

Strategies Used in Producing English Lexical Collocations by Saudi EFL Learners

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Abstract: Thirty, with two distinct proficiency level, EFL Saudi English majors at Taibah University participated in this study. Two written elicitation tasks were used: a fill-in-the-blank test which was accompanied by a self-checklist, and a translation test. In addition, retrospective data was also collected from the participants to elicit their reflections on their written production.

The qualitative analysis of the data resulted in the development of a taxonomy of the strategies used by the participants of the study. The taxonomy was divided into five major categories: retrieval, L1 based strategies, L2 based strategies, reduction strategies, and test-taking strategies.

The participants' overall use of strategies in producing unacceptable collocations was higher in frequency than their use of the strategies in producing acceptable collocations. The results also revealed that the participants relied on *L2 based strategies* more often than other strategies in producing both acceptable and unacceptable collocations. The results also showed that the two groups seemed to have chosen the same strategies and have not differed much in their total number of use. The results revealed that HPS and LPS differed significantly in their use of strategies in producing acceptable collocations especially with regard to the *retrieval strategy*, *L2 based strategies* and *L1 based strategies* in favour of the HPS group. In the production of unacceptable collocations, on the other hand, there were statistically significant differences between the two groups especially with reference to the use of the *reduction strategies* and *L2 based strategies* in favour of the LPS group. The implications of the research findings for teaching English collocations are discussed, along with pedagogical recommendations.

Key Words: English lexical collocations, language learning strategies, EFL learners, Saudi English learners

1. Introduction

Producing English lexical collocations has largely posed a serious problem for learners' of English, (Brown, 1974; Howarth, 1998; Hussain, 1998; Nesselhauf, 2003; Mahmoud, 2005). While producing certain L2 collocational strings of language, learners may employ some strategies to fill a lexical gap. Difficulties that students encounter could be partly attributable to different strategies that they use when producing English lexical collocations. By investigating the strategies that learners use while attempting to come up with L2 acceptable collocations, the present study seeks to shed some light on the underlying processes that students adopt to compensate for the inadequacy in their L2 linguistic system. It was hoped that a thorough analysis of such strategies might lead to suitable methods for dealing with them. An understanding of such underlying mental processes could help teachers adjust their teaching methods and materials in the area of collocations more effectively.

This study focuses on learners' production of collocations in English, a phenomenon which is frequently used in spoken and written interactions. Hence mastering it represents one major step towards approaching naturalness, precision, and therefore fluency in the foreign language. Many studies have proved that English as a foreign (EFL) learners encounter difficulties in collocating English words together in an acceptable way (Bahnas and Eldo, 1993; Farghal and Obiedat, 1995; Diab, 1997; Nesselhauf, 2003; Mahmoud, 2005).

When confronted with such difficulties, learners are likely to use some strategies in order to fill in any lexical gaps in their L2 speech or writing. Although there has been an increasing interest among researchers in finding how L2 learners overcome linguistic problems due to inadequate command of the target language, not much attention has been paid to lexical strategies applied by L2 learners at different proficiency levels. Furthermore, very few studies have investigated learners' use of strategies in producing collocations. On the

other hand, many studies have dealt with strategies that students use in spoken interactions, whereas the present study focuses on students' use of strategies in written tasks.

2. Objectives of the Study

This study is an exploratory study that attempts to:

1. identify and describe strategies that students use when seeking to come up with acceptable English lexical collocations in given tasks.
2. investigate how frequent do two groups of learners of two different proficiency levels use these strategies to produce acceptable or unacceptable collocations.

The study focuses on strategies of language use and specifically communication strategies as they are mainly meant to deal with lexical problems (Ellis, 1994).

3. Questions of the Study

The study attempts to answer the following questions:

1. What are the strategies used by EFL learners in producing acceptable or unacceptable English lexical collocations?
2. How frequent do high and low English proficiency levels groups use these strategies to produce acceptable or unacceptable English lexical collocations?

4. Methodology

4.1. Subjects of the Study

The subjects of the study were 88 fourth-year Saudi English major students at Department of Languages and Translation, Taibah University, Saudi Arabia. All subjects were native speakers of Arabic.

4.2. Data collection

The data was collected from the written performance of students in the given tests. Production data was chosen for the study, because it reflects the "underlying competence", i.e. learner's production competence (Brown, 2000:216).

4.3. Instruments

First a proficiency test was conducted to identify the subjects' proficiency levels. After that two tests were conducted to meet the primary goal of the study, i.e. revealing strategies that students adopt while producing English collocations.

4.3.1. The proficiency test

To identify the participants' English proficiency level (high-low), a proficiency test had been carried out. The general proficiency level of English of fourth year English majors was measured by applying Taibah University's Standardized Proficiency Test¹⁹⁶ to 88 students. The test was administered by the researchers together with members of the English department. Students were asked to answer all the questions and not leave any item unanswered. All test papers were scored. Out of 100 marks the highest score was 85 marks, whereas the lowest score was 35 marks. According to normal curve, the mean, and standard deviation of the scores were computed (See Table 1). As a result, 20 students were found to be high with scores ranging between 85-70 marks out of 100, and 25 were regarded low with scores ranging between 35-58 out of a 100.

Table 1: Measures of spread of study's participants.

No. of Students	<i>SD</i>	Mean
88	9.54	68.6

SD: standard deviation

¹⁹⁶ The test consisted of 100 multiple choice items which measured the writing, reading, vocabulary, grammar, spelling, and pronunciation of participants.

4.3.2. Test one

The first test was an objective test comprising a fill-in-the-blank test which elicited students' production of a set of specific English lexical collocations. Besides, it elicited students' use of strategies. The test was divided into two parts. Each part was devoted to one type of collocations. The first part dealt with 12 items with (verb + noun) collocations, and the second covered 10 items with (adjective + noun) collocations. The study investigated participants use of strategies in the production of these types of collocations because they are the most common types of collocations in English (Newmark, 1988; Lewis, 1997b). Participants were asked to fill in the blanks in part one with a *verb*, and in part two with an *adjective*.

The test was accompanied by a self checklist¹⁹⁷. The use of the checklist in the fill-in-the-blank task had actually positive advantages to the current study. First the checklist was an instrument used in this study to help learners choose which strategy they used in responding to each item, since open ended questions such as 'Why did you choose this word?' turned out to be impractical and resulted in vague answers by the participants in the pilot study conducted. The checklist contained nine options of strategies that were expected to be used by participants. Besides, an open-ended option orderly the tenth option was added for other strategies which might not appear in the checklist, but, were nevertheless, used by the participants. Second, participants were asked to clarify in a written form as a sort of written verbal report how they employed the strategy they marked in the checklist when responding to each item in an attempt to collect immediate reflections from participants about the strategies they used in filling the blanks at the time of performing the task. The self checklist was presented to participants in their native language 'Arabic' to ensure clarity and understanding (see Appendix 1 for an extract of an English version). The data elicited by the checklist as Dornyei, (2003) sees it, would also help as a retrospective data for the interview, where respondents were to be asked to comment on their responses (p. 130).

After completing the first two steps, students were asked to translate the sentences into their native language 'Arabic' (see Appendix 1). The rationale behind asking students to translate the sentences of the fill in the blank task into Arabic could be summarised in the following:

1. It was expected that this step could reflect the participant's intended meaning. Thus it would clarify if the student had understood the meaning of the target sentence fully or not. And so it would show if his response in the blank was actually due to a full understanding or misunderstanding of the target sentence.
2. The translation could also help to refresh students' memory in the retrospective interview. It might help in reminding them of what they had comprehended of the sentence at the time of performing the test.
3. Because the researchers belong to the same native language as the participants, the translation of the target sentences could help the researchers spot occurrences of native language positive/negative transfer.

Besides the written instructions given to students, an example was provided in the instruction page for the students to follow in order to carry out the task (see Appendix 1).

4.3.3. Test two

The second test was a translation test. It aimed at eliciting students' strategies in translating sentences including collocations from Arabic into English. The translation test consisted of 18 short sentences with collocations. In this task, nine items contained (verb + noun) collocations, and nine items included (adjective + noun) collocations. It was expected that at least, one member of the collocations' sequence was known to the participants, so their challenge was to supply the other acceptable collocate. When translating these sentences, the participant either retrieved the correct collocation from their memory, or resorted to any possible means to convey the intended meaning. The test was expected to reveal some strategies that learners might use in order to communicate the meaning of the collocations presented in the give sentences (see Appendix 2).

The use of the translation test in search of strategies used by participants had many advantages. Zimmermann and Schneider (1987) pointed out that despite the well-known fact that translating is in many ways an artificial form of L2 communication, at least as compared to everyday conversation, it seems to be the safest source of information about processes of lexical search, more so than reproductive exercises: the original intended meaning is mostly given for the analyst (except for misinterpretations of the source text) therefore (some aspects of) learners' strategies can be pinned down with higher certainty (p.178).

¹⁹⁷ "A self-checklist is a list of several characteristics or activities presented to the subjects of the study. The individuals are asked to study the list and then to produce a mark opposite the characteristics they possess or the activities in which they have engaged for a particular length of time. Self-checklists are often used when researchers want students to diagnose or to appraise their own performance." (Fraenkel & Norman 2003:130-131).

Furthermore, in the translation test, the avoidance strategy could be easily identified. Blum & Levenston (1978) maintained that “comparison of interlanguage usage, for instance, with expected native-speaker usage in the same context- or of target language with source language in the case of translation- will show *what* is avoided” (p.401). On the other hand, when learners perform translation tasks, the influence of their mother tongue could largely be observed (Bahns,1993; Bahns & Eldaw, 1993; Farghal& Obiedat, 1995).

The rationale behind selecting two types of collocations (verb + noun) and (adjective + noun) to be the target lexical collocations of this study was two-fold. First, these types of collocations were regarded as the most common types of collocations in English (Newmark, 1988; Lewis, 1997b). Second, the current study hopes that applying two common types of collocations could broaden the scope of our understanding of learners’ use of strategies in the production of English lexical collocations, in an attempt to take one step forward to other studies which had focused on (verb + noun) collocations, Bahns & Eldaw (1993), Howarth, (1998), Al-Zahrani (1998), Bonk (2000), Nesselhauf (2003) and, Zughoul & Abdel Fattah (2003) to measure learners knowledge of English lexical collocations.

Because the one aim of this study was to identify and describe strategies used by the participants of this study in producing English lexical collocations, the results of both tasks and both types of collocations were collapsed under the major category of English lexical collocations. Thus, the taxonomy developed, and the results obtained represented all strategies identified from all the tasks of both types of collocations used in this study.

4.3.4. Interviews

The aim of conducting interviews with the participants of the study was to collect qualitative data about participants’ use of strategies in the production of English lexical collocations. Retrospective interviews were the type of interview selected for this study because “it is used primarily in an attempt to explore learners’ thought processes and strategies by asking learners to reflect on their thoughts after they have carried out a predetermined activity” (Gass & Mackey, 2000:37-38).

Poulisse, Bongaerts and Kellerman (1987), maintain that retrospection plays a very important role in the identification of compensation strategies (CpS), (the term the researchers used to specify a type of communication strategy by excluding reduction strategies). To them, in addition to providing independent support for the identification of communication strategies, students’ retrospective comments helped them to identify CpS which would otherwise have remained unnoticed. Furthermore, they revealed CpS which were incorrectly identified as CpS.

4.3.5. Procedures

As for the fill-in-the-blank test, written instructions, and an example of how to carry out the test were provided in the first page. In addition, instructions were read aloud to the participants. Oral explanations were also given both in English and Arabic concerning the strategies checklist to ensure full understanding on the part of participants. Participants were asked to follow the steps given in the instruction sheet and were encouraged to supply their written verbal report in the checklist. Participants were not allowed to use any dictionary as they were taking the tests. With regard to the translation test, students were asked to translate the given sentences from Arabic into English. After the tests were completed, one of the researchers started conducting the retrospective interviews.

Because participants in the interviews were asked to clarify what strategy they had used in the given tasks, all the interviews were conducted in Arabic, the native language of the participants.

Strategies were identified by investigating all items of both tests whether the participant produced acceptable or unacceptable collocations.

4.4. Method of analysis

Before scoring participants’ responses in the production of collocations in the given tasks, a criterion needed to be established upon which the judgment of the acceptability of collocations produced by participants was made. In judging the acceptability of collocations produced, three types of sources were used to determine whether each combination produced by the participants was acceptable or unacceptable. They were specialised dictionaries of English collocations, native speakers responses, and the Cobuild Concordance Sampler. To this

end, all collocations produced by participants in the production tasks were rated for acceptability according to the following criterion:

1. Dictionaries' consultation:

In an attempt to ensure the accuracy of the judgments of all the responses produced by the participants in producing English lexical collocations, four specialized dictionaries of collocations were consulted to determine whether the collocations produced were acceptable or unacceptable. They included;

- *The BBI Dictionary of English Word Combinations* (Benson, et al., 1997)
- *Oxford Collocations Dictionary for Students of English* (2002).
- *LTP Dictionary of Selected Collocations* (1997).
- *DAR El-ILM'S Dictionary of Collocations* (2007)

2. Native speakers' responses:

To achieve this aim, in the fill-in-the-blank-task, three native speakers of English, (see Table 2) were invited to provide all the possible responses that are acceptable for native speakers to use in their variety of English. One of them was a bilingual native speaker of English (American) who had learned Arabic, and so he was also invited to provide his responses for the translation task. Native speakers responses were used by the researchers as a data base to validate the judgment of the acceptability of students' collocations in both tasks if the collocations produced by participants did not appear in the four dictionaries above.

Table 2: Native speakers participated in the study

No.	Nationality	Qualification	Major
1.	British	M.A.	Applied Linguistics
2.	American	M.A.	TESOL
3.	American	M.A.	TESOL

3. Corpus Concordance Sampler

Another source for validating the acceptability of collocations produced by students in the case if the response did not appear in all the sources above was by consulting Corpus Concordance Sampler. The Corpus Concordance Sampler belongs to the Collins Word-bank *Online English corpus*¹⁹⁸.

In judging the acceptability of collocations used, there were a number of important considerations that had to be taken into account. The combinations of (verb + noun) and (adjective + noun) were considered acceptable if they occurred in the participant's production as identical as those combinations that appeared in the sources of the acceptability's judgment. A combination was regarded identical if it occurred in the same form (verb + noun, OR adjective + noun), in the same sense (i.e., the intended meaning of the sentence given in the production task) as that which appeared in sources of validity in the acceptability's criteria mentioned above. Because the acceptability criteria, in this study, focused on syntagmatic, lexical, and semantic features of the produced combinations, deviation in tense aspect, and spelling mistakes were disregarded. For example, in the case of tense aspect, if the participant used the collocation '*did a favour*' instead of what the sentence required '*do a favour*' the collocation was regarded acceptable on the lexical and semantic level. Here the participant's deviation is grammatical rather than lexical or semantic deviation. After classifying responses to acceptable or unacceptable collocations for each item produced by participants, they were scored as follows:

- Correct responses (acceptable collocations) were given (1) mark, whereas
- incorrect responses (unacceptable collocations) were given (0) marks.

After scoring students' responses in the tests given, whether they produced acceptable or unacceptable collocations, a qualitative analysis of the data was processed to identify strategies used by each participant in each item. The researcher observed the following data sources in both tasks to decide what strategy the participant used in each item whether the lexical item or combination of lexical items produced formed acceptable or unacceptable collocations:

Fill-in-the-blank Task

¹⁹⁸ The corpus is composed of 56 million words of contemporary written and spoken text. It covers corpora from British books, radio, newspapers, and magazines, American books, and radio, and British transcribed speech. To search for collocations in the Corpus Concordance Sampler, the facility provides up to 100 of the statistically most significant collocates for the consulted word. It also provides 40 lines of concordance for the focused word in authentic utterances derived from sources mentioned earlier. (<http://www.collins.co.uk/Corpus/CorpusSearch.aspx>)

1. Participants' responses in the blanks.
2. Participants' selection of strategies from the checklist.
3. Participants' immediate written verbal reports on each item.
4. Participants' translation of the collocations in the given sentence.
5. Participants' reflections on their responses in the interview.
6. Researchers' review of related literature taxonomies of strategies.

Translation Task:

1. The participants' responses.
2. Participants' contextual information of the written translation sentences.
3. Participants' reflections on their responses in the interview.
4. Researchers' review of related literature taxonomies of strategies.

After investigating data qualitatively, strategies were identified. These strategies were numbered to facilitate data analysis. The strategies identified were then categorised under five major categories in a taxonomy. Finally, quantitative analysis was then carried out to provide the frequency and percentage of each strategy used in the data whether participants produced acceptable or unacceptable collocations.

5. Discussion of the Results

5.1. Participants' production of collocations in the elicitation tasks

In the quantitative analysis of participants' responses, the number of acceptable collocations and the number of unacceptable collocations for each item responded by the participants was counted. As for the participants' overall performance in the elicitation tasks, Table 3 shows that out of a total of 1200 items responded by the participants of the study, only 369 (30.75%) responses resulted in acceptable collocations, and 831 (69.25%) produced unacceptable collocations.

Table 3

Participants' overall production of acceptable and unacceptable collocations

Students' proficiency level	Students' production of collocations					
	Acceptable collocations		Unacceptable collocations		Total	
	No.	%	No.	%	No.	%
Low	110	9.17	490	40.83	1200	100
High	259	21.58	341	28.42		
Grand Total	369	30.75	831	69.25		

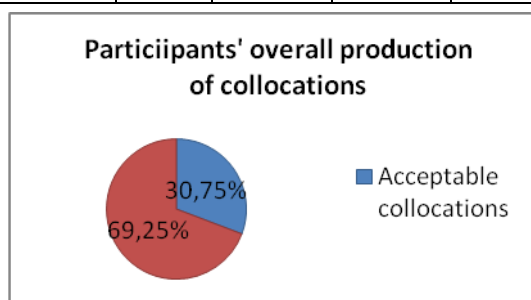


Figure 1: Participants' overall production of acceptable and unacceptable collocations

To gain a clearer picture of each group's performance, Tables 4 and 5 display the results obtained from the elicitation tasks of this study. Considering that each group produced 600 responses with a total of 1200 responses for both groups, results revealed that both high and low proficiency students encountered difficulties in the production of acceptable English lexical collocations. However, as shown in Table 4, high proficiency students (HPS) produced more acceptable collocations compared to low proficiency students (LPS).

Table 4: *High proficiency students' production of acceptable and unacceptable collocations*

Task	High proficiency students		
	Acceptable collocations	Unacceptable collocations	Total

	No.	%	No.	%	No.	%
Fill-in-the-blanks verb + noun	95	52.8	85	47.2	180	100
Fill-in-the-blanks Adjective + noun	78	52	72	48	150	100
Translation verb + noun	51	37.8	84	62.2	135	100
Translation Adjective + noun	35	25.9	100	74.1	135	100
Grand Total	259	43.2	341	56.8	600	100

Table 5

Low proficiency students' production of acceptable and unacceptable collocations

Task	Low proficiency students					
	Acceptable collocations		Unacceptable collocations		Total	
	No.	%	No.	%	No.	%
Fill-in-the-blanks verb + noun	50	27.8	130	72.2	180	100
Fill-in-the-blanks Adjective + noun	29	19.3	121	80.7	150	100
Translation verb + noun	11	8.1	124	91.9	135	100
Translation Adjective + noun	20	14.8	115	85.2	135	100
Grand Total	110	18.3	490	81.7	600	100

With regard to the elicitation tasks used in this study, Tables 4 and 5 also show that participants had more difficulties in producing English collocations in the translation task than in the fill-in-the-blank task. A possible explanation of this result is that in the translation task participants were required to produce the whole *verb + noun*, and *adjective + noun* English collocations, whereas in the fill-in-the-blank task they were required to supply only a single lexical item whether a *verb* or an *adjective* which collocates with the already existing noun in the given sentence. Therefore, while they were required to supply only 50% of the collocation in the fill-in-the-blank task, they were asked to provide 100% of the collocation in the translation task. That is probably why their performance in the fill-in-the-blank task outdid that in a more demanding task such as the translation task.

In general, Figure 2 shows that HPS produced 259 (43.17%) acceptable collocations, whereas LPS produced only 110 (18.33%) responses containing acceptable collocations. These results are also in line with earlier studies such as Al-Zahrani (1998); Lui (2000) which suggest that learners' knowledge of collocations may increase as their proficiency level advances.

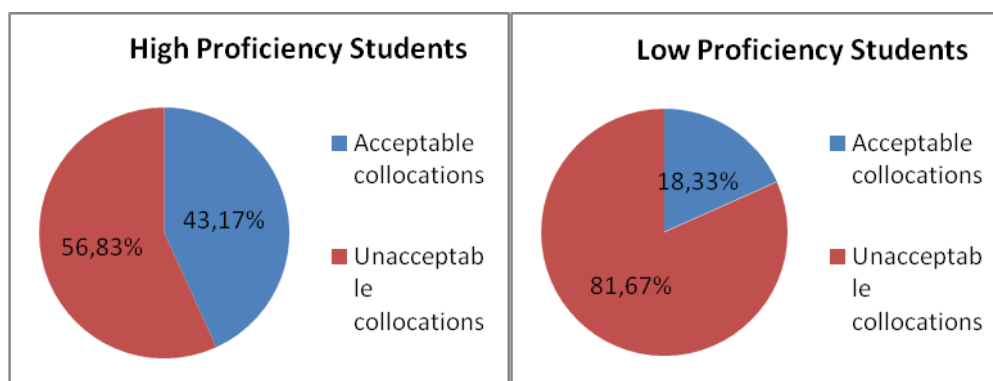


Figure 2: High and Low proficiency students' production of acceptable and unacceptable collocations

5.2. Frequency and percentage of participants' overall use of strategies in producing English lexical collocations

Participants' overall use of strategies in the production of acceptable and unacceptable collocations for each subcategory as well as the major categories was computed by carrying out a frequency and percentage count. The data under investigation yielded a total of 1426 occurrences of strategies used by the participants of the study. It must be noted that the total number of strategies used was higher than the total number of items produced by the participants of this study because some participants used two and sometimes three strategies in their attempt to produce one response. In this respect, Paribakht (1985) maintains that "very often a subject's statement contained several CS[communication strategies]. That is, they occurred within the framework of another CS. Each of these embedded strategies has been regarded a separate entry" (p. 134-135). Following Paribakht (Ibid.), in this study, if an item elicited two or three strategies, each occurrence was counted within its separate subcategory. Frequency of occurrences and percentages of strategies were calculated along the five major categories of strategies of the developed taxonomy of this study. These major categories included the 'retrieval strategy', 'L1 based strategies', 'L2 based strategies', 'reduction strategies', and 'test-taking strategies'. Results of each major category are presented next.

5.2.1. Retrieval strategy

The first major category is the 'retrieval strategy'. This strategy was used in 179 (12.55%) occurrences to produce acceptable English lexical collocations, and not occurring at all in producing unacceptable collocations (see Table 6).

Table 6

Frequency and percentage of participants' overall use of the 'retrieval strategy' in producing acceptable and unacceptable English lexical collocations

Retrieval Strategy	Acceptable Collocations		Unacceptable Collocations	
	<i>f</i>	%	<i>F</i>	%
	Retrieval	179	12.55	0
Total	179 / 12.55 %			
Grand Total	1426 / 100%			
Frequency/Percentage				

5.2.2. L1 based strategies

The second major category in the taxonomy is 'L1 based strategies'. This category comprises 10 L1 based strategies (see Table 7). Strategies under this category occurred 425 times (29.80%) out of a total of 1426 occurrences, of which they occurred 99 times (6.94%) in producing acceptable collocations, and 326 times (22.86%) in producing unacceptable collocations.

In the production of acceptable collocations in this major category, four subcategories were employed by the participants of the current study. The most used strategy was 'positive transfer' which occurred 77 times (5.40%) indicating its popularity, followed by 'use of L1 synonyms' which occurred 16 times (1.12%), and

finally the least used strategies both ‘use of L1 non standard lexical items’ and ‘L1 paraphrase’ which occurred three times (0.21%) each.

Table 7: *Frequency and percentage of participants’ overall use of ‘L1 based strategies’ in producing acceptable and unacceptable English lexical collocations*

L1 based Strategies	Acceptable		Unacceptable	
	Collocations		Collocations	
	<i>f</i>	%	<i>F</i>	%
Negative transfer	0	0	140	9.82
Positive transfer	77	5.40	24	1.68
L1 synonyms	16	1.12	62	4.35
L1 figurative expressions	0	0	3	0.21
L1 Non-standard use	3	0.21	16	1.12
Language switch	0	0	2	0.14
Overextension of L1 lexical items	0	0	11	0.77
Use of L1 related concepts	0	0	5	0.35
L1 & L2 Phonemic similarities	0	0	5	0.35
L1 paraphrase	3	0.21	58	4.07
Subtotal	99	6.94	326	22.86
Total Frequency/percentage	425 / 29.80 %			
Grand total frequency/ percentage	1426 / 100%			

As for the production of unacceptable collocations, participants used all subcategories in this major category. The most frequent subcategory was ‘negative transfer’ which occurred 140 times (9.82%), followed by ‘use of L1 synonyms’ which occurred 62 times (4.35%), and ‘use of L1 paraphrase’ with 58 (4.07%) occurrences. The least used strategies in the production of unacceptable collocations were ‘language switch’ which was used only twice (0.14%), ‘use of L1 figurative language’ which occurred three times (0.21%), and ‘use of L1 related concepts’ and, ‘L1 and L2 phonemic similarities’ which both occurred five times (0.35%) each. Other strategies were in mid-position as displayed in Table 7.

5.2.3. L2 based strategies

The third major category in the taxonomy is ‘L2 based strategies’. This category comprises the largest number of subcategories, which includes 15 subcategories. In this category, 578 (40.53%) occurrences of L2 based strategies were employed by participants, of which 141 (9.89%) of the occurrences resulted in the production of acceptable collocations. On the contrary, and occurring with a high frequency, 437 (30.65%) of the occurrences produced unacceptable collocations. Table 8 below illustrates participants’ use of ‘L2 based strategies’ in producing acceptable and unacceptable collocations.

In this category, 11 strategies were used by participants in the production of acceptable collocations. Among all the subcategories listed in Table 8, the strategy of ‘use of L2 common words and de-lexicalized verbs’ occurred with the highest frequency. Out of a total of 1426 occurrences of strategies, 71 (4.98%) occurrences of this strategy produced acceptable collocations. Strategies that ranked second in this category were ‘use of L2 synonyms’, and ‘approximation’ which both occurred 21 times (1.47%). The strategies that were used least in producing acceptable collocations in this category were ‘use of L2 idioms’, ‘use of physical description’ which each occurred once (0.07%) in the data, followed by ‘relying on grammatical clues’ which occurred twice (0.14%). Next in frequency in this category were ‘use of L2 derivation’, and ‘use of L2 paraphrase’ which occurred three times each (0.21%). Strategies that did not occur at all in the production of acceptable collocations were ‘word coinage’, ‘use of L2 figurative expressions’, ‘overextension of L2 lexical items’, and ‘use of an L2 different word class’. The remaining strategies’ in this category occurred with relatively low frequencies (see Table 8).

Table 8: *Frequency and percentage of participants' overall use of 'L2 based strategies' in producing acceptable and unacceptable English lexical collocations*

L2 based Strategies	Acceptable		Unacceptable	
	Collocations		Collocations	
	<i>f</i>	%	<i>F</i>	%
L2 synonyms	21	1.47	36	2.52
L2 paraphrase	3	0.21	88	6.17
L2 common & de-lexicalized words	71	4.98	150	10.52
Word coinage	0	0	7	0.49
L2 Negation	5	0.35	10	0.70
L2 Antonyms	7	0.49	4	0.28
L2 figurative expressions	0	0	3	0.21
L2 Derivation	3	0.21	0	0
Approximation	21	1.47	65	4.56
L2 physical description	1	0.07	8	0.56
L2 grammatical clues	2	0.14	7	0.49
Overextension of L2 lexical items	0	0	5	0.35
Use of an L2 different word class	0	0	45	3.16
L2 learning & personal experience	6	0.42	9	0.63
L2 Idioms	1	0.07	0	0
Subtotal	141	9.89	437	30.65
Total Frequency/percentage	578 / 40.53%			
Grand total frequency/ percentage	1426 / 100%			

In producing unacceptable collocations, however, participants used 13 strategies in this major category. The strategy which occurred with the highest frequency was again 'use of L2 common words and de-lexicalized verbs', which occurred 150 times (10.52%), followed by 'use of L2 paraphrase' which occurred 88 times (6.17%), and 'approximation' which occurred 65 times (4.56%), followed by 'use of an L2 different word class' occurring 45 times (3.16%). The least used strategies in the production of unacceptable collocations were 'use of L2 figurative expressions' with three occurrences (0.21%), 'use of L2 antonyms' with four occurrences (0.28%) and 'overextension of L2 lexical usages' with five occurrences (0.35%). Two strategies were not used in this major category in the production of unacceptable collocations, 'use of L2 derivation' and 'use of L2 idioms'. Other strategies did not occur with a very high frequency either (see Table 8).

5.2.4. Reduction strategies

The fourth major category in the taxonomy is 'reduction strategies'. It comprises three subcategories 'total avoidance', 'use of irrelevant lexical item', and 'message abandonment'. All three subcategories occurred 205 times (14.38%) in the production of unacceptable collocations only. None had occurred in the production of acceptable collocations. Two of the subcategories in this category occurred with a relatively high frequency, they were 'total avoidance' which occurred 85 times (5.96%), and 'use of irrelevant lexical item' with 99 times (6.94%) of occurrence. On the other hand, 'message abandonment' occurred 21 times (1.47%) with a relatively low occurrence compared to the other two strategies. Table 9 shows frequencies and percentages of strategies used under this category in producing acceptable or unacceptable English lexical collocations.

Table 9: *Frequency and percentage of participants' overall use of 'reduction strategies' in producing acceptable and unacceptable English lexical collocation*

Reduction Strategies	Acceptable		Unacceptable	
	Collocations		Collocations	
	No.	%	No.	%
Total Avoidance	0	0	85	5.96
Use of an irrelevant lexical items	0	0	99	6.94
Message Abandonment	0	0	21	1.47
Subtotal	0	0	205	14.38
Total: Frequency/percentage	205 / 14.38 %			
Grand total: frequency/percentage	1426 / 100%			

5.2.5. Test-taking strategies

The fifth major category in the taxonomy deals with 'test-taking strategies'. It includes two subcategories 'use of words that appeared earlier in the task', and 'use of contextual information'. Strategies under this category were used 39 times (2.73%). The strategy of 'use of words that appeared earlier in the task' had not occurred in the production of acceptable collocations, but was employed four times (0.28%) in producing unacceptable collocations. On the other hand, use of contextual information occurred 16 times (1.12%), in the production of acceptable collocations, and 19 times (1.33%) in the production of unacceptable collocations (see Table 10).

Table 10

Frequency and percentage of of participants' overall use of ' test-taking strategies' in producing acceptable and unacceptable English lexical collocations

Test - taking Strategies	Acceptable		Unacceptable	
	Collocations		Collocations	
	No.	%	No.	%
Use of words that appeared earlier in the task	0	0	4	0.28
Use of contextual information	16	1.12	19	1.33
Subtotal	16	1.12	23	1.61
Total: Frequency/percentage	39 / 2.73 %			
Grand total: frequency/percentage	1426 / 100%			

5.2.6. Participants' overall use of the major categories of strategies in producing English lexical collocations

To summarize the results displayed earlier in this section, Table 11 shows all five major categories' frequency of occurrences and their percentages. Out of a total of 1426 occurrences of strategies, 'retrieval' occurred 179 times (12.55%) in producing acceptable collocations only, none had occurred in the production of unacceptable collocations. 'L1 based strategies' occurred with a frequency of 99 times (6.94%) in producing acceptable collocations, and 326 times (22.86%) in producing unacceptable collocations. On the other hand, 'L2 based strategies' occurred with a high percentage in producing both acceptable and unacceptable collocations. It occurred with a frequency of 141 times (9.89%) in the production of acceptable collocations, and 437 times (30.65%) in the production of unacceptable collocations. On the contrary, 'reduction strategies' occurred only in the production of unacceptable collocations with a frequency of 205 times (14.38%). 'Test- taking strategies' were the least used strategies in both the production of acceptable and unacceptable collocations. They occurred 16 times (1.12%) in the production of acceptable collocations, and 23 times (1.61%) in the production of unacceptable collocations.

Table 11

An overall frequency and percentage's count of the major categories of strategies used by the participants in producing acceptable and unacceptable English lexical collocations

Strategies	Participants strategy use			
	Acceptable Collocations		Unacceptable Collocations	
	No.	%	No.	%
Retrieval	179	12.55	0	0
L1 based strategies	99	6.94	326	22.86
L2 based strategies	141	9.89	437	30.65
Reduction strategies	0	0	205	14.38
Test-taking strategies	16	1.12	23	1.61
Subtotal	435	30.50	991	69.50
Total	1426 / 100 %			

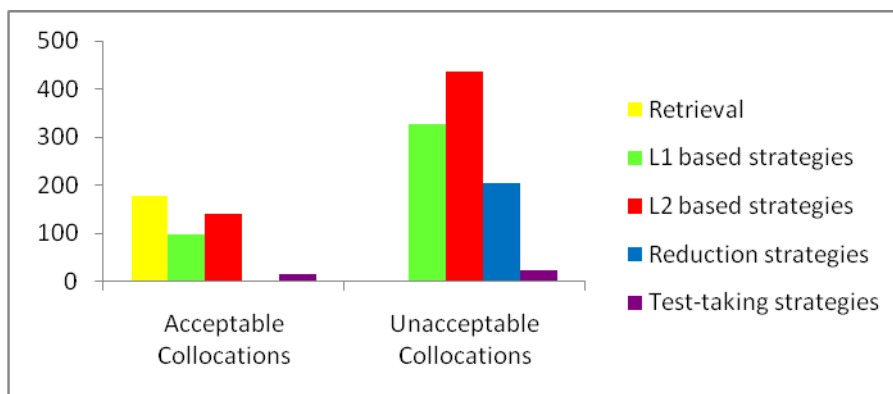


Figure 3. A comparison between frequencies resulted from participants' use of the major categories of strategies in producing acceptable and unacceptable English lexical collocations.

Figure 3 shows that more strategies were employed in producing unacceptable collocations compared to those which produced acceptable collocations. In producing acceptable collocations, the 'retrieval strategy' ranked first, 'L2 based strategies' ranked second, 'L1 based strategies' ranked third, 'test-taking strategies' ranked fourth, and the 'reduction strategies' did not occur at all in the production of acceptable collocations. In producing unacceptable collocations, however, 'L2 based strategies' ranked first, followed by 'L1 based strategies', 'reduction strategies' ranked third, 'test-taking strategies' ranked fourth, whereas 'retrieval strategy' did not occur at all in the production of unacceptable collocations.

5.2.7. Frequency and percentage of participants' use of strategies with reference to their proficiency level in producing English lexical collocations

The results of this study showed variations in the performance of the participants. The subcategories within each major category varied in their frequency of occurrence in two dimensions. First, they varied with regard to the frequency of occurrence among subcategories used by the same group. Second, they differed with regard to the difference between both groups in employing strategies categorized in each major category. To give an overview of data, high proficiency level students (HPS) employed a total of 715 strategies, whereas low proficiency students (LPS) used a total of 711 strategies in producing English lexical collocations. A detailed description of each group's performance is presented in the next section.

5.2.7.1. Retrieval strategy

The first major category in the taxonomy was the 'retrieval strategy'. As stated earlier, this strategy was only used in the production of acceptable collocations, and was not used at all by both groups in the production of unacceptable collocations (see Table 12). As for the two groups of participants use of this category, HPS used this strategy 145 times (20.28%), whereas LPS used it 34 times (4.78%) in the production of acceptable collocation. This indicates that LPS with apparently a smaller inventory of L2 vocabulary used 'retrieval' with a low frequency compared to the HPS who probably possess a larger size of L2 vocabulary.

Table 12. *A comparison of the Frequency and percentage of the retrieval strategy used by each group in producing acceptable or unacceptable English lexical collocations*

Retrieval Strategy	HPS				LPS			
	Acceptable Collocations		Unacceptable Collocations		Acceptable Collocations		Unacceptable Collocations	
	<i>F</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Retrieval	145	20.28	0	0	34	4.78	0	0
Total	145 / 20.28 %				34 / 4.78 %			
Grand Total	715 / 100%				711 / 100%			

5.2.7.2. *L1 based strategies*

The results showed that both groups used ‘L1 based strategies’ in the production of collocations (see Table 13). Out of a total of 715 occurrences of strategies used by HPS, 221 (30.91%) ‘L1 based strategies’ were employed by HPS, of which 62 occurrences (8.67%) produced acceptable collocations, and 159 occurrences (22.24%) resulted in unacceptable collocations. On the other hand, LPS used ‘L1 based strategies’ 204 times (28.69 %) of which 37 occurrences (5.20%) produced acceptable collocations, and 167 occurrences (23.49%) resulted in unacceptable collocations. A closer look at each group’s use of ‘L1 based strategies’ in the production of collocations is presented in the following section.

Table 13

A comparison of the frequency and percentage of the ‘L1 based strategies’ used by each group in producing acceptable or unacceptable English lexical collocations

L1 based Strategies	HPS				LPS			
	Acceptable Collocations		Unacceptable Collocations		Acceptable Collocations		Unacceptable Collocations	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Negative transfer	0	0	68	9.51	0	0	72	10.13
Positive transfer	47	6.57	11	1.54	30	4.22	13	1.83
L1 synonyms	11	1.54	35	4.90	5	0.70	27	3.80
L1 figurative expressions	0	0	1	0.14	0	0	2	0.28
L1 Non standard use of lexical items	1	0.14	4	0.56	2	0.28	12	1.69
Language switch	0	0	0	0	0	0	2	0.28
Overextension of L1 lexical items	0	0	10	1.40	0	0	1	0.14
Use of L1 related concepts	0	0	0	0	0	0	5	0.70
L1 & L2 phonemic similarities	0	0	4	0.56	0	0	1	0.14
L1 paraphrase	3	0.42	26	3.64	0	0	32	4.50
Subtotal	62	8.67	159	22.24	37	5.20	167	23.49
Total: Frequency/percentage	221 / 30.91 %				204 / 28.69 %			
Grand Total	715 / 100 %				711 / 100 %			

As shown in Table 13, out of the 10 subcategories of strategies in this major category, HPS used only four strategies in producing acceptable collocations. They were ‘use of positive transfer of a single L1 lexical item’ which occurred 47 times (6.57%), ‘use of L1 synonyms’ occurred 11 times (1.54%), ‘use of L1 non-standard lexical items’ which occurred only once (0.14%), and ‘use of L1 paraphrase occurred three times

(0.42%). This indicates that 'use of positive transfer of a single L1 lexical item' was the most used strategy by HPS in the production of acceptable collocations, whereas, 'use of 'L1 non-standard lexical items' was the least used by HPS in the production of acceptable collocations.

In contrast, in the production of unacceptable collocations, HPS used 8 out of 10 of the strategies in this category. The two remaining unused strategies were 'language switch', and 'use of L1 related concepts'. As for the eight used strategies, the most used strategy in the production of unacceptable collocations was 'negative transfer of an L1 single lexical item' which occurred 68 times (9.51%), followed by 'use of L1 synonyms' with an occurrence of 35 times (4.90%), and 'use of L1 paraphrase' which occurred 26 times (3.64%). Among the least used strategies in producing unacceptable collocations, were 'use of L1 figurative expressions' which occurred once (0.14%), 'use of L1 non-standard lexical items', and 'use of L1 & L2 phonemic similarities' which both occurred four times (0.56%). The overall use of 'L1 based strategies' by HPS indicates these strategies' high occurrence in their production of unacceptable collocations.

The performance of LPS in the production of lexical collocations with regard to use of 'L1 based strategies' major category to produce acceptable collocations did not vary greatly than that of HPS. A closer look at Table 23 shows that LPS used only three strategies in the production of acceptable collocations. They were 'use of positive transfer of a single L1 lexical item' which occurred 30 times (4.22 %), 'use of L1 synonyms' occurred 5 times (0.70%), 'use of L1 non-standard lexical items' twice (0.28%). Other strategies were not used at all by LPS in the production of acceptable collocations.

In the production of unacceptable collocations, on the other hand, LPS used all strategies in this category. Strategies in this category varied in their frequency of occurrence as shown in Table 14. For example, the strategy of 'negative transfer of a single L1 lexical item' was the most used strategy with a frequency of 72 occurrences (10.13%), followed by 'use of L1 paraphrase' which occurred 32 times (4.50%), next in frequency was 'use of L1 synonyms' which occurred 27 times (3.80%). The least used strategies, however, were 'use of L1 & L2 phonemic similarities', 'over-extension of L1 lexical items', which occurred once each (0.14%), followed by 'language switch' and 'use of L1 figurative expressions' which occurred twice each (0.28%). The remaining strategies were in mid-position between the highlighted subcategories.

Table 13 also shows that HPS and LPS did not vary greatly in their use of 'L1 based strategies' with regard to the total number of strategies used by each group in this category. Nevertheless, results suggest that HPS were relatively more successful users of 'L1 based strategies' in the productions of acceptable collocations with 62 occurrences (8.67%) compared to the LPS who used them 37 times (5.20 %). The most successful strategy in the production of acceptable collocations in this category was 'positive transfer of an L1 single lexical item' which was used by the HPS 47 times (6.57%), and 30 times (4.22%) by the LPS. With regard to the production of unacceptable collocations, however, both groups had employed strategies in this major category with a relatively high frequency. For example, HPS used 'L1 based strategies' 159 times (22.24%), and LPS employed them 167 times (23.49%). The strategy used most by both groups in the production of unacceptable collocations was 'negative transfer of a single L1 lexical item' which was used by HPS with a frequency of 68 occurrences (9.51%), and by the LPS 72 times (10.13%) indicating its common use among both groups.

5.2.7.3. L2 base strategies

In employing strategies in this major category, both groups used most of the strategies listed in Table 14. Out of a total of 715 occurrences of strategies used by HPS, 293 occurrences (40.98%) of 'L2 based strategies' were employed of which 92 occurrences (12.87%) produced acceptable collocations, and 201 occurrences (28.11%) resulted in unacceptable collocations. On the other hand, out of a total of 711 occurrences of strategies used by LPS in this study, 'L2 based strategies' were used 285 times (40.08 %) of which 49 occurrences (6.89%) produced acceptable collocations, and 236 occurrences (33.19%) resulted in unacceptable collocations.

In the production of acceptable collocations, the HPS used 11 subcategories in this major category. The strategies that were used most in the production of acceptable collocations by HPS were 'use of common words and de-lexicalized verbs' which occurred 39 times (5.45%), followed in frequency by 'approximation' which occurred 15 times (2.10%), next in frequency was the 'use of L2 synonyms' which occurred 14 times (1.96%). The least used strategies, however, were 'use of L2 idioms' and 'use of physical description' which both occurred once (0.14%) followed by, 'use of L2 derivation', and 'use of L2 paraphrase' both of which occurred 3 times (0.42%). The remaining strategies, as shown in Table 14, did not occur with high frequency of occurrence either. Some strategies were not used at all, such as 'word coinage', 'use of L2 figurative expressions', 'relying on L2 grammatical clues', 'use of an L2 different word class', and 'overextension of L2 lexical usages'.

HPS used ‘L2 based strategies’ also in the production of unacceptable collocations but with a higher ratio. All strategies in this category were used except ‘use of L2 idioms’ which did not occur at all in the production of unacceptable collocations. With regard to the most used strategies in this section, ‘use of common words and de-lexicalized verbs’, ranked first with a frequency of 64 times of occurrences (8.95%), followed by ‘use of L2 paraphrase’ which occurred 32 times (4.48%), ‘use of L2 synonyms’ occurred 22 times (3.08%), and ‘use of an L2 different word class’ which occurred 21 times (2.94%). Among the least used strategies in the production of unacceptable collocations, HPS used ‘relying on L2 grammatical clues’ only once (0.14%), ‘use of L2 negation’, ‘use of L2 antonyms’, and ‘use of L2 figurative expressions’ 3 times (0.42%) each. Other strategies frequencies of occurrence and percentage appear in Table 14.

In producing acceptable collocations, LPS used 6 out of 15 strategies in this category, other strategies were not used at all (see Table 14). Out of a total of 711 occurrences of strategies employed by LPS, the strategy that was used most in the production of acceptable collocations by LPS was ‘use of common words and de-lexicalized verbs’ which occurred 32 times (4.50%). The least used strategies were ‘use of L2 antonyms’, and ‘recalling from an L2 learning and personal experience’ which occurred only once (0.14%) each, and ‘relying on grammatical clues’ which occurred twice (0.28%). Other strategies occurred with low frequency in this category, such as ‘use of L2 synonyms’ which occurred 7 times (0.98%), and ‘approximation’ which occurred 6 times (0.7%). In producing acceptable collocations, LPS used ‘L2 based strategies’ with a relatively low frequency with a total number of 49 occurrences (6.89%) of strategies used in this category.

Table 14

A comparison of the frequency and percentage of the ‘L2 based strategies’ used by each group in producing acceptable or unacceptable English lexical collocations

L2 based Strategies	HPS				LPS			
	Acceptable		Unacceptable		Acceptable		Unacceptable	
	Collocations		Collocations		Collocations		Collocations	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
L2 synonyms	14	1.96	22	3.08	7	0.98	14	1.97
L2 paraphrase	3	0.42	32	4.48	0	0	56	7.88
L2 common and de-lexicalized words	39	5.45	64	8.95	32	4.50	86	12.10
Word coinage	0	0	4	0.56	0	0	3	0.42
L2 Negation	5	0.70	3	0.42	0	0	7	0.98
L2 Antonyms	6	0.84	3	0.42	1	0.14	1	0.14
L2 figurative expressions	0	0	3	0.42	0	0	0	0
L2 derivation	3	0.42	0	0	0	0	0	0
Approximation	15	2.10	30	4.20	6	0.84	35	4.92
L2 physical description	1	0.14	7	0.98	0	0	1	0.14
L2 grammatical clues	0	0	1	0.14	2	0.28	6	0.84
Overextension of L2 lexical items	0	0	4	0.56	0	0	1	0.14
Use of an L2 different word class	0	0	21	2.94	0	0	24	3.38
L2 learning & personal experience	5	0.70	7	0.98	1	0.14	2	0.28
L2 idioms	1	0.14	0	0	0	0	0	0
Subtotal	92	12.87	201	28.11	49	6.89	236	33.19
Total:								
Frequency / percentage	293 / 40.98 %				285 / 40.08 %			
Grand Total	715 / 100%				711 / 100%			

In producing unacceptable collocations by LPS, results revealed that strategies used in ‘L2 based strategies’ category varied in their frequency of occurrence as shown in Table 14. They also indicate that most strategies in this category were used by LPS except the strategies of ‘use of L2 idioms’, ‘L2 derivation’, ‘L2 figurative expressions’ which did not occur at all. Out of 711 strategies used by LPS, the most used strategy in

this category was 'use of common words and de-lexicalized verbs' which occurred 86 times (12.10%). Next in frequency of occurrence was 'use of L2 paraphrase' which occurred 56 times (7.88%), followed by 'approximation' with an occurrence of 35 times (4.92%), and 'use of an L2 different word class' which occurred 24 times (3.38%). In contrast, the least used strategies were 'use of L2 antonyms', 'use of L2 physical description', and 'overextension of L2 lexical usages' all of which occurred once (0.14%), followed by 'recalling from an L2 learning and personal experience' which occurred twice (0.28%), and word coinage which occurred 3 times (0.42%). The remaining strategies occurred in mid position as shown in Table 14.

Results in Table 14, also indicate that both groups did not differ greatly in their use of 'L2 based strategies' in general as they were employed by HPS 293 times (40.98%), and by LPS 285 times (40.08%). However, they did differ in their frequency of use on subcategory's level and on the bases of the acceptability of the collocations used. In general, in producing acceptable collocations, HPS were more successful users of 'L2 based strategies' with a frequency of 92 occurrences (12.87%), compared to LPS which used them 49 times (6.89%). HPS also used more of the subcategories in this major category than the LPS. In producing unacceptable collocations, however, both groups used 'L2 based strategies' with a relatively high frequency, as they were used by the HPS 201 times (28.11%), and by the LPS 236 times (33.19%). Results also suggest that the most used strategy by both groups in producing acceptable and unacceptable collocations was 'use of L2 common words and de-lexicalized verbs'. Some strategies were used by one group only, such as 'use of L2 figurative expressions', 'use of L2 derivation', and 'use of L2 idioms' which were used by the HPS only. Table 14 shows how the frequency of occurrences within subcategories in this major category varied between the two groups.

6. Conclusion

The results of this study reveal that in the production of unacceptable collocations HPS, use of the major categories followed this order: first, 'L2 based strategies', second, 'L1 based strategies' third, 'reduction strategies', and last, 'test-taking strategies' whereas the 'retrieval strategy' did not occur at all. On the other hand, the use of LPS of strategies in the production of unacceptable collocations had the following order: 'L2 based strategies' ranked first, 'reduction strategies' ranked second, 'L1 based strategies' which ranked third, and 'test-taking strategies' in final position, whereas the 'retrieval strategy' did not occur at all in the production of unacceptable collocations.

Though some studies admitted that most of learners' collocational errors could be attributable to negative transfer from their L1 which is the only resource from which learners can rely upon (Bahns & Eldo, 1993; Bahns, 1993; Farghal & Obiedat, 1995; Huang, 2001, Zughoul & Abdul-Fattah, 2001, 2003; Nesselhauf, 2003), the results obtained in this study revealed that there are other intralingual factors that resulted in learners' collocational errors. This was manifested in participants' use of more 'L2 based strategies' than 'L1 based strategies' in producing unacceptable collocations. In this regard the results of this study supported the findings reached by Wang & Shaw (2008) which suggested that not only L1 transfer was responsible of learners' collocational problems but also there are other intralingual factors.

Furthermore, the results of this study showed that both groups relied on 'L2 based strategies' more often than 'L1 based strategies', in producing both acceptable and unacceptable collocations. It must be noted that in these major categories of strategies there were one or more subcategories that were used with a higher ratio than the other existing subcategories. Some strategies were more dominant than others in each category. For example, in employing 'L2 based strategies', the most common strategy used by both groups was 'use of common words and de-lexicalized verbs', followed by 'use of L2 paraphrase', and 'approximation' respectively. In the major category of 'L1 based strategies', on the other hand, the strategy of 'use of positive transfer of a single L1 lexical item' was the most used strategy by both groups in the production of acceptable collocations. In the production of unacceptable collocations, however, the strategy of 'negative transfer of a single L1 lexical item' was the strategy that was used most by both groups. Such strategy choices made by learners could be a reflection of their teachers' teaching practices of simplifying the new vocabulary introduced through probably using strategies such as 'L1 transfer' 'used of common words and de-lexicalized verbs' 'approximation', and 'paraphrase'.

It is well known that collocational strategies (CSs) are used with the primary goal to compensate for inadequacies resulting from a limited L2 linguistic system to promote communication especially in L2 oral language production. For this reason, researchers investigating learners' language oral production called for teaching them in order to encourage learners' communication in L2. In this regard, the results of this study

revealed that both high and low proficiency students drew on almost similar strategies in producing acceptable or unacceptable collocations in terms of the type of strategy chosen. This suggests that learners from both groups of different proficiency levels share certain ability that is referred to as 'strategic competence'. HPS though did not differ greatly on their choice of strategies than LPS, they differed with regard to the frequencies of occurrences of most of the strategies used particularly in the production of acceptable collocations.

This finding suggests that higher proficiency level could promote learners' production of acceptable collocations. Based on this finding, it can be inferred that in the area of collocational production, CSs teaching may not enhance learners' production of acceptable collocations, whereas explicit teaching of English lexical collocations could hopefully improve learners' production of acceptable collocations. In this sense, this study strongly supports Bialystok's (1990) view that:

The more language the learner knows, the more possibilities exist for the system to be flexible and adjust itself to meet the demands of the learner. What one must teach students of a language is not strategy, but language. (p. 147)

7. Pedagogical Implications and Recommendations for Teaching English Lexical Collocations for EFL learners

In this study, a taxonomy of CSs employed by the participants of this study was developed. This taxonomy could serve as a useful tool to teachers in understanding their students' performance when seeking to produce English lexical collocations. Such a taxonomy, as well as, the quantitative results of this study may assist teachers to emphasise areas of strength that may help students' produce acceptable collocations. It may also direct teachers to discourage those ineffective strategies such as 'reduction strategies' that lead to the production of unacceptable collocations.

Since the retrieval strategy turned out to be effective in the production of acceptable collocations, it is advisable to find ways to enhance learners' ability to retrieve acceptable English collocations. To this end, early exposure to collocations is recommended from the earliest stages of L2 learning (Lewis, 1993; Hill, 2000). To achieve this, collocations should be introduced through intensive reading and listening programmes at the earliest stages of L2 learning to provide an L2 collocational input which may later lead to an output on the part of learners. In this respect, Hill (2000) maintains that "what the language learners are exposed to from the earliest stages is crucial. Good quality input should lead to good quality retrieval" (p. 54). Therefore, when L2 vocabulary items are first introduced to learners they must be presented with their frequent partners in their L2 typical use. Such partnership between lexical items should be stressed as early as possible. Hence, learners would hopefully recognise such partnerships whenever they encounter them, thus they may learn and later retrieve them as whole chunks.

The results of this study also revealed that participants overused employing a specific subcategory of 'L2 based strategies', i.e., 'use of common words and de-lexicalized verbs' with high frequency compared to other 'L2 based strategies' in producing both acceptable and unacceptable collocations. Based on Lewis, Morgan (2000), and Hill (2000) view about using the language that learners already have to extend their collocational competence, it is recommended that learners are introduced to already known common verbs and adjectives together with their frequent noun collocates (Lewis, 1993). For example, it is advisable to introduce de-lexicalised verbs such as *make, do, have, get, take, give, and put*, or common adjectives such as *great, full, complete, quick, little, big, large, strong, good, and bad* with a wide range of their noun collocates. Hence, students will be encouraged to explore the collocational ranges of such common verbs or adjectives and then practise them in their typical use. In this sense, students' attention must be drawn to consider that "learning more vocabulary is not just learning new words, it is often learning familiar words in new combinations" (Woolard, 2000, p. 31).

Students' attention should also be drawn to L2 collocational restrictions between lexical co-occurrences. Such collocational restrictions impose limitations on their substitution by other lexical items. Students must be directed that semantically compatible lexical items are not necessarily collocationally interchangeable. Although synonyms are words with mostly similar meanings, they may not be substituted one for another in some contexts. Hence, students need to have adequate knowledge of the L2 lexicon particularly with sense relations. Recognition of paradigmatic as well as syntagmatic relations of the target language promotes their use of such 'L2 based strategies' in the production of acceptable collocations. By the same token, students may substitute de-lexicalised words which relatively carry little meanings in themselves unaware that each word may have a different collocational range. Therefore, it is recommended that such L2 collocational

restrictions be explicitly taught. Furthermore, special emphasis should be given to restricted collocations, for they may pass unnoticed by learners during traditional vocabulary teaching classes. Students ought to be directed towards noticing and recording such combinations to observe their collocational ranges in different L2 contexts. Hence, this would encourage learners' independence for exploring this important area of L2 lexicon.

Results also revealed that participants of this study relied heavily on their 'L1 based strategies' to provide responses to the given tasks in the production of both acceptable and unacceptable collocations. The predominant strategy that produced acceptable collocations was that of 'use of positive transfer of a single lexical item', whereas 'use of negative transfer of a single lexical item' was the prevailing strategy that resulted in unacceptable collocations. Interestingly enough, the same strategy of 'use of positive transfer of a single lexical item' had also resulted in unacceptable collocations. This suggests that positive transfer of single lexical items does not always produce acceptable collocations. A possible explanation for that is that participants used to transfer word for word without probably being aware of the collocational restrictions of the produced combinations. In this sense, it is advisable as Lewis (1997) suggests that learners should aim at transferring chunk for chunk rather than word for word.

Raising students' awareness of the phenomenon of collocation is crucial for effective L2 learning. Explicit teaching of collocations is advisable in order to raise learners' awareness of the nature of this phenomenon and its importance for their L2 production. To this end, vocabulary should be introduced as whole chunks rather than isolated lexical items. Words are not normally used alone but with other words which habitually co-occur with them in a language. This reflects the need for learning L2 lexical items in their frequent typical pattern of actual use. Explicit teaching of collocations should be put into practice with the help of improved language course books, trained teachers, effective teaching practices, and motivated independent learners.

Learners could immensely benefit from getting access to important resources for noticing collocational patterns by consulting specialised dictionaries of English collocations. Therefore, it is recommended that learners make use of such specialised dictionaries in exploring how words collocate together in English, and how other unexpected combinations do co-occur to form an acceptable collocation. Dictionaries also help learners to frequently revisit already learned material. In addition, they offer other new alternatives of lexical items that can collocate with the target lexical item in question in specific contexts. They may also provide learners with a variety of collocations that can help them produce precise and natural L2 writing. Encouraging learners to use English collocations' dictionaries could help them experience different collocational forms of English. Hence, dictionaries of collocations can serve as resources that enrich learners L2 mental lexicon with new combinations.

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