2 learners generally underuse or avoid PVs (Dagut and Laufer 1985; Waibel 2007; Wierszycka 2015). The fact that, in Arabic, a verb type similar to English PVs does not exist so that learners are not familiar with this type of verb from their native language could be behind the low frequency of PVs in Saudi learners' writing. Thus, the finding from

the present study is congruent with Waibel (2007), Ryo (2013), and Gilquin (2011) that learners whose L1 does not possess PVs tend to use them less frequently than those whose L1 does. However, it is not clear yet whether Saudi learners' underuse of PVs is due to the strategic behavior of the non-native who avoids using PVs, preferring one-word equivalents (Dagut and Laufer 1985; Hulstijn and Marchena 1989; Liao and Fukuya 2004), or due to the lack of formulaic competence (Alejo 2010, 2012). Thus, further research is needed regarding their linguistic preference for one-word verbs or their PV equivalents (see Section 5.3.2 for more explanation).

In terms of PVs, the verbs 'wake up', 'come back', 'get up', 'go out' and 'go back' were overwhelmingly more frequent than the rest of PVs in SLEC. With the exception of 'wake up' and 'get up', these verbs usually rank among the ten most frequent PVs L1 English as previous research has shown (Gardner and Davies 2007; Liu 2011), and they also appear to be very frequently used by L2 speakers (Märzinger 2013). One of the reasons why these PVs are more frequent could be related to the fact the lexical verbs 'come' and 'go' are highly frequent lexical verbs (Altenberg and Granger 2001; Leech et al. 2001; Gouverneur 2008). This fact could make them salient and more likely to be learned than non-salient, less frequent lexical verbs (Ellis 2006). Moreover, Kaszubski (2000) believes that L2 learners tend to overuse those verbs. Another explanation for the high frequency of these PVs could be motivated by the topics used to collect the data. The texts produced by learners in the SLEC corpus are controlled by the topics given to them. This may have restricted learners' selection of lexical items and increased their tendency to produce certain lexical items commonly associated with the given topics. Furthermore, another possible explanation for the high

frequency of these PVs could be a semantic one as these PVs tend to be more literal in meaning than other PVs (e.g. 'give up'), which could make them easier to use for L2 learners.

On the whole, however, the frequencies of the individual PVs in SLEC were often too low for meaningful conclusions to be drawn. Moreover, the results revealed that out of 150 PVs in the list based on Liu (2011), 54 PVs were found in SLEC. This means that 36% of the PVs (types) found across SLEC are among the top 150 in Liu's (2011) list. However, 19 out of these PVs were used only once and 10 PVs only twice. This means that 85 PVs listed by Liu are not attested at all in the learners' compositions in SLEC suggesting that learners may have a serious disadvantage of communicative skills. This might be attributed to the fact that learners have been introduced to out-of-date, non-corpus-based teaching materials. However, it should be taken into consideration that the range of possible text genres present in the BNC and COCA contrasted with only three genres used in SLEC, an issue that may have had an influence on the types of PVs used. This is in line with the common hypothesis about PVs in non-native writings. Given the complexities of their syntactic and semantic features, PVs are assumed to have fewer occurrences in learner language. This has been confirmed in most cases: for example, McKenny's (2006: 141) results confirm that the LOCNESS native corpus includes twice as many PVs tokens as Porticle, a Portuguese learner corpus. Similarly, Waibel (2007) also finds that in the eleven sub-corpora of the International Corpus of Learner English (ICLE), PVs are under-represented in eight sub-corpora. Besides, results of several studies reveal that EFL learners from various L1 backgrounds such as Portuguese, Dutch, French, Korean, and Italian underused PVs in their written language (Fadanelli 2012; Hulstijn and Marchena 1989; Riguel 2014).

Furthermore, the results have revealed that the learners used 58 verb types, which were combined with 14 different particles to form PVs. Native speakers used, as reported by Waibel (2007: 96), 222 different verb types, combined with 24 particles suggesting that native speakers made use of almost four times more verb types as the verbal basis in forming PVs and twice as many particle types compared to the learner group. Considering the overall lower number of PVs in the learner corpus, the remarkable difference in the overall frequency of verb types and particle types in these constructions between the native speakers in Waibel's study and Saudi learners was thus not entirely unexpected.

In addition, the results from the analysis of lexical verbs correspond to the findings from Biber et al. (1999: 413) in that the high-frequency verbs 'take', 'get', 'put', 'come', and 'go' are particularly productive in forming PVs. There is considerable similarity in the lexical verbs used by the learners and those in Biber et al.'s study, especially with regard to the five most productive verbs: The most productive verbs used in the formation of PVs in SLEC are 'get', 'go', 'come', 'take'. Moreover, the results of this study also show parallelism to Ryoo (2013), as the findings demonstrate that 3 out of 5 most common LVs in PVs are the same – 'go', 'come', and 'get'. The first three lexical verbs 'get', 'come', 'go' have been previously identified as highly frequent (Altenberg and Granger 2001; Nesselhauf 2005) and represent some of the most productive verbs in PV formation in native production across English varieties and registers (Liu 2011). Moreover, the high degree of polysemy of these lexical verbs (Biber et al. 1999) increases their frequency in different contexts. However, having the potential to combine with a high number of different particles does not necessarily mean that these verbs are also the most frequently used ones. 'wake up', for instance, features as the

first most frequent PV in SLEC used by the learners although the verb 'wake' is not very productive itself in the formation of PVs. The same goes for the verbs 'grow', and 'sit'.

Regarding particles and their productivity in forming PVs, the most frequent particle used by the learners is 'up' with 341 instances. This finding was not unexpected since the productivity of the particle 'up' has long been noted in the literature (e.g. Bolinger 1971; Biber et al. 1999; Gardner and Davies' 2007). Following 'up' is the particle 'out' in SLEC with 126 instances. These findings are exactly in line with Biber et al.'s findings in that 'up' is the most productive particle in the formation of PVs, followed immediately by 'out' (1999: 412). The high frequency of 'up' and 'out' could be explained by the fact that they are more likely to behave as particles than any other grammatical form, in particular than as prepositions (Dehé 2002; Gardner and Davies 2007) in addition to their multiple meanings both concrete and abstract which help them to be placed next to many different lexical verbs to convey a broad range of meanings. (González 2010; Lindstromberg 2010). In addition, another researcher who reported similar results was Fadanelli (2012), presenting 'up', 'out', 'off', 'back', and 'down' as the AVPs used in PVs, they are among the top AVPs in SLEC.

5.2.2 Erroneous and unnatural usages of PVs

The analysis of the PVs has produced a number of interesting and practical findings regarding the PV patterns found in the SLEC corpus. Given the earlier mentioned fact that Arabic has no PV structure, a particularly important finding which could be a contributing factor to the inappropriate use of these PVs is most often related to the influence of learners' L1 (Arabic). A large body of elicitation and corpus-based research on PVs (Dagut and Laufer 1985; Laufer and Eliasson 1993; Darwin and Gray 1999; Waibel 2008; González 2010; Ke 2013; Gilquin 2011, 2015) has recurrently pointed out that PVs are a "peculiarity of the

Germanic languages" (Liao and Fukuya 2004, p. 211), a group to which Arabic does not belong. In addition, the lexical knowledge as well as the lack of awareness of regular patterns of PVs of learners (e.g. common collocates) could be considered as contributing factors. These findings further support those discussed in Chapter 2: that Saudi learners of English face particular difficulty in using PVs (Siyanova and Schmitt 2007).

The results suggest that the Saudi learners investigated have problems with the use of these verb types and confirmed the usual presence of deviations from established forms that characterize learner language (van Rooy 2011). Some deviations have been found in the data such as redundant uses of particles with one word verbs, which is a common phenomenon in learner language (Gilquin 2015; Schneider and Gilquin 2016), preference for using some verbs in combination with a particle where the use of a simple verb would be more appropriate, formation of a new PV, and syntactical problems such as the confusion between the use of transitive and intransitive PVs.

There were some instances of an additional use of particles where the influence of the learners' L1 is noticeable in the carrying of an L1 pattern into English which results in the redundant use of particles. One of the possible explanations for why learners add an additional particle after selecting the right verb could be that learners are aware of the aspectual meanings the particles add to the verbs they combine with, or that they are aware of the established patterns for creating aspectual PVs. This fact might have triggered the learners to use these particles in order to put some emphasis on the actions. These examples of using additional particles by the learners can be seen as an indicator of the learners' underlying awareness of particles and their role in forming PVs or a wish to use these particles in their language. However, in contrast to the additional use of particles, learners'

omission of these units when using PVs is also another type of erroneous use of PVs found in the learner data. This expected deviation is due to the lack of these units in learner's L1 and can be interpreted as a sign of the learner's incomplete lexical knowledge. Moreover, there also was one more type of erroneous use of PVs which is connected to the notion of omission. It was caused either by lack of lexical knowledge or by confusion between transitive and intransitive PVs. There were some examples in which the objects of transitive PVs were left out, resulting in incorrect uses of transitive verbs as intransitive ones, (see 4.2.5). One might hypothesize that this error is caused by the fact that students aren't always explicitly taught the distinction between transitive and intransitive verbs during the teaching process. Another possible reason for this could be the formal similarity between some PVs, such as in the case of 'grow up' and 'bring up'. Both of them can have the same meaning as the Arabic word 'يربي' 'to educate'. As a result, the learners' extension of the phrasal verb's scope to inappropriate contexts may have been caused by a lack of necessary contextual knowledge for the PVs 'grow up' and 'bring up' combined with the influence of the L1 which could have made the learner think that both PVs can also be used as interchangeably as in their equivalents in L1.

Another deviation found in the learner data is the incorrect choice of PV itself or one of its constituents, i.e. substitution errors. There are some instances of incorrectly chosen PVs, incorrectly chosen lexical verbs, and incorrectly chosen particles found in the corpus. In other examples, the learners got the lexical verb right but failed to choose the appropriate particle. The reason for the substitution of a particle could be the learners' lack of lexical knowledge of the PVs as in case of 'hand out' and 'hand in'. Perhaps the learner is not aware that 'hand out' and 'hand in' have different meanings and cannot be used interchangeably

resulting in the incorrect choice of PV. In other examples, the reason for the substitution of a particle could be the influence of the learners' L1 which can be seen in the inappropriate use some PVs. Therefore, learners may have relied on their L1 to decide on the most likely particle to be used in this particular context resulting in an inappropriate use of some PVs. The influence of the learners' L1 can also be seen in the incorrect choice of the entire PV as in the case of 'look around' instead of the verb 'explore' which would be the appropriate verb to use, see (4.2.5).

Moreover, another type of deviation found was the collocational deviation. It was related to the choice of the PVs collocates. PV was combined with inappropriate collocates as in the example with 'catch up', resulting in unidiomatic combinations. The deviation observed was accounted for by L1 interference, (see 4.2.5).

The results confirmed the fact that PVs pose difficulties for this particular learner group. However, despite the difficulties they pose, some deviations from the norm, such as redundant use of particles, can be interpreted as a wish from the part of the students to employ PVs. As was previously mentioned, there are instances in the data where a native speaker would prefer a "simple" (i.e. one-word) verb but the learner attempted to use a PV unsuccessfully. It is important to mention here the "simplified use of phrasal verbs" in this context, as described by Waibel (2007, p. 118). It refers to the tendency of learners to express their intended meaning in overly general words in situations where a different expression would actually be more appropriate (p. 137). Waibel claims that such "simplified" uses result from a lack of relevant vocabulary knowledge and that their use is one of the reasons causing learner language to sound unnatural.

To conclude, the way learners used the PVs demonstrates a noticeable departure from the norms used by native speakers to a great extent. In terms of the deviation types, PVs were used with redundant or inappropriate particles, and or with unusual collocates. While these unnatural combinations did not always prevent the reader from understanding the intended meaning, they did contribute to a lack of nativeness by giving the reader the impression that the language is not being used in the context in which it should be. Moreover, there were examples of transitive uses of intransitive PVs or vice versa in the data, which shows that learners lack syntactical knowledge.

5.2.3   Factors influencing the use of PVs

One of the aims of the present study was to determine the effect of learner variables (i.e. L2 proficiency, gender, semantic nature of PV and text genre) on L2 learners' use of PVs. PV use was operationalized in terms of the frequency of PV occurrence across two proficiency levels (beginner and lower intermediate), gender (male and female), semantic nature (literal and figurative) and three text genres (argumentative, narrative, and descriptive). Given that the statistical analyses conducted indicated that the interaction between the effects of L2 proficiency, semantic nature of PV, gender and text genre was statistically significant, the results will be discussed in light of the main effects that these four variables had on the frequency of PVs.

5.2.3.1 Proficiency level and PV frequency

The results show that there is a positive link between the learners' use of PVs and their language proficiency. It has been found that lower intermediates produced more PV tokens (407 of the total of 726 tokens) than beginners who used 319 PV tokens. Among both

genders, the learners' use of PVs increases as their proficiency level increases. The lower intermediates in both genders demonstrated greater use of this structure. The male beginners used 110 PVs (37.83%), while the male lower intermediates used 180 PVs (62.10%). Similarly, among the females 209 PVs (47.93%) were produced by beginners vs. 227 PVs (52.06%) produced by lower intermediates. With regard to the relative frequency of the PVs that were used, the results show that the relative frequency of PVs produced by lower intermediates is higher than the beginners (3.46 vs. 3.41 per 1000 words). The results indicated that the difference between the learners' use of PVs and their language proficiency was significant suggesting that an increase in L2 proficiency translates into a higher frequency of PVs.

These results were consistent with those found in an important body of evidence mainly coming from elicitation studies which has shown that L2 proficiency was indeed a key factor in the use of PVs and that higher proficiency correlated with higher PV frequency (e.g. Dagut and Laufer 1985; Yorio 1989; Liao and Fukuya 2004; Siyanova and Schmitt 2007). In addition, the results also were consistent with those found in the study of Zhao and Le (2016) who confirmed that there is a positive link between proficiency and improvement in PV knowledge, with the advanced group outperforming the intermediate group in their study. Also, Blais and Gonnerman (2013) confirmed that learners showed a significant proficiency effect on both tasks used in their study. The researchers concluded that ESL learners' "[…] grasp of phrasal verbs' semantic properties improves as their overall competence in the language increases" (p. 843). The findings from this present study, therefore, support the claim that language proficiency influences the learner's performance on the use of PVs. Teachers, curriculum designers, and material creators must use this

knowledge to provide pertinent advice regarding PVs for students with varying degrees of proficiency in order to improve their ability to learn and understand this language form and to speak the target language more fluently.

However, despite the existence of these studies that found a link between L2 proficiency and PV frequency, other studies such as Becker (2014), who compares PVs frequency in intermediate and advanced L2 speakers' production, have shown that L2 proficiency does not go hand in hand with more frequent use of PVs. The unclarity in the relationship between L2 proficiency and PV frequency could be attributed to the fact that the connection between them is relatively complex. According to González (2010) and Gardnier and Schmitt (2015), the productive use of PVs proves to be challenging for L2 learners at various stages of language development. Moreover, this difficulty faced by L2 learners could take place regardless of the learners' proficiency level (Wray 2002). In addition to this, the inconsistency in the findings could also be attributed to the different ways in which L2 proficiency has been operationalized. For example, L2 proficiency has been measured based on length of stay in an English-speaking country (Weirszycka 2013), enrolment in an intensive English program (Becker 2014), institutional status (Siyanova and Schmitt 2007), and amount of L2 instruction (Zhang and Wen 2019). Others have measured proficiency levels using external estimation or based on in-house language examinations with no further details of the individual proficiency bands. Thus, due to the numerous ways in which the construct of proficiency has been operationalized, it is difficult to compare the findings of this study to those reported in previous studies on the role of L2 proficiency in PV frequency, and to determine the significant impact of L2 proficiency on PV use (Chen and Smakman 2016).

5.2.3.2 Text genre and PV frequency

Does genre have an influence on PV frequency? The three genres included in this study are argumentative, narrative, and descriptive. More than the half of the 726 PVs (438, or 60.33%) fall into the descriptive section. The argumentative texts are those in which Saudi learners used the PV structure least frequently, in fact only 73 (10.04%) of all PVs were found among this genre. The remaining 215 (29.57%) items appear among the narrative texts. Regarding the relative frequency of the PVs that were used, the results show that the relative frequency of PVs is highest in the descriptive genre, followed by narrative and argumentative (5.68, 3.43 and 1.02 per 1000 words). The results revealed that the three text genres differed significantly in their productions of PVs which suggests that the genre factor has a great influence on PV frequency.

As already discussed in Chapter 4, the most frequent PV across the corpus is 'wake up'; it occurs 174 times. 'come back' is the second most frequent PV overall with 73 occurrences, followed by 'get up' (69 times), 'go out' (62 times), 'go back' (57 times), 'grow up' 29 times, and 'give up' 20 times. The explanation for these high frequencies could be topic dependence: the PVs in question are used for the description of personal experiences and activities in daily life. The fact that the great majority of PVs, such as 'wake up', 'come back', 'go out', 'get up', and 'go back', are colloquial may be an indicator that the written compositions of learners are not very formal in general as these PVs are neither very formal, nor can they be expected to occur in academic or argumentative writing, while only few 'academic' PVs occur among items attested in the SLEC (e.g. 'point out', 'find out', and 'sum up'). Moreover, the texts produced by learners in the SLEC corpus are controlled by the topics given to them. This may have restricted learners' selection of lexical items and

increased their tendency to produce certain lexical items commonly associated with the given topics. This occurrence may also be due to the fact that the proficiency level of students is relatively low (beginner and lower intermediate), and it is difficult for them to write and use academic writing style.

This finding sheds further light on the ''field''-specific nature of the use of some PVs, an issue which has been addressed in some detail by Celce-Murcia and Larsen-Freeman (1999). Celce-Murcia and Larsen-Freeman (1999) believe that certain PVs, for which there are no concise alternatives, are associated with a particular field. Therefore "the field-specific use is pertinent in explaining the use or non-use of phrasal verbs in certain contexts" (1999: 434). These observations are also consistent with those in Hinkel's (2009) discussion of topic effect on features of L2 texts. Hinkel (2009) analyzed modal verb use in a small corpus of L1 and L2 writing (718 essays/201,601 words) on five topics written by speakers of English, Chinese, Korean, and Japanese. The results demonstrate that median frequency rates of modal verbs in L2 essays are significantly affected by the writing topic. Thus, the results of the current study confirm the result of both of the above studies on the influence of text genre as a factor which has a statistically significant effect on in the use of PVs.

5.2.3.3 Semantic nature of PVs and PV frequency

Another sub-question this study is interested in is whether the semantic nature of PVs influences the performance of the participants on their productive use of PVs. To answer this question, a comparison has been made between the results for both types of PV. The corpus results indicated that the use of literal PVs was higher than the figurative PVs, suggesting that figurative PVs are more difficult for learners to use. Consequently, they tend to use fewer figurative PVs. These data reinforce the hypothesis that learners have difficulties with

producing figurative PVs. Looking closely at the most frequent PVs ('wake up' 174, 'come back' 73, 'get up' 69, 'go out' 62, 'go back' 57, 'grow up' 29, 'give up' 20, 'stay away' 14, 'sit down' 13, 'sum up' 12, 'get out' 11, 'put on' 11, 'find out' 9, , 'work out' 8, 'get back' 8, 'pick up' 8, 'hang out' 7), it is important to mention that most of the PVs included in this analysis happen to be predominantly literal ones based on Garnier and Schmitt's (2015) list of meaning senses. The reason for their higher frequency could be because they have only literal meanings.

As already mentioned, literal PVs such as 'wake up', 'come back' and 'go out' are more likely in some genres (e.g. descriptive writing); figurative PVs such as 'point out', and 'sum up' are often used in formal texts such as argumentative essays. The majority of literal and figurative PVs were used in the descriptive writings, followed by narrative and argumentative. The preference for literal PVs is probably a consequence of genre, as SLEC contains descriptive texts in which literal uses of PVs are likely to be frequent. This finding could support the claim that topic sensitivity and genre dependency influence learners' choices of PVs. Interestingly, however, although most of the highly frequent figurative PVs are indeed underused by all learners, other figurative PVs are overused, i.e. 'give up' and 'go on'. This could be due to teaching: as can be seen in Section 3.5.3, PVs such as 'go on', 'give up', 'hang out', 'make up' and 'look out' are among the 20 most frequent PVs in secondary textbooks.

These findings are consistent with Dagut and Laufer's (1985) finding that PV type (literal or figurative) had a significant influence on the participants' performance on tasks, with the mean score on literal PVs being higher than the mean score on the figurative ones. Kamarudin (2013) also investigated the use of PVs by Malaysian learners of English. The

study included a comprehension, multiple choice test and corpus analysis of 24 PVs in the corpus of English of Malaysian Students (EMAS) and the Bank of English (BoE) Corpus. The results showed an average understanding of frequent PVs among Malaysian students; however, these results were influenced by semantic types of PV suggesting that figurative PVs are a problematic construction for learners. This finding, on the other hand, does not align with that of Garnier and Schmitt (2016) who found the effect of PV semantic types on productive knowledge to be insignificant.

In short, the difficulty presented by figurative PVs in contrast with literal PVs for Saudi learners could be due to the semantic nature of PVs, since the meaning of figurative PVs is not derived from the meaning of their individual components, and learners thus have difficulty associating their meanings with their forms.

5.2.3.4 *Gender and PV frequency*

Another variable this study is interested in is whether gender is also a factor in the use of PVs. According to Schmitt and Redwood (2011) there has been much debate about the role of gender in language learning and acquisition. At first, no impact was expected as no study has, to my knowledge, found an effect of this variable on the production of PVs; except for Kamarudin (2013: 111-119) study which has shown that gender has an impact on the overall understanding of PVs to a small extent. However, the results show that females produced more PV tokens than males as 436 (60%) of all the PV tokens found in the corpus (726) have been utilized by the females, while males have used 290 PVs (40%). This means that more PVs, in absolute terms, are produced by females than males. With regard to the relative frequency of the PVs that were used, the results shows that the relative frequency of PVs produced by females is higher than the males (4.00 vs. 2.82 per 1000 words). The log-

likelihood test demonstrated that the difference is statistically significant and %DIFF suggests that the PVs have 42.40% higher frequency in females compared to males suggesting that the differences in scores were statistically significant, and that there is significant relationship between the gender variable and the students' overall performance on the PVs.

These findings align with those of Kamarudin (2013), who reported that the gender variable has a relatively small effect on the Malaysian students' overall understanding of the PVs tested. They are contrary to the findings of Schmitt and Redwood (2011), who reported that gender has no influence on learner performance in the use of PVs.

5.3 MCQ findings

5.3.1 Learners' knowledge and use of PVs

One of the aims of this study is to assess Saudi undergraduate English learners' productive and receptive skills. This section discusses the results of the Saudi undergraduate English learners' productive and receptive skills; in other words, the focus is on their active use and knowledge of the PVs gathered from the productive task given (task 1) and their ability to recognize and recall the PVs in a passive and receptive way (task 2), which has been analyzed through the results of the receptive task.

The majority of the participants were able to use the PVs receptively and productively with a percentage of correct answers, namely 72% for the receptive task and 59% for the productive task. The mean score for the receptive task ($M = 11.52$, $SD = 3.08$) was marginally higher than the mean score for the productive knowledge task ($M = 9.41$, $SD = 3.97$). This is in line with Schmitt and Redwood's (2011) and El-Dakhs' (2016) findings in that the participants did better receptively than productively. However, EFL Saudi learners

performed better in both tasks in comparison to learners in Schmitt and Redwood (2011), who found that their participants had good receptive knowledge 65.2% correct answers) and fair productive knowledge 48.2%. Saudi EFL learners performed better only productively in comparison to El-Dakhs (2016), whose participants scored 80.9% on their receptive and 30.7% on their productive task. This could be due to the way the PVs tested were selected in the present study compared to the two studies mentioned. All PVs used in the present study were selected based on the textbooks used by the students at their elementary, intermediate and secondary schools (See Section 3.5.3). In addition, they are all found within the list of 150 most frequently used PVs in Liu's (2011) study. This maximized the likelihood that students had already met these selected PVs, which they might then either use or avoid. Thus, given a research design that maximized the likelihood that participants had met these items on which they were tested, scores of 72% and 59% correctly answered items on receptive and productive tasks in the current study, might be considered quite low especially when they are compared to the results of the native control group in which they score 100% in both tests. This raises a serious concern regarding participants' knowledge and use of other PVs in English. While Schmitt and Redwood (2011) concluded that their participants showed relatively good knowledge of the PVs tested considering their intermediate level of English, it can be concluded that a score of 72% for the receptive task and 59% for the productive is rather weak considering that the participants in this study were undergraduate university students and they were only presented with familiar PVs; those that they have been introduced to in the years of studying English as well as 'high-frequency PVs' as identified by previous research (Gardner and Davies 2007; Liu 2011).

Despite the fact that previous studies did not take the same approach as this study in an effort to maximize the probability that students have been introduced to familiar PVs as well as high-frequency PVs before assessing their productive or receptive knowledge, the results of the current study support the findings of such previous studies (e.g. Barekat and Baniasady 2014; Liao and Fukuya 2004; Dagut and Laufer 1985). Contrary to earlier studies in the Arab World (i.e. Mahmoud 2015; AbdulRahman and Abid 2014; Ayadi 2010), it is worth mentioning that the students who participated in the present study were non-English majors. This major field of study difference may have particularly contributed to the Saudi learners' low performance on the tasks of this study. This is in line with You's (1999) findings on the influence of university major on the acquisition of PVs. You (1999) found that Korean learners' tendency to avoid using PVs differed between Korean learners of English who are majoring in English in Korea and others educated in Korea but enrolled in non-English majors. His results highlighted the role played by the major field of study. To confirm this hypothesis, further research is needed to compare between those who majoring in English and those who are non-English majors.

Following the general pattern in vocabulary studies and the normal expectations, the participants showed better receptive than productive knowledge. This is in line with the findings in Ayadi and Abdul Rahman (2014) on Omani learners and El-Dakhs (2016) on Egyptian learners. In addition, productive knowledge involves knowing a lexical item well enough to produce it when it is needed for communication purposes (Schmitt 2010). Productive knowledge has been proved to be more difficult to acquire than receptive knowledge (Nation 2001). Thus, success in productive tests requires a greater depth of knowledge than in receptive tests, which could, in part, explain participants' scores.

As already noted, the previous studies attributed learners' underuse of PVs to several factors, including cross-linguistic differences. Some researchers (e.g. Dagut and Laufer 1985) conclude that the presence of PVs in learners' first language (such as Germanic languages) helps learners to use these verbs, whereas the non-existence of PVs in the first language results in learners' underuse and avoidance of these verbs. This could offer another explanation for Saudi learners' limited use of PVs given the fact that PVs do not exist in Semitic languages including Arabic. In addition, English language textbooks which are used to teach Saudi students overlook or mention PVs only in passing (Aldahesh 2009). According to Alangari (2019), PVs in most textbooks used at schools in Saudi Arabia are introduced under the vocabulary section as part of general spoken language and not as part of academic writing, and no explanation is provided of their use or their collocations, and no reference is made to academic use. For example, in the textbook *Traveller 6*, PVs associated with the verb 'go' such as 'go with', 'go off' and 'go over' are introduced through an exercise in which students are asked to match the PV with its meaning, with no explanation given of its use, or collocations, as shown in Figure 5.1.

Figure 5.1

Phrasal verbs with go (Traveller 6).

5.3.2 PV avoidance

One of the aims of this study is to assess the extent of the participants' tendency to avoid the use of PVs. To achieve this, this question was addressed in Task 3 of the MCQ of this study in which the participants were required to complete gaps in sentences with appropriate PVs, single-word verbs or two distractors. The participants' answers were marked and classified into three categories: (1) wrong answers, (2) right answers demonstrating avoidance (i.e. single-word verbs) and (3) right answers with PVs. A total of 195 students completed the multiple-choice test. The total number of possible answers was 6,240 (195 students x 32 items): 3,300 PVs were chosen, that is 53% of the total score; while in 2,243 or 36% of cases, PVs were avoided and the correct one-word verb was used instead; finally, 697 answers, or 11%, were wrong answers. The participants avoided using PVs; however, they did not display a strong tendency of avoidance. With regard to the control group results, they performed better than Saudi participants. The total number of possible answers was 384 (12 Native speakers x 32 items): 326 PVs were chosen, that is 84.89% of the total score, and 58 answers 15% were made up of a (correct) one word verb. The result showed that the Saudi learners used PVs much less frequently than the native speakers, which means that the Saudi learners avoided using PVs and preferred the one-word verbs in (36%) of cases compared to the native speakers 15%.

As Dagut and Laufer (1985) mention, the PV structure is a characteristic of Germanic languages. The tendency of students to avoid PVs in 36% of cases might be attributed at this point to systemic incompatibility between the source language and the target language as was concluded by Dagut and Laufer (1985); Laufer and Eliasson (1993); Liao and Fukuya (2004);

Ben Duhaish (2008); Kamarudin (2013), Barekat and Baniasady (2014); and El-Dakhs (2016).

Ayadi (2010), for example, believes that avoidance of PVs by Arab EFL learners is due to the absence of such constructions in Arabic. The fact that there are two varieties of Arabic known by learners, modern standard Arabic (MSA) and non-standard Arabic (NSA), makes the situation more complicated. PVs do not exist in NSA while there are few verbs that take particles in MSA and the meaning of the verb changes with each particle. MSA PVs are considered complex and sometimes difficult for students to understand and consequently difficult to use. Due to the inherent complexity of PVs in MSA, or because of the influence of NSA, students tend not to use this form. Therefore, as a result of this structural difference between L1 and L2, learners might prefer to avoid using the PVs. Thus, the findings of the present study support the idea that L1-L2 differences are a good predictor of avoidance in L2.

This is also in line with findings in Dagut and Laufer (1985), who looked at a group of Hebrew-speaking students of English and their use of English PVs. The results of the study demonstrated that the majority of the learners avoided using PVs, exhibiting a strong preference for one-word verbs, and the avoidance was more pronounced with figurative PVs than with the literal or completive PVs. They attributed this finding to structural differences between L1 (Hebrew) and L2 (English) as Hebrew does not have a construction that corresponds to the English PVs.

In addition, English is a satellite-framed language that expresses path information in satellites to verb roots, such as particles and prepositional phrases, while Arabic is a verb-framed language, which conflates the path information with the motion information

contained in its verb roots (Slobin 2006; Talmy 1975). Looking at the participants' responses, most avoided the PV 'go down', in its literal meaning, with 89.5% of students choosing its equivalent single-word verb; this example suggests that the typological difference between the two languages in their ways of delivering path information could be at play.

- A company will fail if it allows the quality of its products to <u>go down</u>.

- ستفشل الشركة إذا سمحت ب<u>انخفاض</u> جودة منتجاتها

The English PV expresses the path or the direction of the agent's movement via the particle 'down', while in Arabic the same information is expressed via the verbal component 'ينخفض', which corresponds to the English verb 'decrease'. Acknowledging that the basic sense of particles in PVs is "locational, directional, spatial, or [involving] movement" (Waibel 2007: 17) and that other extended senses can be captured by the basic sense (Boers 2004; Bolinger 1971), the typological difference may have made it difficult for the Saudi EFL learners to understand the syntactic and semantic role of particles in PVs. In addition, adding these particles to the lexical verbs, resulted in underuse of PVs in their production.

Moreover, the limited amount of the learners exposure to PVs could be another possible cause of the learners' avoidance of PVs. It has been argued that the quantity and quality of input play a crucial role in the acquisition and use of PVs (Chen 2013; Dagut and Laufer 1985; Sjöholm 1995; Waibel 2007). Given the fact that cross-linguistic difference between English and Arabic is not a result of the possibility of positive L1 influence in the Saudi learners' use of English PVs, it can be assumed that any knowledge of PVs these learners possess could be a consequence of their exposure to PVs in the classroom or outside it. Accordingly, the learners' avoidance of PVs may indicate that they had not been provided with sufficient L2 input on PVs. This finding is further supported by another finding in this

study (see Section 5.3.3.1), in which the learners' use of PVs increases as their English proficiency level increases. This finding suggests that the amount of L2 input may have an influence on the learners' production and avoidance of PVs. This is also supported by the findings of Aldukhayel (2014), who investigated the avoidance of PVs by Arab ESL learners and their length of exposure to the English-speaking environment (long exposure, short exposure). The results of Aldukhayel (2014) revealed that Arab ESL learners with long exposure did not avoid any type of PV, while Arab ESL learners with short exposure avoided the figurative PVs. The major outcome of his study is that Arabic-speaking learners' avoidance of English PVs is due to their relatively short exposure to the English-speaking environment.

In addition, when considering the participants' performance on the productive task 59%, another explanation for the participants' tendency to avoid PVs can be put forward. As reported earlier, the participants' productive use of PVs was low, which could have negatively contributed to their use of PVs in the avoidance task. This observation supports similar findings with Egyptian learners in El-Dakhs (2016).

5.3.3   Factors effecting the knowledge and use of phrasal verbs

After assessing the participants' productive and receptive use and knowledge of phrasal verbs, the effect of a number of factors on this knowledge were assessed: language proficiency level, semantic nature of PVs and gender.

5.3.3.1   Language proficiency

Does PV knowledge increase as overall language proficiency increases? The findings of the present study suggest that proficiency has a statistically significant effect on the use of PVs by Saudi EFL learners. More specifically, for both receptive and productive tasks, there

was a statistically significant difference between lower intermediate and beginner students' performance on both types of tasks, with lower intermediate students performing better on all counts. This suggests that there is a strong relationship between the proficiency level and students' use and knowledge of PVs productively and receptively, which implies that the higher the level of students' proficiency, the better would be their performance. A similar result was reported by Schmitt and Redwood (2011) who examined L2 learners' receptive and productive knowledge of highly frequent PVs in English and its relationship with different factors including proficiency level. The results showed a significant positive relationship between PV knowledge and L2 proficiency as upper-intermediate learners scored higher than intermediate learners on both receptive and productive PV tests.

Since productive mastery is more advanced and it is often acquired later than receptive knowledge (Melka 1997), it can be noticed that the two proficiency levels performed better in the receptive task than in the productive one. The productive task, on the other hand, required participants to write the exact form of the PV. The participants had to produce the target PVs themselves in the form of a fill-in-the-gap task. It should also be noted that Schmitt (2010) has pointed out that this type of task is "the most difficult test format" (p. 85) in vocabulary acquisition research. The statistical differences observed between the receptive and the productive task, therefore, could be due to the difficulty of the productive task, which required learners to have higher levels of language proficiency, and higher levels of productive-mastery.

These results were consistent with those found in the study of Zhao and Le (2016) who confirmed that there is a positive link between proficiency and improvement in PV knowledge, with the advanced group outperforming the intermediate group in their study.

Also, Blais and Gonnerman (2013) confirmed that learners showed a significant proficiency effect on both tasks used in their study. The findings from this present study, therefore, support the claim that language proficiency influences the learner's performance on the productive and receptive use and knowledge of PVs.

In addition, the results of the avoidance task which investigated the role of proficiency level in the avoidance of PVs indicated that proficiency level had a significant effect on the preferences of learners in using PVs as there was a statistically significant difference between lower intermediate and beginner students' performance on both types of PV, with lower intermediate students performing better on all counts. This result suggests that there is a strong relationship between the proficiency level and students' avoidance of PVs. The result shows that the correlation is positive, which implies that the higher the level of students' proficiency, the better would be their performance and they would avoid PVs less. This implies that high proficiency students may have a better use of both literal and figurative PVs than the beginners. In other words, students of higher proficiency levels tend to avoid literal and figurative PVs less than beginners. These results support Liao and Fukuya's (2004) conclusion that intermediate learners avoid using PVs more than advanced learners, and "although the advanced learners did not perform very differently from native speakers, they also showed a slight tendency to use PVs less than the native speakers" (p.210). Contrary to these results, Hulstijn and Marchena (1989) concluded that there was no significant difference between advanced and intermediate learners in avoiding PVs.

In the Saudi context, these results are consistent also with those found in the study of Ben Duhaish (2008) who investigated the avoidance behavior of 129 Arab intermediate and advanced learners of English, including Saudis and non-Saudis. The results indicated that the

main influencing factor was the proficiency level of the learners as advanced learners had noticeably higher scores than the intermediate level learners. In addition, it is in line with Abu Jamil (2010) who carried out a study to explore avoidance behavior among ESL and EFL Arab learners. He reported that the learners' performance was influenced by level of proficiency, which was a significant main effect. Although the proficiency levels of the learners in this study (beginner and lower intermediate) differ from those two studies and the current study focuses on Saudi learners only in an EFL context, the result of the current study confirms the results of both previous Saudi studies regarding the influence of proficiency level as a factor which has a statistically significant effect on the avoidance of PVs.

5.3.3.2 Semantic nature of PVs

Another sub-question this study is interested in is whether the semantic nature of PVs influences the performance of the participants on both productive and receptive tasks. To answer this question, a comparison has been made between the results for both types of PV.

For both receptive and productive tasks, participants performed better on literal than on figurative PVs. Proficiency level is also important here, as there was a statistically significant difference between lower intermediate and beginner students' performance on both types of tasks and for both types of PV, with lower intermediate students performing better on all counts. The results suggest that figurative PVs are a problematic construction for learners and that they have a better knowledge of and ability to use literal PVs than figurative PVs, both productively and receptively.

These findings are consistent with Dagut and Laufer's (1985) finding that PV type (literal or figurative) had a significant influence on the participants' performance on tasks, with the mean score on literal PVs being higher than the mean score on the figurative ones.

Kamarudin (2013) also investigated the use of PVs by Malaysian learners of English. The study included a comprehension, multiple choice test and corpus analysis of 24 PVs in the corpus of English of Malaysian Students (EMAS) and the Bank of English (BoE) Corpus. The results showed an average understanding of frequent PVs among Malaysian students; however, these results were influenced by semantic types of PV suggesting that figurative PVs are a problematic construction for learners. This finding, on the other hand, does not align with that of Garnier and Schmitt (2016) who found the effect of PV semantic types on productive knowledge to be insignificant.

Many factors influence learners' difficulties in mastering PVs and their choice to avoid using them; the level of semantic transparency of the construction is one of those factors. The results on task 3 show that participants performed better on literal PVs than on figurative PVs by avoiding them less. The result revealed that PV type had a statistically significant effect on the learners' performance suggesting that students have a better knowledge of literal PVs than figurative ones. These results suggest that semantic factors play a key factor in students' preference for one-word verbs.

This study lends support to previous findings in the literature (Dagut and Laufer 1985; Liao and Fukuya 2004; Ben Duhaish 2008; Abu Jamil 2010; Saiya 2011; Ghabanchi and Goudarzi 2012; Kamarudin 2013; and Barekat and Baniasady 2014) that the semantic complexity of PVs plays a vital role in avoidance behavior. All the aforementioned studies reported that avoidance was more evident with figurative PVs and that the semantic complexity of PVs led to the avoidance behavior of L2 learners.

The finding in the current study is also similar to the findings of previous studies in the Arab world, by AbdulRahman and Abid (2014) and El-Dakhs (2016), who examined the

use of PVs by Omani and Egyptian leaners, respectively. In the Saudi context, Ben Duhaish (2008) also reported that the learners had noticeably higher scores in the use of literal PVs than the figurative and semi-transparent ones. It is also consistent with Gandorah's (2015) finding that intermediate learners avoided more PVs than advanced learners. Also, figurative PVs were avoided more than literal PVs. Gandorah (2015) attributed the poor performance with figurative PVs and the low performance of the intermediate group generally to the inherent semantic complexity of PVs. However, there are a few shortcomings with this study; firstly, the number of the participants (18) was small and only males participated. Secondly, only 13 PVs were tested. Thirdly, the selection of PVs was a replication of Liao and Fukuya's (2004) study, which has been criticized since it was pertinent only to American English. Liao and Fukuya (2004) also failed to address how they compiled their particular list of PVs, neglecting to provide at least some evidence that the learners had prior knowledge of the PVs being tested. The present study tried to avoid these shortcomings by employing more participants of both gender (male and female). Also, more PVs (32) were tested, and these were chosen carefully on the basis of establishing learners' prior knowledge of these PVs as already discussed in Section 3.5.3.

In short, the difficulty presented by figurative PVs in contrast with literal PVs for Saudi learners could be due to the semantic nature of PVs, since the meaning of figurative PVs is not derived from the meaning of their individual components, and learners thus have difficulty associating their meanings with their forms.

5.3.3.3 Gender

Another variable this study is interested in is whether gender is also a factor in the use of PVs. According to Schmitt and Redwood (2011) there has been much debate about

the role of gender in language learning and acquisition. For both receptive and productive tasks, the results on the current study indicated that the difference was not significant, and for these participants at least, gender did not appear to be a factor in their knowledge of PVs, as there was not a statistically significant difference between male and female students' performance on either type of task (productive or receptive). These findings align with those of Schmitt and Redwood (2011), who reported that gender has no influence on learner performance in the use of PVs.

Some previous studies showed that females had a higher productive vocabulary than males (Catalán and Moreno Espinosa 2004; Scheepers 2014; Moyo 2018). However, the discrepancy between the results of MCQ and corpus date could be explained by the fact that there are two types of productive vocabulary can be distinguished: controlled and free types. Controlled productive vocabulary refers to the production of words when they are triggered by a task (Laufer 1998, p. 257), while the free productive vocabulary alludes to the use of words at one's free will (Laufer and Nation 1999). It seems that female participants performed better when the task given to them include a free production task where there is a chance to express oneself and be creative and more room to be free to choose the words more than in the controlled tasks in which tests prompt subjects to produce predetermined target words.

Chapter 6: CONCLUSION

6.1   Overview of the chapter

This is the last Chapter of the present study, and it is arranged as follows: in Section 6.2, a summary of the present study is provided. In Section 6.3, the main findings of the study based on the research questions are presented. Pedagogical implications will be addressed in Section 6.4. The Chapter concludes with Section 6.5 which includes limitations and some suggestions for future research in the study of phrasal verbs in learner language.

6.2   Summary of the study

The present study examines productive and receptive knowledge of PVs among Saudi undergraduates EFL learners of English. It uses a mixed-methods approach to elicit two kinds of data: Firstly, data are drawn from a self-built corpus of written compositions, the Saudi Learners of English Corpus (SLEC), comprising 212,033 tokens (running words and punctuation) and 175,592 running words, or 1,156 documents, produced by 741 Saudi undergraduate EFL students. Secondly, 195 Saudi undergraduates in Saudi universities were asked to complete three MCQ tasks designed to assess their productive and receptive skills, and to measure their PV avoidance behavior. The design of the MC tasks was informed by an analysis of a specially-constructed corpus of Saudi EFL textbooks, and taking into account the most frequent PVs in Liu's (2011) corpus-based study, to maximize the likelihood that students had already been presented with familiar PVs, which they might then either use or avoid. In both cases, the research attempts to trace the influence of the following variables on learners' use or avoidance of PVs: students' proficiency level (beginner vs. lower

intermediate); students' gender (male vs. female); and the semantic type (literal vs. figurative) of the PV in question. In addition, the analysis of the SLEC data investigates the impact of text genre (argumentative vs. narrative vs. descriptive) on learners' use of PVs. Several novel findings that emerged from the present empirical study are summarized herein. Aside from being the first study using a mixed-methods approach to elicit both experimental and corpus data to investigate the use and knowledge of PVs by undergraduate Saudi learners of English in EFL context, the significance of the present study lies in the fact that it is the first large scale corpus-based study to be carried out on the performance of this group of English learners with regard to the PVs usage. Furthermore, the notions of over- and underuse and avoidance as well as the interrelation of possible factors in the quantitative use of PVs (or lack thereof) were also examined. Analysis of the use of PVs was deemed critical as they were reported to be avoided and underused by many learner groups.

6.3 Major findings

Previous research on PVs in Saudi Arabia has mainly focused on avoidance patterns (Ben Duhaish 2008; Abu Jamil 2010; Gandorah 2015). The present study, in the experimental part, combined productive and receptive measures as well as investigating the avoidance of English PVs and addressed a major shortcoming in previous research as discussed in Section 3.5.3 which failed to account for the learners' probable prior knowledge of the PVs tested. The results of this study confirmed the challenging nature of PVs and supported the findings of earlier studies pointing out the difficulty of PVs for English language learners (e.g. Gardner and Davies 2007; Garnier and Schmitt 2015, 2016; Liao and Fukuya 2004; Schmitt and Redwood 2011).

Based on the findings of the present study, a number of conclusions can be drawn with respect to the learners' knowledge and use of PVs. The findings reported in Chapter 4: have shown that, in general, the majority of the participants were able to use the PVs receptively and productively with an average percentage of correct answers of 59% for the productive and 72% for the receptive task and with a mean score for the receptive task marginally higher than the mean score for the productive task (see 4.3.2 and 4.3.3). The participants showed better receptive knowledge than productive use. This is in line with the findings in Ayadi and Abdul Rahman (2014) on Omani learners and El-Dakhs (2016) on Egyptian learners. In addition, productive knowledge involves knowing a lexical item well enough to produce it when it is needed for communication purposes (Schmitt 2010). Productive knowledge has been proved to be more difficult to acquire than receptive knowledge (Nation 2001). Thus, success in productive tests requires a greater depth of knowledge than in receptive tests, which could, in part, explain participants' scores.

However, these results could be considered quite low knowing the way the items under investigation were selected: as noted earlier, the PVs in the present study were selected based on the textbooks used by the students at their elementary, intermediate and secondary schools. In addition, they are all found within the list of 150 most frequently used PVs in Liu's (2011) study, which was based on the BNC and COCA to maximize the likelihood that students had already met the selected PVs, which they might then either use or avoid. Thus, given a research design that maximized the likelihood that participants had been familiar with the items on which they were tested, scores of 72% and 59% correctly answered items on receptive and productive tasks in the current study, might be considered quite low especially when they are compared to the results of the native control group in which they score 100%

in both tests. This raises a serious concern regarding participants' knowledge and use of other PVs in English. Furthermore, it can be concluded that a score of 72% for the receptive task and 59% for the productive is rather weak considering that the participants in this study were undergraduate university students and they were only presented with familiar PVs; those that they have been introduced to in the years of studying English as well as 'high-frequency PVs' as identified by previous research (Gardner and Davies 2007; Liu 2011). In addition, the present study confirmed the observation that Saudi EFL learners tend to avoid the use of PVs (Abu Jamil 2010; Gandorah 2015). The result showed that the Saudi learners used PVs much less frequently than the native speakers, which means that the Saudi learners avoided using PVs and preferred the one-word verbs in (36%) of cases compared to the native speakers 15%. However, they did not display a strong tendency to do so. It is speculated that the reasons behind avoidance could be L1-L2 structural differences (see 5.3.2). As already noted, according to Ayadi (2010), there are two varieties of Arabic known by learners. PVs do not exist in NSA while there are few verbs that take particles in MSA and the meaning of the verb changes with each particle. MSA PVs are considered complex and sometimes difficult for students to understand and consequently difficult to use. Due to the inherent complexity of MSA PVs, or because of the influence of NSA, students tend not to use this form. Therefore, as a result of this structural difference between L1-L2, learners might prefer to avoid using PVs in English. Thus, the findings of the present study support the idea that L1-L2 differences are a good predictor of avoidance in L2.

Moreover, English is a satellite-framed language that expresses path information in satellites to verb roots, such as particles and prepositional phrases, while Arabic is a verb-framed language, which conflates the path information with the motion information

contained in its verb roots (Slobin 2006; Talmy 1975). Looking at the participants' responses, most avoided the PV 'go down', in its literal meaning, with 89.5% of students choosing its equivalent single-word verb; this example suggests that the typological difference between the two languages in their ways of delivering path information could be at play.

In addition, another explanation for the participants' tendency to avoid PVs can be framed in terms of their performance on productive knowledge tasks. As reported earlier, the participants' productive knowledge of PVs was 59%, which could have negatively contributed to their use of PVs in the avoidance task. This observation supports similar findings with Egyptian learners in El-Dakhs (2016).

After assessing the participants' productive and receptive knowledge and use and avoidance of PVs, the effect of a number of factors on this knowledge and use of PVs were assessed. The results indicate that there is a relationship between students' proficiency level and their knowledge and use of PVs (see 5.3.3). They suggest that proficiency has a statistically significant effect on the use of PVs by Saudi EFL learners. The results showed a significant positive relationship between PV knowledge and L2 proficiency as lower intermediate learners scored higher than beginner learners on both receptive and productive PV tests. In addition, the results of the avoidance task which investigated the role of proficiency level in the avoidance of PVs indicated that proficiency level had a significant effect on the preferences of learners in using PVs as there was a statistically significant difference between lower intermediate and beginner students' performance on both types of PV, with lower intermediate students performing better on all counts. This finding is consistent with other studies (e.g. Liao and Fukuya 2004, and Karamudin 2013). This finding could be helpful for teachers who wish to work on increasing awareness among the low

proficiency level learners of the important role of PVs in language learning. Based on these results, it can also be assumed that any knowledge of PVs these learners possess could be a consequence of their learning these PVs in the classroom or outside it, since as the level of students' proficiency increases, the better would be their performance and the less they would avoid PVs. Accordingly, the learners' avoidance of PVs may indicate that they had not been provided with sufficient L2 input of PVs. As a result, the limited amount of their exposure to PVs could be another possible cause of the learners' avoidance of PVs. It has been argued that the quantity and quality of input play a crucial role in the acquisition and use of PVs (Chen 2013; Dagut and Laufer 1985; Sjöholm 1995; Waibel 2007). This is supported by the findings of Aldukhayel (2014) in which he investigated the avoidance of PVs by Arab ESL learners and their length of exposure to the English-speaking environment. The major outcome of his study is that Arabic-speaking learners' avoidance of English PVs is due to their relatively short exposure to the English-speaking environment.

Similarly, as far as semantic nature of PVs is concerned, the findings further indicate that participants performed better on literal PVs than on figurative PVs on both tasks (see 5.3.3.2). Furthermore, the semantic transparency of the PVs was found to be one of the influencing factors in learners' choice to avoid using PVs. The results show that there was a statistically significant difference between lower intermediate and beginner students' performance on both types of tasks and for both types of PV, with lower intermediate students performing better on all counts. In addition, these results also suggest that semantic factors play a key factor in students' preference for one-word verbs. These results show that students have a better use and knowledge of literal PVs than the figurative ones, both productively and receptively, and that literal PVs present less difficulty to learners. Thus, the difficulty

presented by figurative PVs in contrast with literal PVs for Saudi learners could be due to the semantic nature of PVs, since the meaning of figurative PVs is not derived from the meaning of their individual components, this idiomatic meaning made learners confused and caused difficulties associating their meanings with their forms (Quirk et al. 1985).

When it comes to gender, the results of receptive, productive and avoidance tasks indicated that the difference was not significant, and for these participants at least, gender did not appear to be a factor in their knowledge of PVs, as there was not a statistically significant difference between male and female students' performance on these tasks. These findings align with those of Schmitt and Redwood (2011), who reported that gender has no influence on learner performance in the use of PVs.

Regarding the corpus data, it seems that Saudi EFL students are not hesitant to use PV constructions despite the claim that non-native learners prefer to use one-word verbs over PVs. The analysis yielded a total of 726 instances (tokens) of PVs of the 93 PV types found across the SLEC and distributed over the three genres in the corpus. However, the results indicate that the learners in question produced, on average, one PV construction in approximately every 241 words of text. This result that is a little over half of the estimates presented by Gardner and Davies' (2007) regarding the presence of PVs in the BNC in which PVs occur once, on average, in every 150 words. Moreover, the log-likelihood test showed that the difference between the frequency of PVs in SLEC and the frequency of PVs in BNC is statistically significant. In addition, PVs make up only 0.83% of the total number of words in the corpus from which it can be concluded that English PVs are not frequent in this sample of the language of Saudi learners. The five most common PVs make up 60%, and the 20 most common 83%, of all PV tokens, from which it can be concluded that PVs are not evenly

represented. The results also show that approximately 41 PVs out of 93 PV types are hapaxes. It can thus be concluded that, overall, Saudi learners underused PVs in comparison to their native speaker counterparts to a great extent. In addition, these results suggest that the learners produced PVs less frequently than native speakers might be expected to in their essays, which is a pattern found in previous studies showing that L2 learners generally underuse or avoid PVs (Dagut and Laufer 1985; Waibel 2007; Wierszycka 2015). Furthermore, the results have revealed that the learners used 58 verb types, which were combined with 14 different particles to form PVs. Native speakers used, as reported by Waibel (2007: 96), 222 different verb types, combined with 24 particles suggesting that native speakers made use of almost four times more verb types as the verbal basis in forming PV and twice more particle types compared to the learner group. Considering the overall lower number of PVs in the learner corpus, the remarkable difference in the overall frequency of verb types and particle types in these constructions between the native speakers in Waible study and Saudi learners was thus not entirely unexpected.

Moreover, the results revealed that out of 150 PVs in the list based on Liu (2011), 54 PVs were found in SLEC. This means that 36% of the PVs (types) found across SLEC are among the top 150 in Liu's (2011) list. However, 19 out of these PVs were used only once and 10 PVs only twice. This means that 85 PVs listed by Liu are not attested at all in the learners' compositions in SLEC suggesting that learners may have a serious disadvantage of communicative skills. This might be attributed to that learners have been introduced to out-of-date, non-corpus-based teaching materials. However, it should be taken into consideration the range of possible text genres present in the BNC and COCA contrasted with the only three genres used in SLEC, an issue that may have had an influence on the types of PVs used.

This is in line with the common hypothesis about PVs in non-native writings. Given the complexities of their syntactic and semantic features, PVs are assumed to have fewer occurrences in learner language.

In addition, the results from the analysis of lexical verbs correspond to the findings from Biber et al. (1999: 413) in that the high-frequency verbs 'take', 'get', 'put', 'come', and 'go' are particularly productive in forming PVs. There is considerable similarity in the lexical verbs used by the learners and those in Biber et al. study, especially with regard to the most productive verbs: The most productive verbs used in the formation of PVs in SLEC are 'get', 'go', 'come', and 'take'.

Regarding particles and their productivity in forming PVs, the most frequent particle used by the learners is 'up' with 341 instances. This finding was not unexpected since the productivity of the particle 'up' has long been noted in the literature (e.g. Bolinger 1971; Biber et al. 1999; Gardner and Davies' 2007). Following 'up' is the particle 'back' in SLEC with 147 instances and 'out' with 126 instances. The high frequency of 'up' and 'out' could be explained by the fact that they are more likely to behave as particles than any other grammatical forms, namely, prepositions (Dehé 2002; Gardner and Davies 2007) in addition to their multiple meanings both concrete and abstract which help them to take place next to many different lexical verbs to convey a broad range of meanings. (González 2010; Lindstromberg 2010).

In terms of PVs, the verbs 'wake up', 'come back', 'get up', 'go out' and 'go back' were overwhelmingly more frequent than the rest of PVs in SLEC. With the exception of 'wake up' and 'get up', these verbs usually rank among the ten most frequent PVs L1 English

as previous research has shown (Gardner and Davies 2007; Liu 2011), and they also appear to be very frequently used by L2 speakers (Märzinger 2013). One of the reasons why these PVs more frequent could be related to the fact they lexical verbs 'come' and 'go' which are highly frequent lexical verbs (Altenberg and Granger 2001; Leech et al. 2001; Gouverneur 2008). This fact could make them salient and more likely to be learned than non-salient, less frequent lexical verbs (Ellis 2006). Moreover, Kaszubski (2000) believes that L2 learners tend to overuse those verbs. Another explanation for the high frequency of these PVs could be motivated by the topics used to collect the data. The texts produced by learners in the SLEC corpus are controlled by the topics given to them. This may have restricted learners' selection of lexical items and increase their tendency to produce certain lexical items commonly associated with the given topics. Furthermore, another possible explanation for the high frequency of these PVs could be a semantic one as these PVs tend to be literal in meaning than other PVs (e.g. give up), which could make them easier to be used by L2 learners. It could also be due to the fact that the proficiency level of students is low relatively (beginner and lower intermediate), and it is difficult for them to write and use academic writing style.

In addition, the results show that there is a positive link between the learners' use of PVs and their language proficiency. The results show that lower intermediates produced more PV tokens (407 of the total of 726 tokens) than beginners who used 319 PV tokens. These results were consistent with those found in an important body of evidence mainly coming from elicitation studies which has shown that L2 proficiency was indeed a key factor in the use of PVs and that higher proficiency correlated with higher PVs frequency (e.g. Dagut and Laufer 1985; Yorio 1989; Liao and Fukuya 2004; Siyanova and Schmitt 2007).

Furthermore, the results indicate that the use of literal PVs was higher than the figurative PVs, suggesting that figurative PVs are more difficult for learners to use, contrary to literal PVs, which are very frequently transparent in meaning, as both elements in the PV combination retain their regular meanings, and, thus, are less difficult to use. These data reinforce the hypothesis that learners have difficulties with producing figurative PVs. In fact, closer examination of learners' actual use of PVs in the SLEC corpus further confirms that learners seem to be able to use many literal PVs appropriately in contrast with the figurative ones (see 4.2.3, and 5.2.1). This finding is in fact similar to those found in Dagut and Laufer (1985), Hulstijn and Marchena (1989), and Liao and Fukuya (2004) who also reported that figurative PVs are more difficult for language learners than literal ones. However, while these studies were entirely based on test results, this study integrated both MCQ and corpus analysis in order to obtain more comprehensive findings. While MCQ provide us with general information in relation to learners' knowledge and use of some very frequent PVs, the use of corpus analysis further reveals the learners' actual use of this language form.

In addition to language proficiency level and semantic nature of PVs, it was found that text genre is another important factor that can influence the learners' level of PVs use (see 5.2.3). The three genres included in this study are argumentative, narrative, and descriptive. More than the half of the 726 PVs (438, or 60.33%) fall into the descriptive section. The argumentative texts are those in which Saudi learners used the PV structure least frequently, in fact only 73 (10.04%) of all PVs were found among this genre. The remaining 215 (29.57%) items appear among the narrative texts. Regarding the relative frequency of the PVs that were used, the results show that the relative frequency of PVs used in descriptive is higher than the other two genres, followed by narrative and argumentative (5.68, 3.43 and

1.02 per 1000 words). The results revealed that the three text genres differed significantly in their productions of PVs which suggests that the genre factor has a great influence on PV frequency. Moreover, the most frequent PV across the corpus was found to be topic dependent and used for the description of personal experiences and activities in daily life. The majority of literal and figurative PVs were used in the descriptive writings, followed by narrative and argumentative. The preference for literal PVs is probably a consequence of genre, as SLEC contains descriptive texts in which literal uses of PVs are likely to be frequent. This finding could support the claim that topic sensitivity and genre dependency influence learners' choices of PVs (Celce-Murcia and Larsen-Freeman 1999; Hinkel 2009).

In terms of gender, the results show that females produced more PV tokens than males as 436 (60%) of all the PV tokens found in the corpus (726) have been utilized by the females, while males have used 290 PVs (40%). With regard to the relative frequency of the PVs that were used, the results shows that the relative frequency of PVs produced by females is higher than the males (4.00 vs. 2.82 per 1000 words). The log-likelihood test demonstrated that the difference is statistically significant and %DIFF suggests that the PVs have 42.40% higher frequency in females compared to males suggesting that the differences in scores were statistically significant, and that there is significant relationship between the gender variable and the students' overall performance on the PVs. As already indicated, the discrepancy between the results of MCQ and corpus date could be explained by the fact that there are two types of productive vocabulary can be distinguished: controlled and free types. It seems that female participants performed better when the task given to them include a free production task where there is a chance to express oneself and be creative and have more freedom to

choose the words more than in the controlled tasks in which tests prompt subjects to produce predetermined target words.

As for the qualitative analysis, there were instances of PVs extracted from the learner corpus which include deviations from the target norm. The way learners used the PVs demonstrates a noticeable departure from the norms used by native speakers to a great extent. A particularly important finding which could be possible contributing factors to the inappropriate use of these PVs is most often related to the influence of learners' L1 (Arabic). In addition, there is a lack of lexical knowledge as well as a lack of awareness of the regular patterns of PVs of learners (e.g., common collocates), which would be other possible factors. Given the earlier mentioned fact that Arabic has no PV structure, the influence of L1 has considerable impact on learners' performance. The L1 interference was noticeable in the form of underuse of these verb types, as well as wrong choice or omission of the particle. The use of PVs in inappropriate contexts were also found. The data suggests that the Saudi learner investigated have problems with the use of these verb types. Some deviations have been found in the data such as redundant uses of particles with one word verb, preference of using some verbs in combination with a particle in which the use of a simple verb would be more appropriate to use, formation of a new PVs, syntactical problems such as the confusion between the use of transitive and intransitive PVs. While these unnatural combinations did not always prevent the reader from understanding the intended meaning, they did contribute to a lack of nativeness by giving the reader the impression that the language is not being used in the context in which it should be. Moreover, lack collocational knowledge of the Saudi learners left the learners no choice but to combine verbs with inappropriate particles for

instance to communicate the intended meaning relying on the translational equivalents of L1 expressions and grammatical patterns.

6.4 Pedagogical implications

Despite the fact that previous studies did not take the same care to maximize the probability that students had been introduced to the target structures before assessing their productive or receptive knowledge, the results of the current study generally support the findings of previous studies, in pointing up the difficulty presented by PVs for English language learners (e.g. Gardner and Davies 2007; Garnier and Schmitt 2015, 2016; Liao and Fukuya 2004; Schmitt and Redwood 2011). This finding implies that PVs deserve to be given special attention in language classrooms as the results show learners under investigation face difficulty in using and producing PVs. Teachers also have an important part to play in making learners aware of the PV phenomenon and its importance.

A number of reasons have been identified that may contribute to underuse and avoidance of PVs by Saudi learners of English. One of these reasons could be the lack of PVs in the learners' first language (Arabic). Accordingly, special attention should be given in order to prevent learners transferring and copying their L1 structure into the L2 and to help them acquire new constructional knowledge of PVs (Goldberg 2016). Instead of teaching PVs along with one-word synonyms, as shown in the example in Figure 5.1, which may lead to learners ignoring the significant characteristics of particles as satellites and may increase the possibility of their transferring the verb-framed properties of Arabic to their production in English, teachers and material desginers should be aware that PVs deserve greater attention in language classrooms and emphasize the point that PVs are characteristic of English as a

satellite-framed language (Waibel 2007). It is also suggested that, if providing one-word synonyms, teachers should do so with giving clear examples to help learners understand that they should not use these one-word synonyms as an exact replacement for PVs, as they are not used in precisely the same way in terms of context of use or register.

The strong L1 interference found in the data indicates the need to underline the lexical differences between learners' L1 and L2. By relying on the L1 patterns and translational equivalents, learners in order to express their intended meaning sometimes produce questionable and deviant word combinations. Teachers who share the same L1 as their students can use this common knowledge to anticipate potentially problematic PVs very early in the learning process, to draw learners' attention to the distinction between the L1 and L2 word combinations by using a contrastive approach to vocabulary teaching. According to Yamashita and Jiang (2010) using this approach would help decrease the interference of L1 (p. 663). This approach has been found to be more effective compared to vocabulary teaching methods that ignore the crosslinguistic differences (e.g. Laufer and Girsai 2008).

Additionally, there are also several PVs that could be replaced by a single verb in the learners' L1 which can influence the learners' use and knowledge of such PVs. Thus, it is suggested that teachers should take into account learners' L1 (Arabic) by explaining the meanings of PVs in both Arabic and English to help learners learn and use PVs better. Giving a clear explanation of the syntactic similarities and differences of both L1 and L2 could increase the learners' awareness of that fact that they cannot simply follow their Arabic structure and produce similar forms in English, which has different structure.

Furthermore, the results confirm that learners face more difficulties in their use and knowledge of figurative PVs than literal ones. In addition, the frequency analysis conducted further confirmed this. Thus, teachers could pay more attention to figurative PVs, focusing on those that are highly frequent in English, as they are more useful for learners in their writings and communication. As the meaning of these figurative PVs cannot be understood simply by knowing the meaning of the individual elements in the PV combination, it is a difficult task for teachers to make learners aware of how the meanings of these figurative PVs are deduced. Therefore, when teaching students vocabulary, teachers should assist them in learning the word's aspects which include its written form, spoken form, grammatical behavior, collocational behavior, frequency, conceptual meaning, stylistic register, and association with related words. Learners at the advanced level should give special attention to mastering the contextual use of polysemous PVs, as indicated by Siyanova and Schmitt (2007). Moreover, it might be helpful as well to introduce new meanings to the PVs forms that students already know to broaden their PV repertoire. Given that PVs are frequently polysemous, learning a different meaning of one is essentially the same as learning a new verb. In the current study, Saudi EFL students tend to use the literal meanings of PVs more often. It would be very helpful if more figurative usages of PVs were introduced in teaching.

Moreover, the results of this study indicate that language proficiency level is another important factor that can influence the learners' use of PVs. Teachers may find this information helpful as they prepare for lessons because they may want to concentrate on different PV input and utilize various methods in teaching this language form to learners of different proficiency levels. In addition, the results of this study indicate that the Saudi EFL learners' underuse and avoidance of PVs is due to their limited exposure to PVs as Saudi

learners with lower intermediate proficiency levels showed higher levels of productive and receptive knowledge of PVs than beginner learners. As discussed in Chapter 1, in Saudi Arabia, English classrooms are the primary source of input in the EFL context. However, classroom time is limited. Although the best method of teaching PVs is unknown, there is no reason to believe that the few fundamental rules that apply to single words and other formulaic sequences do not also apply to them. Repetition and recycling, for instance, are thought to be essential when learning new words (Nation 2013). Thus, it is the role of the EFL teachers to focus on providing learners with greater exposure to PVs by promoting other forms of exposure. For example, by providing them with a variety of authentic language, contextualized examples of these verbs. Learners may find this type of instruction more interesting, and it may help them perceive the frequent use of PVs in natural environments in English. Teachers could also encourage learners strongly to engage in activities such as reading, watching films and social networking in English. However, mere exposure to PVs is not enough to improve the learners' performance in their use (e.g. Nesselhauf 2005; Waibel 2007; Granger 1998). Moreover, the repeated exposure of a word does not ensure memory, let alone its production or appropriate use. Thus, explicit teaching and focused and repeated practice with respect to PVs could be useful to improve the learners' understanding and use of PVs rather than trying to teach them incidentally alone which is far less effective than explicit teaching (Nation 2013). Teaching PVs explicitly, focusing on all their components, meaning(s) and usage patterns, is believed to be necessary to improve error-free production of L2 learners (see Nesselhauf 2005: 269). Teachers should, therefore, teach high frequency PVs more explicitly in the language classroom. For example, many studies have confirmed the benefits of employing conceptual metaphors frameworks when they are explicitly taught

on students' understanding and retention of PVs meanings (e.g. White 2012; Neagu 2007; Yasuda 2010). L2 learners will not employ the words for which they have receptive knowledge in their writing unless they receive focused and repeated practice with those words (Snellings, Van Gelderen and De Gloper 2004). Additionally, learning is not a passive process and requires active coding during the learning process (Reisberg 2013). Therefore, exercises created to assist the learning of new PVs should not be created in a mechanical fashion way but in a way to trigger deep processing. Since deeper processing promotes better recall, they must encourage students to consider the verbs in terms of their meaning, analyze their components, and relate them to words and collocates they already know. This can be done, for example, by applying of corpus analysis methods in the classroom (i.e. Data-driven-learning (DDL)) which allows deep processing by means of exploration of language structures and motivates learners to discover the target language by self-driven research interests or questions. It has been argued that DDL is particularly well suited for teaching multi-word unit usage aspects to boost student consciousness, thus helping learners to perceive and internalize repeating patterns and meanings (e.g. Meunier 2002: 130; Xiao and McEnery 2006: 126).

Furthermore, there are so many PVs in English that it would be hard if not impossible to teach them all. Textbook designers, therefore, as well as teachers, especially in the Saudi context, should have very clear guidelines and adopt a more principled approach when it comes to selecting PVs to present to learners in their textbooks. The results of the study indicate that many high frequency PVs are underused and avoided by learners. Therefore, textbook writers in Saudi Arabia should consider emphasizing the importance and usefulness of corpus tools in their selection process of what needs to be taught to learners first and what

should be introduced at a later stage. For instance, they could make use of the PHaVE List and include a varied selection of exercises and assessment activities based on this list. Gardner and Davies' (2007) and Liu's (2011) lists of the 150 most frequent PVs might also be a very useful guide for teachers and textbook writers in their selection of suitable PVs for learners. They should be introduced before other PVs that are less frequently used in the real world. In addition, textbook writers should also consider the inclusion of PVs with a wider range of distribution and used in various text types (academic vs. non-academic, formal vs. informal) as they are more useful for learners than those that have very restricted usage. Teachers also should have access to different patterns and meanings of these PVs with the help of the concordance lines provided by online corpora such as BNC and COCA corpora.

Moreover, the results of the corpus data indicated that there is a relationship between learners' gender and their use of PVs (see 5.2.3.4). As far as gender and language learning is concerned, some previous studies showed that females are the ones who had a higher productive vocabulary than males (Jiménez Catalán and Moreno Espinosa 2004; Scheepers 2014; Moyo 2018). In addition, some previous studies found that female university students were reported to use more language learning strategies than males (Montero-SaizAja 2022; Oflaz 2019; Pawlak 2013). Because of this, female learners display a marginally better use of several facets of the target language, including PVs. This may be related to how well they perform overall in the target language. This finding is perhaps useful for teachers who could use this study to raise awareness of the critical function of PVs in language learning, particularly among male students. Additionally, teachers may use the best teaching methods they believe will aid this group of students in learning PVs more effectively.

Finally, it can be difficult for language practitioners and teachers to choose an appropriate approach to the teaching of PVs to L2 learners (Schmitt and Redwood, 2011). There are many ideas in the literature for teaching PVs to L2 users (e.g. Side 1990; Darwin and Gray 1999; Dirven 2001; Kurtyka 2001; Armstrong 2004; Condon 2008; Yasuda 2010; White 2012; Torres-Martínez 2015; Ke 2017). Given that no single approach is suitable for all teaching contexts, having such a broad range of possibilities is good, but it may make the selection process more challenging. It is crucial for teachers to first comprehend the extent to which individual factors such as, L2 proficiency, gender and L1 background, may impact their students' learning of PVs before determining which approach to apply. The results of the current study can help with this knowledge and can be used to guide the choice of the PV teaching approach that best suits L2 students' needs.

6.5 Contributions, limitations of the present study and suggestions for further research

This study was born out of the need to fill the gap in the literature on the use of phrasal verbs by Saudi EFL learners of English. The present study thus sheds the light on the use of PVs among a new population exploring the nature of the learners' receptive/productive knowledge and use in addition to their employment of the avoidance strategy, as well as the effect of their proficiency level, gender, text types and the semantic nature of PVs on the use of PVs. This study aims to fill the gap in this area, as well as to overcome a methodological shortcoming in previous studies investigating avoidance behavior and it relies on a mixed-methods approach to get more comprehensive results. In addition, this thesis is one of the few studies that explores Saudi learners authentic writing using corpus tool. Moreover, to the best of my knowledge, there is no corpus-based study of use and under-use of PVs conducted

in Saudi context. Therefore, this study is notable for using corpus data to attempt to reveal an overall and characteristic profile of PV usage by Saudi EFL learners of English in written register in a comparative fashion. Thus, one of the goals of this study is to identify the most frequently used PVs by Saudi EFL learners in their written productions using corpus analysis and to reveal any possible overuse and/or underuse, and to compare the frequency results of PVs as well as their usage to find whether the most frequently used PVs in these EFL learners' productions are parallel with those by native speakers of English in written register. It provides a comprehensive insight into Saudi learners' use of PVs, yet it is limited in some ways. Despite the important and useful findings obtained in the present study, there are some limitations that should be addressed.

First, the study is concerned with a fairly homogeneous group: All are Saudi EFL learners and university students, of similar ages, with the same L1 (Arabic), who have never spent time in an English-speaking country. For this reason, it is difficult to generalize the results to a wide population of English learners. Therefore, the conclusions drawn from this study cannot be carried over to Saudi ESL learners or any other group of learners with different characteristics and language backgrounds. In addition, they also represent learners in the western region of Saudi Arabia, and, therefore, the results cannot be generalized to all learners in Saudi Arabia although such learners are following the same education system and using the exact same textbooks. Hence, it is suggested that future studies should consider involving both groups of learners (ESL and EFL) and comparison could be carried out with other regions of Saudi Arabia to confirm the assumptions with respect to the issue under investigation.

Second, due to time constraints, the study's results were obtained from only one type of test (a multiple-choice test). Thus, I suggest that carrying out a study applying other tests such as translation, and story-retell tasks to measure learners' use, knowledge and avoidance of PVs would be of great value. It could be useful as well to investigate the influence of task type on PV use and avoidance. In addition, as far as the PV test is concerned, future researchers may also focus on other high frequency PVs, which are not examined in the present study.

Third, it would be useful to investigate students' use and avoidance of PVs at different levels of proficiency (e.g upper intermediate, advanced) following similar approaches to better understand the impact of proficiency level on PV knowledge and avoidance.

Fourth, with respect to the corpus (SLEC), a variable which needs improvement is the size of the corpus; although it is still acceptable for the purpose of the present study, a larger corpus would allow us to have even more confidence in our results. Having a larger corpus would also offer great advantages for future researchers as it would provide much richer data, allowing researchers to examine many other language elements. This limitation could not be avoided since expanding the corpus would require more time and more students' writings than could be gathered for the current research due to time restrictions as this study was conducted as a part of a PhD program. Future work could focus on enlarging the size of the corpus by adding more writing of different proficiency levels and different texts genres in different settings, as well as adding a spoken part to the corpus. Adding a spoken part to the corpus will be generally good enough to provide more useful insights into the use of PVs produced by Saudi learners of English as it is generally assumed that PVs are mainly used in spoken rather than written discourse (Biber et al. 1999). In addition, the texts produced by

learners are controlled by the topics given to them, which may have put some restrictions on the learners' selection of lexical items by increasing their tendency to use certain lexical items commonly associated with the given topics. Thus, future research may also consider providing learners with a wider range of topics.

However, despite all the limitations mentioned above, the results of the tests and corpus analysis have given us many important and useful findings regarding the productive and receptive use of PVs among Saudi learners of English as a Foreign Language, and the study presented here remains the largest empirical study conducted to date on this phenomenon, to my knowledge, as well as the one in which the selection of test items was best motivated.

It is hoped that the findings of the present study will be useful for teachers, syllabus designers, textbooks developers, as well as learners concerning issues related to PVs use in order to help learners learn and use PVs appropriately, and, most importantly, to gain fluency in English, which is the aim of the Ministry of Education in Saudi Arabia, and, undoubtedly, the goal of most English learners.

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