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Weighing up the Effect of Contextual Cues in Learning English Phrasal Verbs: Is Context the Answer to Avoidance?

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| ABSTRACT

Research on English phrasal verbs indicates that these lexical units are problematic and hence difficult to deal with by EFL learners. Thus, one common strategy learners use when encountering phrasal verbs is avoidance: i.e. simply to avoid decoding them in spoken or written content as well as avoid using them in their own speech or writing. This study examines whether contextual cues, i.e. written or spoken context surrounding phrasal verbs, could be of any help to EFL learners in dealing with such lexical units both in receptive and productive tasks. A total of 60 English majors at King Abdulaziz University sat at two separate testing sessions in which they were tested on their recognition as well as recall of 30 preselected unknown English phrasal verbs. Using a between-groups design, the subjects were randomly allocated to three intact groups based on the amount of phrasal verb contextual cues they were exposed to during the first testing session: no contextual cues (control group), sentential-level cues (treatment group 1), and paragraph-level cues (treatment group 2). A receptive multiple-choice test on the target phrasal verbs was conducted during the first session followed by a productive fill-in-the-blank cloze test on the second session. The results of one-way between-groups ANOVA indicate that the paragraph-level cues group outperformed both the no contextual cues group as well as the sentential-level cues one on the receptive measure. However, none of the three groups exhibited any significant differences in their performance on the productive measure. These findings emphasize the role of contextual cues in decoding English phrasal verbs in the receptive mode (i.e. during listening or reading tasks) but call for exploring alternative routes to contextual cues in aiding EFL learners' use of these lexical units in the productive mode (i.e. during speech or writing tasks).

| KEYWORDS

Phrasal verbs, contextual cues, receptive knowledge, productive knowledge

1. Introduction

Formulaic sequences, i.e. multiword constructions composed of a fixed sequence of words, often pose learning difficulties for many L2 learners of English. These multiword units are "lexical items which consist of more than one 'word' and have some kind of unitary semantic or pragmatic function" (Moon, 2015, p. 120). Knowledge and mastery of multiword items are key to attaining native-like fluency in a second language (Folse, 2004; Jacobsen, 2013; Wood, 2004). Phrasal verbs are one form of multiword constructions in English and hence, similar to other multiword items,   learning them is a daunting task for L2 English learners (Alangari, Jaworska, & Laws, 2020). According to the Longman Dictionary of Contemporary English (1992, p. 771), a phrasal verb is "a group of words that acts like a verb and usually consists of a verb with an adverb and/or a preposition". As such, a phrasal verb is essentially a multiword construction that constitutes a combination of a main verb succeeded by one particle or more (either a preposition or an adverb or both) functioning together syntactically and semantically as one unit (Koprowski, 2005; Saari, 2018). Unlike regular one-word verb forms, phrasal verbs are less intelligible both in terms of their meanings as well as syntactic structure.

The significance of phrasal verbs in English is well-recognized by EFL researchers and practitioners. First, phrasal verbs represent "an important component of native-like spoken discourse" and avoidance of using them by non-native speakers of English and/or replacing them with equivalent more formal one-word synonyms may render them sound peculiar to native speakers (Siyanova & Schmitt, 2007, p. 121). Similarly, Rodríguez-Puente (2012) stresses the status of phrasal verbs within the English language noting that their use represents one marker of proficiency as well as fluency for native and non-native speakers alike. Moreover, the large amount of phrasal verbs in English is one indicator of their significance within the language (Cornell, 1985). In this regard, McArthur (1989) provides one estimate of English phrasal verbs noting that they amount to 3000 at minimum with at least 700 of these being used in everyday communication. Riguel (2014) provides another estimate noting that phrasal verbs occupy a third of the English verb lexicon. As such, it is no wonder then that Bolinger (1971) once regarded phrasal verbs as "an outpouring of lexical creativeness that surpasses anything else in our language" (p. xi).

Despite their significance in the language, English phrasal verbs, as noted earlier, tend to be avoided by L2 learners of English and replaced by single-word equivalences when available (Siyanova & Schmitt, 2007). This is simply due to phrasal verbs being "notoriously difficult for non-native speakers to acquire" (Gardner & Davies, 2007, p. 2). This learning difficulty in turn arises from the complex nature in which English phrasal verbs operate. Blau, Gonzales, & Green (1983) note that the problematicity of phrasal verbs stems from two linguistic aspects: semantic along with syntactic. The semantic complexity of phrasal verbs stems from both the idiomatic disposition of some phrasal verbs as well as the polysemous nature of others (Riguel, 2014). The syntactic complexity, in turn, is well summed up by Larsen-Freeman (2001) who notes that comprehension of phrasal verbs requires collective knowledge of three components: 1. the type of particle that goes with the head verb (i.e. preposition or adverb); 2. phrasal verb transitivity (i.e. whether it takes an object or not); and 3. phrasal verb separability (i.e. whether the head verb and the particle can be set apart from each other by an object). Indeed, it is this syntactic complexity of English phrasal verb structures that may have tempted Darwin and Gray (1999) to assert that "the phrasal verb is a syntactic oddity in the language world" (p. 65). Adding to the semantic and syntactic intricacy of English phrasal verbs, their unfamiliarity to many L2 learners of English whose L1 backgrounds differ from that of English aggravates their complexity. This unacquaintance is due to the inability of L2 English learners learning in their native foreign countries to pick up the figurative extension which some phrasal verbs possess as they are not subjected to the same lifelong cultural and sociological experiences native speakers go through (Tyler & Evans, 2001).

With this complex nature of phrasal verbs in mind, coupled with L2 learners of English common tendency to avoid using them, the need arises to find suitable ways for teaching and learning them. In this relevance, Armstrong (2004) stresses the need for teaching English phrasal verbs to enhance L2 learners' conscious access to these verb constructions as well as their skill in producing them. However, phrasal verbs have proven to be extremely arbitrary to the extent that no suitable ways for teaching them have yet been proposed (Schmitt, 2001). Notwithstanding their arbitrary nature, Mitchel (2018), amongst other scholars, suggested that context may be a good facilitator for learning phrasal verbs. To our knowledge, however, no prior study ever examined the contribution of context in learning English phrasal verbs. Hence, this study comes to address this perceived gap within the phrasal verbs' literature by empirically examining whether contextual cues surrounding phrasal verbs can provide any assistance for L2 learners of English in decoding the interpretation of such verbs when running into them. In specific, it examines the contribution of contextual cues on both the receptive recognition as well as the productive recall of English phrasal verbs.

2. Literature Review
2.1 Phrasal verbs
In general terms, a phrasal verb is a multiword language construction. It is a verb that is composed of two or more words, hence the resemblance to idioms (Teng, 2020). As Quirk et al. (1985, p. 1150) state, phrasal verbs are two-component verbs composed of a verb succeeded by an adverbial particle which "behaves to some extent either lexically or syntactically as a single verb". As to its meaning, a phrasal verb construction commences with a primary verb succeeded by one particle or more constituting a structure in which the total meaning is not often deducible via the collective meaning of its composing parts (Dixon, 1982; Siyanova & Schmitt, 2007). Thus, a phrasal verb ends with an adverbial particle such as "back, up, down, round, around, away, at, about, for, in, into, off, on, out, over, through, to" (McCarthy & O'Dell, 2004, p. 9). In way of categorization, McCarthy and O'Dell (2007) distinguish three types of constructions phrasal verbs may come in: prepositional phrasal verbs (end in a preposition; e.g. figure out), particle phrasal verbs (end in a particle; e.g. take off) and preposition-particle phrasal verbs (end in a combination of both a preposition and a particle; e.g. look forward to).

Phrasal verbs are very prevalent in English (Garnier & Schmitt, 2015; Strong & Boers, 2019a; Thyab, 2019). Due to this prevalence (mainly in spoken English), phrasal verbs are now gaining significant attention (Omidian, Akbary, & Shahriari, 2019). One estimate of their ubiquity within English predicts that learners would encounter during exposure to written or spoken content at least one phrasal verb within each block of 150 English words (Gardner & Davies, 2007). In terms of their exact number within the language, McCarthy & O'Dell (2004) note that this number nowadays exceeds 5000. Given this ubiquity in the language, they stress that "there is a need to focus on phrasal verbs in English" (McCarthy & O'Dell, 2004, p. 6). As to usage formality, phrasal verbs are seen as mainly colloquial and are thus acknowledged to be a distinctive feature of informal speech (Akbary, Shahriari, & Fatemi, 2018; Altenberg, 1998). In acknowledgment of their status in English, Cornell (1985) draws attention to the numerous dedicated phrasal verb dictionaries at learners' disposal nowadays noting that plenty of English phrasal verbs are now even incorporated within most regular learner dictionaries with separate entries allocated to them.

2.2 Problems and difficulties in learning English phrasal verbs

It is widely acknowledged that phrasal verbs are an extremely problematical component of English for EFL learners to acquire (e.g. Alangari, Jaworska, & Laws, 2020; Condon, 2008; Garnier & Schmitt, 2016; Granger, 1998; Liao & Fukuya, 2004; Side, 1990). This is evident during both receptive comprehension (i.e. while listening and reading) as well as productive recall (i.e. while speaking and writing). For this reason, dedicated instructional sections on phrasal verbs are incorporated within most EFL coursebooks (Strong & Boers, 2019a) with some language learning resources and textbooks even fully allocated to these verb constructions (e.g. McCarthy & O'Dell, 2004).

The difficulties in learning phrasal verbs arise from a number of characteristics seemingly inherent in these lexical units. First, the semantic structure of phrasal verbs is distinctively complex (Laufer & Eliasson, 1993) with some being semantically vague altogether and others being polysemous (i.e. having more than one possible meaning). Phrasal verbs as such exist in a continuum of semantic clarity with the meaning of some phrasal verbs being deducible through their composing parts while others with a fixed idiomatic nature are not (Siyanova & Schmitt, 2007). In other words, using semantic terms, whereas some phrasal verbs are compositional (i.e. their denotation is the composite meaning of the parts they constitute), others are non-compositional (i.e. their interpretation is rather fixed). For instance, as examples for this latter group of idiomatic fixed phrasal verbs, one cannot explain via their constituent words why the phrasal verbs 'carry on', 'break up', and 'put up with' should mean 'continue', 'end a romantic relationship', and 'tolerate' respectively (Strong & Boers, 2019a, 2019b).

However, in terms of which constituent (i.e. verb vs. particle) is more meaningful in a phrasal verb, "often the verb appears the better clue for an approximate interpretation of a phrasal verb (e.g., *drink* seems a stronger clue than *up* to interpret *drink up*)" and "consequently, learners may pay more attention to the verb than to the particle" (Strong & Boers, 2019a, p. 291). Nevertheless, one should differentiate between the meaning contribution of particles when analyzing the meaning of a given phrasal verb as opposed to their contribution when comparing phrasal verbs that have the same head verb. As such, although the contribution of a particle to the ultimate meaning of a phrasal verb (i.e. within phrasal verb contribution) is tiny, a particle may change the entire meaning of a phrasal verb when it replaces its accompanying particle (i.e. across phrasal verbs contribution) (e.g. whereas *bring up* means 'raise a child', *bring in* means 'introduce').

As to polysemous phrasal verbs, although these are less complex than fixed idiomatic phrasal verbs as their meanings are compositional and as such somehow deducible from the phrasal verb constituent parts, the numerous meanings they take on still pose a challenge when learning them. In this regard, Gardner and Davies (2007) stressed the polysemy of phrasal verbs as they counted 559 different meanings for the list of one hundred most common phrasal verbs within the British National Corpus (BNC) with 5.6 different senses per a single phrasal verb on average. The phrasal verb 'make up', for instance, has multiple senses as in *make up the difference, make it up to someone, make up a story, make up for something, make up after an argument, make up a bed*, and *make up one's face* (Strong & Boers, 2019a). As such, when learning phrasal verbs with a polysemous nature, "learners face the task of distinguishing between numerous form-meaning correspondences" (Strong & Boers, 2019b, p. 562). Following from this finding, L2 learners should receive adequate exposure to the various senses of the phrasal verbs within the BNC list for them to attain proper knowledge of these phrasal verbs (Omidian, Akbary, & Shahriari, 2019).

Another facet of the hardship of learning English phrasal verbs which L2 learners have to deal with lies in their syntactic structures. This syntactic difficulty, in turn, has two sides: phrasal verb transitiveness (i.e. object requirement) as well as phrasal verb separability (i.e. verb and particle adjacency). As to transitiveness, a phrasal verb could either be transitive (i.e. must take on an object) (e.g. *let down* my teammates) or intransitive (i.e. prohibited to take on an object) (e.g. my car *broke down*). In terms of phrasal verb

separability, L2 English learners need to identify when the particle and verb comprising the phrasal verb are amenable to being separated from each other by the object (Strong & Boers, 2019a). Separability, as such, is a phrasal verb feature that is only pertinent to transitive verbs. Whereas separable phrasal verbs allow for verb and particle separation by inserting the object in between them (e.g. *take off* my jacket or *take* my jacket *off*), inseparable phrasal verbs prohibit such separation (e.g. *go over* the exam but NOT *go* the exam *over**). Furthermore, as to separable phrasal verbs, separation is obligatory when a pronoun functions as the object (e.g. *let them* down but NOT *let down* them*) (Strong & Boers, 2019a). The syntactic complexity of phrasal verbs as such is quite evident in both aspects of transitiveness as well as separability and is no wonder a source of confusion for EFL learners when learning phrasal verbs.

A third aspect of difficulty in dealing with English phrasal verbs is their large amount within the language. In this regard, it is estimated that English has 3,000 phrasal verbs at the minimum (Kaluza, 1984). Moreover, in a more recent estimate, McCarthy & O'Dell (2004) count about 5,000 phrasal verbs existing in English nowadays. Although coursebooks dedicated to EFL learners do include some texts containing phrasal verbs, the low number of occurrences of such verb forms in these textbooks is extremely inadequate for learners to acquire them (Alejo-González, Piquer-Píriz, & Reveriego-Sierra, 2010). As such, due to their massive number in the language, learners may opt to avoid using phrasal verb constructions and rather use their familiar single-word equivalences (Siyanova & Schmitt, 2007).

A fourth aspect of difficulty in phrasal verb learning, one which we believe to be the most problematic, is EFL learners' unacquaintance with phrasal verb constructions in their native language. This unfamiliarity is most salient within learners whose first languages are of non-Germanic origins. This is because phrasal verb constructions are characteristic of languages within the Germanic language family (Darwin & Gray, 1999; Laufer, 2000). Indeed, research examining EFL learners' phrasal verb usage suggests that learners are quite vulnerable to making errors when putting phrasal verbs into use particularly when phrasal verb structures do not exist in the learners' native language (Paquot & Granger, 2012). Alternatively, some learners are not inclined to use phrasal verbs altogether (Cervantes & Gablasova, 2017; Dagut & Laufer, 1985). It follows then that learners whose mother tongues contain phrasal verb equivalent structures would most likely experience less difficulty in learning English phrasal verbs (Laufer & Eliasson, 1993). By the same token, learners with native language backgrounds that are void of phrasal verb structures would hence require additional aid for learning them (Strong & Boers, 2019a).

It is no wonder then that, as noted earlier, EFL learners are inclined to bypass using phrasal verbs especially when one-verb synonyms are available (Siyanova & Schmitt, 2007). The four difficulties we just discussed, which are seemingly inherent in phrasal verbs, are candidate reasons for such avoidance. In light of our research gap and guided by the reviewed literature, the following are two research questions we pose:

RQ1. Does the presence of contextual cues have any effect on EFL learners' receptive recognition of phrasal verbs?
RQ2. Does the presence of contextual cues have any effect on EFL learners' productive recall of phrasal verbs?

3. Method
3.1 Participants
A total of 60 first-year English major undergraduates participated in this study. These were drawn from six course sections at the Department of Modern Languages and Literatures at King Abdulaziz University, Saudi Arabia, during the academic year 2022/2023. The participants had a similar EFL learning background with all of them having commenced their English language learning from the sixth grade at primary school and none had ever been abroad to an English native-speaking country or a local English private school. As such, their EFL classes represented the primary source of exposure to English. The subjects were all male as gender was not a factor at play in this study and, since they were all in their first year of tertiary-level study, they were 19 to 20 years of age. The subjects were briefed on the purpose as well as the procedures of the study and participation was allowed on a voluntary basis. Using random sampling, all participants were assigned to three groups in preparation for taking part in two testing sessions. Whereas the first group was provided during the first testing session with a list of sampled isolated unknown English phrasal verbs without any contextual cues (the control group), the second and third groups were given the same list of phrasal verbs with sentential-level and paragraph-level contextual cues respectively (the two treatment groups). Since the main purpose of our study was to gauge the effect of contextual cues on EFL learners' recognition and recall of English phrasal verbs, it was a prerequisite that our subjects had as minimal baseline knowledge of English phrasal verbs as possible. For this reason, we opted for first-year students rather than more advanced undergraduates so as to ensure our subjects had the least acquaintance with English phrasal

verbs. Moreover, the participants also took part in a phrasal verb sampling task the purpose of which was to exclude a list of phrasal verbs which were unknown to them.

3.2 Instruments

3.2.1 Phrasal verb recognition task

This task aimed at compiling a list of English phrasal verbs that were essentially unknown to all of our participants to use them as test items for our receptive and productive phrasal verb tests. Subjects in the three groups were presented with a list of 60 English phrasal verbs drawn from Schmitt and Redwood's (2011) receptive phrasal verb test (see Appendix A for this devised list). All subjects were then requested to identify only the phrasal verbs which they were familiar with. Later on, out of a total of 33 phrasal verbs reported by our subjects as unanimously unknown (i.e. none of them identified any of those verbs), 30 phrasal verbs were selected as candidate verbs (see Appendix B) for test items for our receptive and productive phrasal verb tests.

3.2.2 Phrasal verb receptive test

This test was based on the list of phrasal verbs elicited via our initial phrasal verb recognition task. The test had 30 multiple-choice items which assessed the subjects' receptive recognition ability of the 30 phrasal verbs that featured on our devised list. Hence, the maximum score for the test was 30 marks. The test items were drawn from Schmitt and Redwood's (2011) receptive phrasal verb test. In comparison, whereas Schmitt and Redwood's (2011) original test had a total of 60 items, our adapted version had 30 test items. Each item included an incomplete statement that was missing a phrasal verb with four phrasal verbs given as possible answers one of which was the only correct phrasal verb that suited the context of the item. To minimize the guessing effect, a fifth neutral option (i.e. don't know) was provided. Below is an example item from this test with the answer key provided (see Schmitt & Redwood (2011) for the full version of the test):

ITEM	CHOICES				
"Mark thinks he is a bit of a Romeo. He is always trying to .... girls. (talk to in a friendly way)" (Source: Schmitt & Redwood, 2011, p. 205)	chat in	**chat up**	chat out	chat off	don't know

3.2.3 Phrasal verb productive test

Similar to the receptive test, this test was based on the same list of phrasal verbs we elicited via the initial phrasal verb recognition task. However, the order of the phrasal verbs being tested was scrambled in this productive version to eliminate learners' resort to mnemonic strategies for remembering either the choices they were given on the receptive test for each item or the answers they then provided. The test comprised 30 items that measured our subjects' productive recall ability of the same phrasal verbs appearing on our original sampled list of phrasal verbs. The test items were extracted from Schmitt and Redwood's (2011) productive phrasal verb test. Each item took a fill-in-the-blank cloze format as it contained a statement in which the subjects had to provide on their own one phrasal verb to complete the statement. The beginning letters of the head verb and the particle following it were provided. An example item from this test is provided below (see Schmitt & Redwood (2011) for the full version of the test):

STATEMENT	ANSWER
"Mark thinks he is a bit of a Romeo. He is always trying to c.......... u.......... girls. (talk to in a friendly way)" (Source: Schmitt & Redwood, 2011, p. 198)	....

3.3 Procedure

The data collection for this study was carried out over the course of two weeks in the second semester of the academic year 2022/2023. It commenced with the phrasal verb recognition and sampling task. All participants in our three groups were invited to a thirty-minute session in which they were provided with the initial sampling list of 60 English phrasal verbs described earlier. In this session, the subjects were requested to examine each phrasal verb on the list and while doing so circle each one whose meaning was known to them. An examination of the students' responses to the phrasal verb recognition task later revealed that all students unanimously agreed on a total of 33 phrasal verbs as being unknown to them from which 30 verbs were then selected for inclusion in the study tests. Two days post the phrasal verb recognition task, all participants were invited to sit for the receptive phrasal verb test. Whereas test-takers in the first group did not receive any handout of contextual cues on the phrasal verbs

included in the test (i.e. no contextual cues group), test-takers in the second and third groups received one handout for each group that contained two different types of contextual cues. Whereas the subjects in the second group received a handout that contained only an example sentence for each phrasal verb on the test (i.e. sentential-level cues group), the third group subjects received a longer handout that contained each phrasal verb on the test placed within a paragraph-level context (i.e. paragraph-level cues group). Each contextual paragraph within this handout ranged from 4 to 8 lines. The participants were given 45 minutes to finish the receptive phrasal verb test. The following week, the students were invited to take the productive phrasal verb test. The handout procedure that was administered during the receptive phrasal verb test was not applied during this productive test. As such, none of the three groups received any type of contextual cues handouts since the purpose of this test was to measure the effect of the initial handout procedure on their productive recall ability of the same phrasal verbs they were tested on previously during the receptive phrasal verb test. Since, unlike the receptive test, this productive test required subjects to produce the target phrasal verbs on their own without being provided with multiple answers to choose from, the time allowed for this test was one hour.

Following the data collection procedures, the receptive and productive phrasal verb tests were marked and the participants' scores on the two tests were entered into SPSS for statistical analysis. To assess the effect of the 'handout procedure' (i.e. the amount of phrasal verb contextual cues provided) on our three groups, the subjects' mean scores on the receptive phrasal verb test were compared using the one-way analysis of variance (ANOVA) test to see whether any significant differences existed across the three groups in their test scores as a result of the different amount of contextual cues they were exposed to. A similar ANOVA analysis was also conducted in relevance to the three groups' mean scores on the productive phrasal verb test.

4. Results

4.1 Contextual cues and learners' recognition of phrasal verbs

Our first research question queried whether the presence of contextual cues adjacent to phrasal verbs could contribute to learners' receptive recognition of these verbs. To answer this research question, we first calculated the mean score for each of our three study groups on the receptive phrasal verb test. As shown in Table 1, the group that received an accompanying handout of contextual cues at paragraph level on the phrasal verbs included in the test (i.e. the paragraph-level cues group) had the highest mean score on the receptive phrasal verb test (M= 14.35, SD= 6.07). Whereas the group that received contextual cues at the sentence level (i.e. the sentential-level cues group) came second (M= 9.45, SD= 3.44), the group that received no accompanying handout of contextual cues (i.e. the no contextual cues group) had the lowest mean score on the phrasal verb test (M= 5.45, SD= 1.99). Figure 1 displays the differences among our study groups in their mean scores on the receptive phrasal verb test.

Table 1. Descriptive statistics for the receptive phrasal verb test (Max. score = 30)

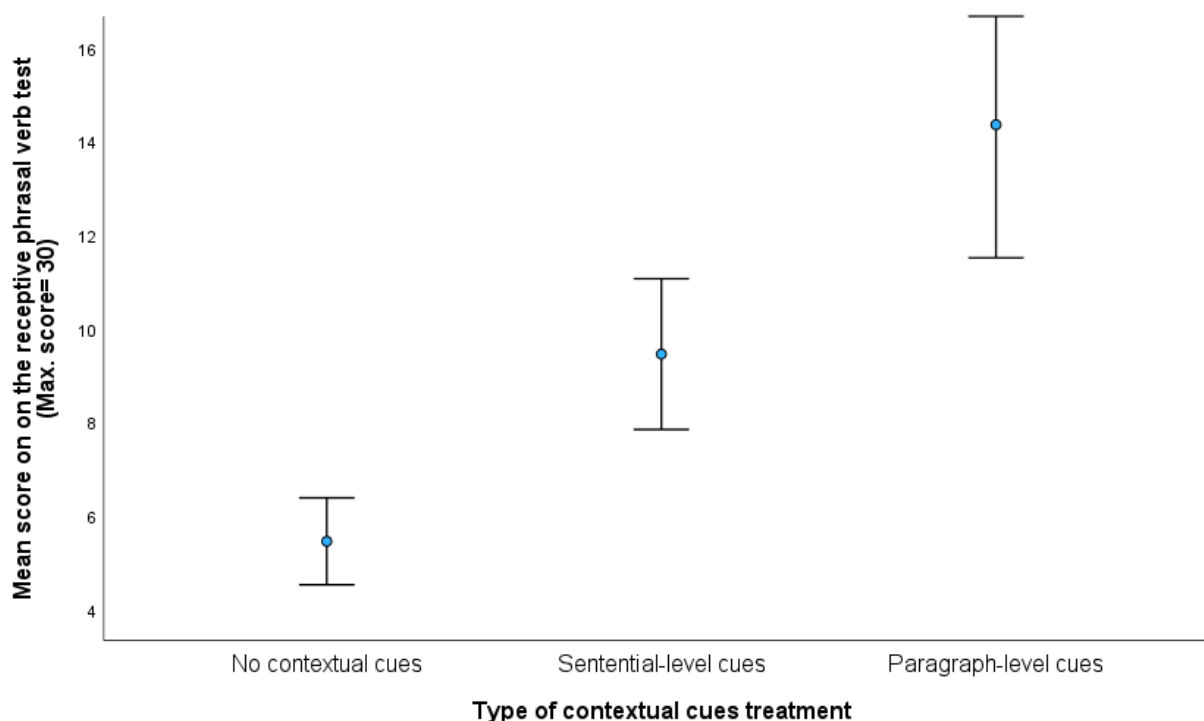| Contextual cues group	N	Mean	SD	SE	Min.	Max.
No contextual cues	20	5.45	1.99	.444	1	10
Sentential-level cues	20	9.45	3.44	.769	2	15
Paragraph-level cues	20	14.35	6.07	1.358	3	22
Total	60	9.75	5.52	.712	1	22

Figure 1. Mean score of study groups on the receptive phrasal verb test

To ascertain whether the differences among our three groups in their mean scores on the receptive phrasal verb test in consequence of the different types of phrasal verb contextual cues treatment they were subjected to (i.e. no contextual cues, sentential-level cues, and paragraph-level cues) were significant, an analysis of variance (ANOVA) was conducted (alpha value set at 0.05). As shown in Table 2, the results of the ANOVA analysis revealed that these differences were indeed significant, $F_{(2, 57)}$ = 22.64, $p < .001$. In terms of effect size, the result of the eta squared test (η^2 = 0.44) shows that the significant effect of phrasal verbs contextual cues treatment on learners' performance on the receptive phrasal verb test which we concluded via the ANOVA analysis was a large one. This effect size reveals that the amount of phrasal verbs contextual cues provided to our subjects (i.e. none, sentential-level, and paragraph-level) explained 44% of the variance in their scores on the receptive phrasal verb test.

Table 2. ANOVA and effect size for group scores on the receptive phrasal verb test

	Sum of Squares	df	F	Sig.	η^2
Between Groups	794.80	2	22.64	<.001	0.44
Within Groups	1000.45	57			
Total	1795.25	59			

Since the ANOVA test revealed an overall significant difference among our study groups in their scores on the receptive phrasal verb test, post-hoc multiple comparisons were needed to identify the particular pairs of groups which yielded this significant difference. As Table 3 shows, the post-hoc Tukey test showed that the paragraph-level cues group scored significantly higher on the receptive phrasal verb test than both the sentential-level cues group and the no contextual cues group ($p = .001$ and $p < .001$ respectively). Moreover, the sentential-level cues group scored significantly higher than the no contextual cues group ($p = .010$).

Table 3. Post-hoc multiple comparisons among study groups using Tukey HSD adjustment

Group (A)	Group (B)	Mean Difference (A-B)	SE	Sig.
No contextual cues	Sentential-level cues	-4.00*	1.33	.010
	Paragraph-level cues	-8.90*	1.33	<.001
Sentential-level cues	No contextual cues	4.00*	1.33	.010
	Paragraph-level cues	-4.90*	1.33	.001
Paragraph-level cues	No contextual cues	8.90*	1.33	<.001
	Sentential-level cues	4.90*	1.33	.001

*Alpha value at the 0.05 level.

4.2 Contextual cues and learners' recall of phrasal verbs

The second research question examined the extent to which the presence of phrasal verb contextual cues could assist learners in their productive recall of phrasal verbs. For this purpose, the mean score on the productive phrasal verb test was calculated for each of the three study groups. Table 4 shows that all three groups achieved very close scores on the productive test. Whereas the paragraph-level cues group had a slightly higher mean score than the other two groups (M= 5.05, SD= 1.88), the sentential-level cues group and the no contextual cues group performed almost similarly on the productive phrasal verb test (M= 4.65, SD= 2.03 and M= 4.20, SD= 1.54 respectively). The three groups' close performance on the productive test is displayed in Figure 2. Despite the close mean scores on the productive phrasal verb test, we ran the ANOVA test to determine whether the slight differences among our study groups on the productive test were significant. As Table 5 shows, the ANOVA analysis revealed that these differences were not significant, $F_{(2, 57)}$ = 1.08, p = .346. As such, since the ANOVA analysis yielded no significant differences among our study groups in their performance on the productive phrasal verb test, post-hoc comparisons were not conducted.

Table 4. Descriptive statistics for the productive phrasal verb test (Max. score = 30)

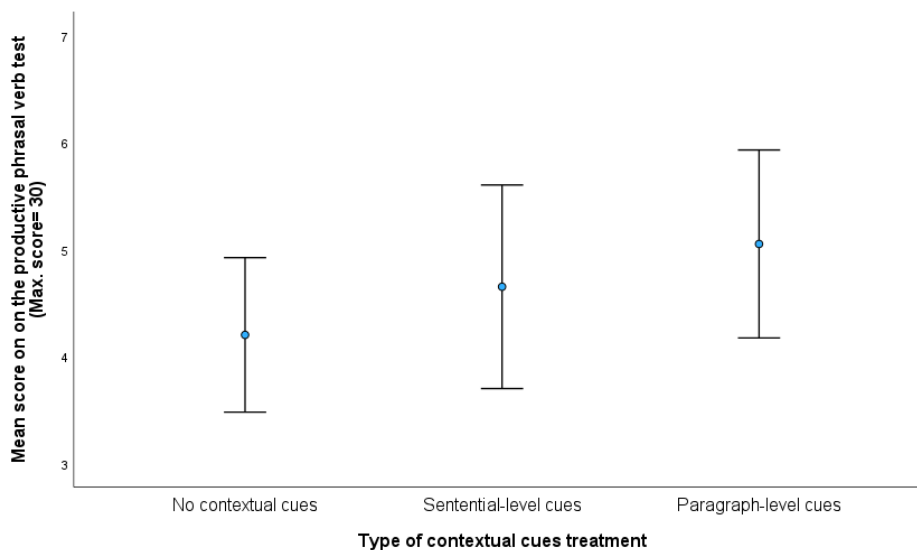| Contextual cues group	N	Mean	SD	SE	Min.	Max.
No contextual cues	20	4.20	1.54	.345	1	7
Sentential-level cues	20	4.65	2.03	.455	1	8
Paragraph-level cues	20	5.05	1.88	.420	2	8
Total	60	4.63	1.83	.236	1	8

Figure 2. Mean score of study groups on the productive phrasal verb test

Table 5. ANOVA and effect size for group scores on the productive phrasal verb test

	Sum of Squares	df	F	Sig.	η²
Between Groups	7.23	2	1.08	.346	0.04
Within Groups	190.70	57			
Total	197.93	59			

5. Discussion

In terms of receptive recognition of English phrasal verbs, the findings show that the paragraph-level cues group surpassed both the sentential-level and no contextual cues groups on the receptive phrasal verb test. Similarly, the sentential-level cues group achieved a significantly higher score on the receptive test than the no contextual cues group. The eta squared test revealed a large effect size of 0.44 indicating that 44% of the variance in group scores on the receptive test was indeed due to the differing amount of phrasal verbs contextual cues provided to each of the three groups. As such, the paragraph-level cues group outperformance of the sentential-level cues and the no contextual cues groups indicate that the presence of more contextual cues surrounding unknown phrasal verbs immensely helps learners towards decoding and understanding their meanings. In this regard, Schmitt and Redwood (2011) carried out a study examining the contribution of different non-classroom language sources (e.g. TV shows, music, podcasts, movies ...etc.) on L2 English learners' knowledge of English phrasal verbs. Their findings show that movies and TV shows were the only two sources that correlated positively with their subjects' knowledge of phrasal verbs. Consequently, since movies and TV shows are characteristic of being full-fledged contextualized language sources, this finding of Schmitt and Redwood's (2011) study lends support to our own finding that the amount of phrasal verb contextual cues immensely contributes to the receptive knowledge of English phrasal verbs. Moreover, this finding that the paragraph-level cues group has surpassed the other two groups who received less or no phrasal verbs contextual cues attest to the commonly-acknowledged characteristic of semantic vagueness often attributed to phrasal verbs in the literature (e.g. Gardner & Davies, 2007; Laufer & Eliasson, 1993; Siyanova & Schmitt, 2007; Strong & Boers, 2019a, 2019b). Indeed, this finding entails that only subjects who were exposed to an ample amount of phrasal verb contextual cues (i.e. at the paragraph level) managed to score significantly higher on the phrasal verb receptive test than the other two groups who were either exposed to cues only at the sentence level or none at all.

As to productive recall of English phrasal verbs, however, the results revealed no significant differences among our study groups in their performance on the productive phrasal verb test with all three groups achieving quite low mean scores on this measure. These findings show that, unlike their contribution to the initial firsthand recognition of English phrasal verbs as we saw from the receptive test scores, the amount of contextual cues surrounding phrasal verbs does not have any effect when it comes to learners' later recall of phrasal verbs. In other words, despite being presented within a contextualized environment (i.e. sentential-level cues and/or paragraph-level cues), EFL learners' recall of phrasal verbs does not seem to be influenced by exposure to any contextual cues surrounding such verbs. Yet, we suspect that this is only true for first-time single-exposure scenarios such as the one adopted in our study and that extensive repeated exposure to phrasal verb contextual cues, especially those at the paragraph level, would most likely contribute to better recall of English phrasal verbs during future productive language tasks.

In this regard, three reasons for our subjects' low performance on the productive phrasal verb test can be envisaged. First and foremost, phrasal verbs are acknowledged as a distinctive feature of colloquial English, and EFL learners' exposure to such form of English is predominantly kept to a minimum in EFL classes hence leading to very limited exposure to English phrasal verbs. Second, it seems that EFL learners' common tendency of avoiding phrasal verbs we discussed earlier in the literature review is another reason behind such low performance. Obviously, though, this popular habit of phrasal verb avoidance was more amenable to use in the productive test where learners had to supply the omitted phrasal verb on their own than in the receptive test where they only had to supply one from a number of possible choices. As such, this avoidance strategy was intrinsically appropriate for use in the productive phrasal verb test but did not seem to have interfered with our subjects' performance in the case of the receptive test since they only had to provide from a number of given options one phrasal verb for each item. This, in turn, explains the noticeable discrepancy in the subjects' performance on the two tests as they achieved far better scores on the receptive test (avoidance strategy not activated) than on the productive one (avoidance strategy activated). Third, as we noted earlier in the literature review, English phrasal verbs are characterized by their diverse nature in terms of both their forms as well as meanings which renders these lexical units quite demanding for L2 English learners to master particularly at the productive level.

6. Conclusion, implications and suggestions for further research

EFL learners often tend to avoid phrasal verbs when reading or listening to L2 content. This study examined the effect of the presence of contextual cues surrounding English phrasal verbs on EFL learners' recognition and recall of such verbs. As evident from the findings of the study, phrasal verb contextual cues have contributed to our subjects' recognition of the unknown phrasal verbs they encountered during the receptive phrasal verb test, with the extensive paragraph-level cues group outperforming the other two groups. In other words, the amount of such cues largely contributed to learners' successful decoding of these verbs. A key implication for this finding on EFL pedagogy is that contextualization of phrasal verbs (i.e. contextual presentation) ought to be the norm in EFL teaching and learning. As such, EFL coursebook designers and textbook authors should see to it that any new phrasal verbs presented in their textbooks are fully contextualized and that isolated decontextualized lists of phrasal verbs are avoided during the presentation of such verbs and only made available for reference and study purposes as end-of-textbook reference materials for learners to resort to when needed. Another suggestion for the contextual presentation of new phrasal verbs would be to provide dedicated phrasal verbs contextual cues analysis exercises in EFL textbooks in which learners are instructed to use premarked (e.g. italicized, underlined, or bolded) contextual cues to help them decode the meaning of target phrasal verbs within each unit.

By the same token, teachers should spare no effort during the presentation of new phrasal verbs to their learners in providing as much extensive contextualization to these verbs as possible. This could be in the form of informal short stories or anecdotes they tell their learners in which the target phrasal verbs are used. Direct sentence-level contextualized explanations of target phrasal verbs are also recommended (e.g. for the phrasal verb 'turn down', the teacher provides an example sentence "Donald *turned down* the discount offer the ticket salesman gave him at the airport because he was not intending to travel any soon". He then explains that 'turn down' means 'to refuse something you have been offered'. L2 Learners of English should similarly aim to spare no effort in using this phrasal verbs contextual cues analysis strategy as an aid towards decoding the meaning of unknown English phrasal verbs they encounter upon reading English materials whether they be course-related materials read as part of their formal study or non-course related ones read merely for leisure and entertainment.

At the productive level, unlike our findings as to the receptive recognition of phrasal verbs, the results suggest that learners' recall of phrasal verbs was not affected, at least for initial exposures, by the presence of phrasal verb contextual cues. In other words, for any later recall of phrasal verbs, the primary first-time exposure to contextualized phrasal verbs is not sufficient for learners to use such verbs in productive language tasks (i.e. tasks involving speech or writing). Hence, repeated exposure to contextualized target phrasal verbs seems necessary for EFL learners' success in such productive tasks. Finally, it should be noted that, due to the time and scope constraints of this study, we only examined the role of written context in learning English phrasal verbs. It may have been encompassing if we could also examine the contribution of spoken context in learning phrasal verbs both in terms of receptive recognition as well as productive recall of these verbs. Therefore, we encourage future replications of this study to examine the role of spoken contextual cues on EFL learners' knowledge of English phrasal verbs to see whether the amount of such cues has any effect on learners' recognition and recall of such verbs.

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Appendix A
Phrasal verb recognition task

Name/ ....   **Student's Number/** ....

Here is a list of 60 English phrasal verbs. Please go through this list circling ONLY the phrasal verbs you are familiar with (i.e. you know their meanings).

Phrasal Verbs			
1	break up	31	break down
2	carry out	32	bring in
3	chat up	33	carry on
4	come in	34	come down
5	come out	35	come off
6	come over	36	get on
7	cool off	37	get out
8	dig up	38	get up
9	fall behind	39	give back
10	find out	40	give out
11	get down	41	go in
12	get in	42	go off
13	go on	43	go over
14	go out	44	hold back
15	make out	45	hold on
16	make up	46	look around
17	move on	47	move back
18	pass away	48	move in
19	pay back	49	move out
20	pick up	50	move up
21	pin down	51	pick out
22	put back	52	put off
23	put on	53	put out
24	set up	54	put up
25	sit up	55	sit down
26	take after	56	take back
27	tear up	57	take down
28	think over	58	take on
29	turn down	59	take up
30	work out	60	turn off

Appendix B
List of selected unknown phrasal verbs

1	chat up
2	come off
3	come over
4	cool off
5	dig up
6	fall behind
7	get in
8	give back
9	give out
10	go over
11	hold back
12	hold on
13	look around
14	make out
15	move back
16	move in
17	move out
18	move up
19	pass away
20	pay back
21	pick out
22	pin down
23	put off
24	sit up
25	take after
26	take down
27	tear up
28	think over
29	turn down
30	turn off