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Contrastive Analysis of the Use of Lexical Verbs and Verb-noun Collocations in Two Learner Corpora —WECMEL vs. LOCNESS—

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Abstract

Empirical evidence has shown that the linguistic productions of native and non-native learners differ in so many ways which may affect the achievement of communicative competence by non-native learners. Lexical verbs seem to be the most problematic ones as they carry both semantic meanings and also tense markers. Since previous studies have shown that non-native learners do not use these verbs effectively as do native learners, including the use of verb-noun collocations which are eminent in native writing, this study, therefore, examines and contrasts the salient features of commonly used lexical verbs and their verb-noun collocations between a corpus of ESL learners whose first language is Malay (WECMEL) and native learner corpus (LOCNESS). This contrastive analysis hopes to unveil the significant elements of common lexical verbs and their noun collocates used in academic writing and its non-native use by Malays ESL learners. The findings would suggest pedagogical implications in the area of language education.

Keywords

Lexical verbs, Verb-noun collocations, Learner Corpora, Contrastive analysis,
Communicative competence

1 Introduction

Over the last decade, the approach taken in teaching English in Malaysia has always been the Communicative Language Teaching (CLT) as this approach emphasizes on

communicative competence that allows message to get conveyed in several language contexts. Although CLT does not place great importance on the achievement of grammatical competency, the quality of an academic writing, on the other hand, would also be based on grammatically appropriate and accurate sentences. Close (1991) also asserts that effective communication takes place via a sequence of logically related sentences. For sentences to be logical, they need to be grammatically accurate as well. Since sentences are made up of lexical items, in writing, communicative competence can be enhanced with the proper use of vocabulary, which includes both semantic and syntactic uses.

Previous corpus-based studies, for example, Shazila and Noorzan (2012), have shown that among the lexical items used in writing, nouns and verbs seem to dominate a text. It is not surprising as nouns and verbs are the main lexical items that make up a sentence. Every written sentence requires at least a noun and a verb, for example, *The teacher is writing*. A verb can also be followed by another noun, for instance, *The teacher is writing a book*. Syntactically, the nouns in this example are used as subject and object respectively; grammatically, the nouns used are singular and therefore preceded by an article; semantically, the noun *book* can be used with the verb *write*. However, the English nouns are not this straightforward, which requires learners of English to understand the nature and grammatical use of nouns in order for them to use the nouns accurately. But perhaps, the most difficult lexical item in English sentences would be the verbs. The verbs can be categorized as lexical verbs or auxiliary verbs. In the verb phrase *will have been driven*, it consists of one lexical verb, i.e. *driven*, from the base-form *drive*. Whereas, the other words in *will have been driven* are identified as auxiliary verbs. The lexical verb is also known as the main verb which terms the process taking place. It is the most 'important' verb as it conveys 'meaning', as compared to auxiliary verbs, also called the *helping verbs*, which only convey the time and aspect of the verb phrase. It is the lexical verbs that are the main concern of the study.

The lexical verbs can be categorized into three different types: Intransitive, copula and transitive (Verspoor and Sauter, 2000). Intransitive verbs do not take an object or describe the subject, for example, *He is sleeping*. However, this sentence can still be expanded to include a prepositional phrase to indicate position of the action, such as, *He is sleeping on the couch*. In contrast, transitive verbs can take an object, such as, *he hit the cat*. As for copula verbs, they are used to indicate attributes of the subject, for instance, *She will become a good mother*. In the three latter examples, it can be deduced that lexical verbs are often followed by a prepositional phrase (*on the couch*) or a noun phrase (*the cat* or *a good mother*). Not only are there different types of lexical verbs which carry different semantic meanings, they also carry tense markers in the tense and aspect system of the English language which is found complex by second language learners, especially to those whose first language does not employ the same system. Due

to the differences and complexity of the English lexical verb forms, they prove to be one of the challenging parts of speech to be learned by learners and taught by language instructors.

1.1 The learning and teaching of lexical verbs

The teaching of verbs normally comes under the teaching of grammar. Teaching verbs implicitly would mean applying the traditional method where the rules pertaining to the formation of verbs are highlighted. The belief that grammar is important has led several language instructors to focus on the acquisition of grammar rules that includes the learning of the forms of lexical verbs. Nonetheless, this usually results in getting good grades in grammar tests but very often than not, learners are not able to apply the grammar rules to actual writing, even after a substantial number of years of learning them (Sharil, 2009). Even if learners are able to apply grammar rules accurately in using the lexical verbs, they still need to be able to use the verbs correctly with other words, i.e. they need to know the collocates of verbs. As indicated earlier, a text is mostly made up of nouns and verbs; a lexical verb can be followed by a noun, or in other words, a lexical verb can have nouns as its collocates, forming a verb-noun collocation. However, not all verbs can have any nouns as their collocates. Thus, besides the syntactic and grammatical knowledge that a learner must have, he must also have the knowledge of which lexical verb collocates with which noun, i.e. collocational competence, which definitely would enhance a learners' communicative competence. As a matter of fact, verb-noun collocations are commonly found prevalent in the writing of native speakers and therefore the lack or inaccurate use of verb-noun collocations in writing would simply show that the learners have not achieved native-like proficiency.

Clearly, there is a need to redefine the method in teaching and learning of lexical verbs. Possibly the best way to do this is by looking at how these verbs are actually used by L2 learners in comparison to how L1 learners use them.

1.2 Verb-noun collocations

As collocation is a prominent feature in native writing, several studies have looked into the use of collocations in non-native writing. Despite that, there can still be many aspects that need reinvestigation especially if previous studies involved only relatively small data and L2 learners with a specific mother tongue. As the influence of mother tongue may not be the same from one language to another, an investigation on Malay ESL learners' writing will thus bridge the gap in the study of collocations in SLL. The emphasis on the importance of learning collocations in second language writing would most probably translate to the need of sound collocational competence for ESL learners,

especially at advanced levels, in order for them to attain both communicative competence and native like proficiency level in writing.

Verb-noun collocations seem to be one of the most investigated collocations (eg. Nesselhauf, 2003; Koya, 2003; Zinkgraf, 2008; Brashi, 2009). This could be due to the high occurrence of collocations in the academic context and newspaper language that are formed from high-frequency verbs (Biber et al., 1999). Lesniewska (2006: 97) states that "high frequency verbs are very polysemous, the restrictions on their use, which are not predictable from their meaning, may be perceived as highly arbitrary", which would constitute a problem to ESL learners in using the verb-noun collocations. Nevertheless, according to Howarth (1998), it is the ability to use these collocations that will reflect the nativeness of their writing. In the Malaysian context, despite the importance of collocations in academic writing, verb noun collocations have not been given much emphasis in EAP (English for Academic Purposes) courses which are normally offered to intermediate and advanced ESL students. This is probably due to the fact that very little is known on the actual use of these verb-noun collocations in academic context and in the writing of L2 learners of English, whose L1 is Malay. Therefore, this calls for a study in this area as to offer insights into the actual use of verb-noun collocations by Malay ESL learners.

1.3 Contrastive analysis

Many studies of SLL have employed the approach of contrastive analysis depending on the objectives of study. Lado, who was a prominent figure in modern linguistics, emphasized on the importance of contrastive analysis in SLL studies. In one of his most influential books, i.e. *Linguistics across cultures: Applied linguistics for language teachers* (Lado, 1957) he stated that "...in the comparison between native and foreign language lies the key to ease or difficulty in foreign language learning." This view is shared by several contemporary linguists and researchers, such as, Aijmer and Altenberg (1996) and Johansson (2007), who also believe that contrasting languages or different varieties of the same language would give insights that might not surface in studies on monolingual corpora. Furthermore, Leech (1998) and Granger (1996) also assert that when contrasting a learner language with a native-speaker corpus, areas of nativeness and non-nativeness can be identified. The findings of such studies, would therefore lead to the design of teaching materials that could improve or enhance second language learning. All this would sum up the three objectives of contrastive analysis which are to provide insights into similarities and differences between languages, to explain and predict problems in L2 learning, and to design course materials for language teaching. The advent of corpus linguistics and the advancement in computer technology have made it even possible for a contrastive analysis of massive data.

1.4 Theoretical framework

The study of verb-noun collocations can either take the frequency-based approach, which was first introduced by Firth (1956) and expanded by Halliday (1966) and Sinclair (1991), or the phraseological-based approach, which was made popular in the area of lexicography by Cowie (1981), Hausmann (1989) and Mel'cuk (1998) (in Nesselhauf, 2005). In the frequency-based approach, what matters most is the co-occurrence of the collocations. A verb with a noun combination is considered a collocation if it occurs more than once (Kennedy, 1990). In this approach, however, the relationship of the lexical elements is not considered significantly as in the phraseological-based approach.

In the phraseological-based approach, both words and syntactic relationship of the lexical elements play an important role in deciding the occurrence of a collocation. Cowie (1981) distinguishes the transparency and commutability elements of the lexical verbs to come up with a continuum of collocations that range from free combinations, restricted collocations, figurative idioms to pure idioms. In this approach also, the elements in the collocations are said to be syntactically related and must consist of two lexical elements, such as, a verb and a noun, to be considered as collocations (Hausmann, 1984 cited in Nesselhauf, 2005). Nesselhauf (2005), on the other hand, indicates that a verb-noun collocation does not only necessarily consist of a verb and a noun but also other words that form the grammatical patterns of verb-noun collocations. All the words that form the verb-noun collocations are referred as 'lexemes' (Nesselhauf, 2005: 25) so that verb-noun collocations with the same element but different word forms are considered as the same collocation.

There are three different types of classifications of verb-noun collocations that emerge from the phraseological-based approach of verb-noun collocations, which are based on the grammatical patterns of the collocations, semantic characteristic of the verbs and degree of restriction of the combinations (Nesselhauf, 2005). However, for the purpose of the study, only the first classification will be considered. The grammatical classification is given further categories by Nesselhauf, i.e. VO (*bake a cake*), VPO (*think of a solution*), VA (*fall out of love*), VOC (*elect sb a president*), VOPO (*take sth into account*), and VO + to + inf (*push sb to*). Although there are studies that combine the frequency-based approach and phraseological based approach, the present study only undertakes the approach of phraseology and would not consider frequency as an important element in deciding on the occurrences of verb-noun collocations as the learner corpora involved are only contrasted against each other and not referred to a reference corpus. However, following the like of Halliday (1966), only verb-noun combinations that co-occur more than once were considered for analysis.

II Purpose of Study

Taking into account the importance of lexical verbs in an English sentence and the difficulties faced by L2 learners in using and learning verb-noun collocations, it is the purpose of this study to investigate the use of lexical verbs and the nature verb-noun collocations used in L1 and L2 writing through a corpus linguistic approach. L1 writing is the argumentative essays written by native learners of English and L2 writing is the essays written by a specific group of ESL learners with the same mother tongue, i.e. Malay. As far as studies on verb-noun collocations are concerned, there have been no specific studies that focus on the writing of Malay ESL learners at tertiary level. The findings of this study would be able to identify the non-native elements that may occur in the use of verb-noun collocations in L2 writing which may further lead to pedagogical implications. With the purpose of investigating the use of lexical verbs and their verb-noun collocations in L1 native speakers' writing and L2 learners' writing, the study is both quantitative and qualitative in nature which seeks to answer the following research questions:

1. What are the features of commonly used lexical verbs in L1 and L2 writing?
2. What are the similarities and differences in the use of verb-noun collocations between L1 and L2 writing?

III Methodology

3.1 The corpora

The study comprises two sets of learner corpora, i.e. Louvain Corpus of Native English Essays (LOCNESS)¹⁾, a native learner corpus which is pioneered by Granger (in Barlow, 2005) to complement the International Corpus of Learner English (ICLE) native learner corpus and WECMEL (Written English Corpus of Malay ESL Learners), which is a non-native learner corpus. LOCNESS is a collection of argumentative essays produced by A-level students in Britain (60,209 words), and British and American undergraduates (95,695 and 168,400 words respectively), with a total of about 240,000 words. LOCNESS has been used in many contrastive studies (eg. Guo, 2006; Juknevičienė, 2008; Ping, 2009), some of which with significant findings. Hence, it will be the choice for native learner corpus as it was designed for the purpose of a contrastive analysis with a non-native learner corpus.

WECMEL, on the other hand, was specifically compiled to meet the objectives of this study. It consists of about 470,000 words of argumentative essays from 720 Malay ESL learners who were enrolled in a pre-degree program in Universiti Teknologi Mara

(UiTM) in Malaysia. All the Malay ESL learners who contributed to the corpus had a high distinction in their English paper in the national examination at the end of their secondary years as it is an admission requirement of the pre-law programme they were in. Subsequently, upon completing the programme successfully, they would be absorbed into the Law Faculty which requires them to have a high level of English proficiency for them to cope well with the language used in the legal environment, in both the academic context and their future profession.

3.2 Data generation procedure

The lexical analysis software WordSmith Tools version 5²⁾ was employed to generate both the lexical verbs and verb-noun collocations from both corpora, using the Wordlist and Concord functions. Since this study is both quantitative and qualitative, the lexical verbs were quantified and only most commonly used lexical verbs with a high frequency of noun collocates were considered for the qualitative analysis of verb-noun collocations.

In an earlier study conducted by the researcher (Noorzan and Shazila, 2012), it was found out that the most common verb form of the lexical verbs in both WECMEL and LOCNESS is VVI, i.e. the infinitive form of the lexical verb. Table 1 below shows the summary of the verb-forms of the lexical verbs used by Malay ESL learners and English native learners.

Table 1 The frequency of the verb forms of the lexical verbs used in WECMEL and LOCNESS

Tags of lexical verbs ³⁾	Frequency in WECMEL	Frequency in LOCNESS	Differences	Examples
VVB	12, 167 (2.56%)	3,996 (1.52%)	8,171 (+ 1.04%)	<i>accept, conclude, propose, attack, choose, throw</i>
VVD	3,641 (0.50%)	1,078 (0.68%)	2,563 (- 1.04%)	<i>asked, gained, offered, faced, manipulated, spent</i>
VVG	7,273 (1.37%)	2,670 (1.31%)	4,603 (+ 0.06%)	<i>eating, hiding, meeting, enjoying, grabbing, robbing</i>
VVI	11,606 (4.05%)	3,691 (3.02%)	7,915 (+ 1.03%)	<i>hope, inform, pay, reject, play, engage</i>
VVN	6,352 (1.09%)	3,152 (2.14%)	3,200 (- 1.05%)	<i>kept, missed, owned, extracted, grown, hired</i>
VVZ	4,396 (0.66%)	2,073 (0.96%)	2,323 (- 0.30%)	<i>teaches, respects, opens, smacks, urges, improves</i>
TOTAL	45,435 (10.23%)	16,660 (9.63%)	28, 775 (+ 0.6%)	

IV Results and Discussions

4.1 Frequency and types of lexical verbs

Based on the finding in Table 1, most common lexical verbs in lemma forms that appeared in both corpora were identified. There are altogether 42 lexical verbs that have the frequency percentage of more than 0.1 percent, as shown in Table 2 below:

Table 2 Percentage of commonly used lexical verbs in WECMEL and LOCNESS

No.	Commonly used VVI lexical verbs	Percentage in WECMEL (n=48,620)	Percentage in LOCNESS (n=25,315)	No.	Commonly used VVI lexical verbs	Frequency in WECMEL (n=48,620)	Frequency in LOCNESS (n=25,315)
1.	get – T	3.20% - VVI	1.39% - VVI	22.	feel – L	0.64% - VVG	1.12% - VVB
2.	make – T	3.17% - VVI	2.97% - VVI	23.	look – I	0.60% - VVI	0.65% - VVI
3.	take – T	2.10% - VVI	1.88% - VVI	24.	prevent – T	0.55% - VVI	0.24% - VVI
4.	give – T	1.82% - VVI	1.18% - VVI	25.	realize – I/T	0.47% - VVI	0.34% - VVI
5.	know – I/T	1.75% - VVB	1.05% - VVI	26.	stop – I/T	0.47% - VVI	0.37% - VVI
6.	help – I/T I	1.61% - VVI	0.56% - VVI	27.	put – T	0.43% - VVI	0.52% - VVN
7.	need – T	1.59% - VVB	0.92% - VVB	28.	produce – T	0.42% - VVI	0.27% - VVI
8.	lead – I/T	1.59% - VVI	0.49% - VVI	29.	choose – T	0.40% - VVI	0.36% - VVI
9.	happen – I	1.58% - VVB	0.44% - VVI	30.	continue – I/T	0.40% -VVI	0.48% - VVI
10.	cause – T	1.35% - VVI	0.64% - VVI	31.	lose – T	0.40% - VVD	0.52% - VVI
11.	think – I	1.33% - VVB	1.11% - VVB	32.	find – T	0.40% - VVI	0.88% - VVI
12.	want – T	1.32% - VVB	1.12% - VVB	33.	keep – T	0.39% - VVI	0.51% - VVI
13.	say – I/T	1.11% -	1.30% -	34.	bring – T	0.38% -	0.63% -

		VVI	VVI			VVI	VVI
14.	show – I/T	1.10% - VVB	0.73% - VVB	35.	teach _ I/T	0.37% - VVB	0.32% - VVI
15.	go – I	1.06% - VVI	1.56% - VVG	36.	pay – I/T	0.36% - VVI	0.48% - VVI
16.	play – I/T	1.00% - VVG	0.48% - VVI	37.	change – I/T	0.29% - VVI	0.59% - VVN
17.	see – I/T	0.98% - VVI	1.45% - VVI	38.	create · T	0.28% -VVI	0.51% - VVN
18.	use – T	0.89% - VVG	1.80% - VVN	39.	try – I/T	0.26% - VVB	0.65% - VVG
19.	learn – I/T	0.75% - VVI	0.36% - VVI	40.	stay – I	0.24% _ VVI	0.19% - VVI
20.	reduce – I/T	0.67% - VVI	0.28% - VVI	41.	live – I	0.19% - VVI	0.58% - VVI
21.	increase – I/T	0.66% - VVI	0.36% VVI	42.	support · T	0.45% - VVI	0.45% - VVI

Although the percentage may seem small, the overall frequency of lexical verbs found in each of the learner corpora is substantial, i.e. 48,620 lexical verbs in WECMEL, and 25,315 lexical verbs in LOCNESS. Therefore, the cut-out point is 0.1% so that lexical verbs with high occurrences could be considered for further analysis. In addition, from the 42 lexical verbs which were commonly used in both learner corpora, there is a total of 17 transitive verbs, 7 intransitive verbs, 17 lexical verbs which can either be transitive or intransitive and 1 linking verb. This finding suggests that there is a high possibility of the verbs to have nouns as their collocates. Besides the percentage and the type of verbs shown in the list of commonly used lexical verbs in WECMEL and LOCNESS, the list also reveals the most common verb form of the lexical verb as listed next to the percentage. It shows that the most common verb form of the commonly used lexical verbs is VVI, in accordance with the earlier finding of the common verb form of the overall lexical verbs in both learner corpora.

30 of the lexical verbs in WECMEL occur most as infinitive verb (VVI); 9 as base-form verb (VVB); 1 as past-tense (VVD) and present progressive (VVG) verbs ; none as past participle (VVN) or present singular (VVZ). As for LOCNESS, about two third of the lexical verbs appear most in the form of infinitive verb (31 out of 42), 5 verbs in base-form (VVB), 2 in present progressive (VVG) and 4 in past participle form (VVN). These findings suggest that Malay ESL learners have significantly overused the past tense form as compared to native learners, especially for the lexical verbs, *say* and

lose. In addition, the Malay ESL learners have also considerably underused the past participle form as none of the lexical verbs in WECMEL has VVN as the highest frequency. There are four past participle verbs in LOCNESS which have the highest frequency among all the verb forms, i.e. *use*, *put*, *change* and *create*.

4.2 Lexical verbs and their noun combinations

Table 3 Frequency of verb-noun combinations in WECMEL and LOCNESS

No.	Frequency of verb-noun combinations in WECMEL	Most commonly used verb form	Frequency of verb-noun combinations in LOCNESS	Most commonly used verbform
1.	<i>cause</i> – Transitive 96.21%	VVI	<i>reduce</i> – Transitive 69.01%	VVI
2.	<i>reduce</i> – Transitive 81.21%	VVI	<i>prevent</i> – Transitive 62.90%	VVI
3.	<i>bring</i> – Transitive 74.47%	VVI	<i>take</i> – Transitive 55.85%	VVI
4.	<i>lose</i> – Transitive 66.66%	VVD	<i>keep</i> – Transitive 53.43%	VVI
5.	<i>use</i> – Transitive 64.65%	VVG	<i>stop</i> – Transitive 51.06%	VVI
6.	<i>take</i> – Transitive 63.20%	VVI	<i>make</i> – Transitive 50.26%	VVI
7.	<i>make</i> – Transitive 51.65%	VVI	<i>give</i> – Transitive 50.00%	VVI

The same lexical verb list in Table 2 was used to find out the frequency of verb-noun combinations. Table 3 above shows the commonly used lexical verbs in WECMEL and LOCNESS which have the highest percentage of verb-noun combinations. The highest

frequency of the verb-noun combinations is based on the percentage rather than the total number as both corpora are not of the same size. It was found that the lexical verbs with the highest frequency of verb-noun combinations in WECMEL are *cause*, *reduce*, *bring*, *lose*, *use*, *take* and *make*; whereas for LOCNESS, the lexical verbs are *reduce*, *prevent*, *take*, *keep*, *stop*, *make* and *give*, all arranged in sequence of frequency. As anticipated from the previous finding of the frequency of the type of lexical verbs, all the verbs that have the highest percentage of noun collocates are transitive verbs. This implies that verb-noun collocations are also formed from transitive verbs.

The large percentage difference in the use of *cause* + *noun* combinations by Malay ESL learners is a result of the essay topic, which is, “Careless drivers are the main cause of road accidents in Malaysia”. Therefore, it is not surprising that the combinations of *cause* + *accidents* are in abundance. From this finding, it appears that both Malay ESL learners and English native learners have *reduce*, *take* and *make* as the lexical verbs with a high occurrence of noun collocates. This indicates that these verbs also may have a high possibility of having verb-noun collocations. Further analysis was done to look at the occurrences of verb-noun collocations from these verbs. Since it is a contrastive analysis of verb-noun collocations, the approach to the analysis was qualitative rather than quantitative as it would enable the researcher to investigate the salient features of the verb-noun collocations.

4.3 The syntactic patterns of verb-noun collocations

4.3.1 *reduce* + *noun* collocations

Table 4 Syntactic patterns of *reduce*+*noun* collocations in WECMEL and LOCNESS

Syntactic patterns	<i>reduce</i> + <i>noun</i> collocations in WECMEL	<i>reduce</i> + <i>noun</i> collocations in LOCNESS
VO (Verb + Object)	<p><i>reduce the amount of accidents</i> (d8.s14.m16)</p> <p><i>reduce their awareness</i> (d10.s2.m15)</p> <p><i>reduce potential chances</i> (d10.s25.m10)</p> <p><i>reducing their cholesterol</i> (d19.s1.m15)</p> <p><i>reduce the impact</i> (d11.s11.m12.5)</p> <p><i>reduce our stress level</i> (d20.s18.m10)</p> <p><i>reduce this matter</i> (d8.s13.m13)</p>	<p><i>reduce congestion</i></p> <p><i>reduce crime</i></p> <p><i>reduce the number of cars</i></p> <p><i>reduce gas emissions</i></p> <p><i>reduce pollution</i></p> <p><i>reduce supply</i></p>

	<i>reduce pressure (d19.s10.m12)</i> <i>reduce the number of accidents (d3.s5.m17)</i> <i>reduce the problem (d15.s26.m10)</i> <i>reduce the rate of death (d7.s22.m12)</i> <i>reduce their speed (d10.s23.m14)</i>	
Ungrammatical structures	<i>reduce road accident (d2.s15.m8)</i> <i>reduce the amount of road accident (d14.s15.m13)</i> <i>reduce the number of road accident (d10.s13.m14)</i> <i>reduce the rate of accident (d7.s24.m11)</i> <i>reduce the percentage of the road accident (d8.s7.m14)</i>	

Table 4 shows the syntactic patterns of *reduce + noun* collocations. The lexical verb *reduce* is transitive and therefore the use of it will have to be followed by a noun. However, *reduce* is not an action verb that requires an object that is physically affected by the verb like, *kick the ball*. Therefore, although all the collocations of *reduce + noun* are categorized as having the syntactic pattern of VO, the nouns used, such as, *congestion*, *crime*, *emissions* and *pollution*, used by native learners in LOCNESS, are either abstract nouns, which are uncountable, or countable nouns, which are in plural forms. As for the *reduce + noun* collocations used by non-native learners, they are often preceded by either an article, as in *reduce the impact* and *reduce the problem*, or a determiner, such as, *reduce this matter*; or a pronoun, for example, *reduce their speed* and *reduce our stress*. The native learners, on the other hand, often used *reduce + noun* collocations without any other word preceding the noun, which could mean that the nouns, i.e. *congestion*, *crime* and *pollution*, used with the verb *reduce* by native learners have more possibility to be more collocable than the nouns used by Malay ESL learners. The only *reduce + noun* collocation used in this way by Malay ESL learners is *reduce pressure*. There are also a few ungrammatical structures used by these learners in constructing the *reduce + noun* collocations; the noun *accident* was used in singular form. They should be used in plural form when used in a noun phrase preceded by determinant nouns, such as, amount, rate, number and percentage.

4.3.2 *make + noun collocations*

Table 5 Syntactic patterns of *make+noun* collocations in WECMEL and LOCNESS

Syntactic patterns	<i>make + noun</i> collocations in WECMEL	<i>make + noun</i> collocations in LOCNESS
VO (Verb + Object)	<p><i>make a call (d7.s2.m10)</i></p> <p><i>make a change (d9.s12.m10)</i></p> <p><i>make a comparison (d27.s2.m13)</i></p> <p><i>make a conclusion (d27.2.m13)</i></p> <p><i>make a decision (d19.s21.m12)</i></p> <p><i>make a big difference (d10.s15.m12)</i></p> <p><i>make an effort (9d8.s13.m13)</i></p> <p><i>make a long journey (d8.s22.m15)</i></p> <p><i>make a better judgement (d16.s25.m11)</i></p> <p><i>make a new law (d13.s10.m13)</i></p> <p><i>make a good healthy life (d16.s12.m10)</i></p> <p><i>make a healthy mind (d19.s29.m18)</i></p> <p><i>make a mistake (8.s9.m18)</i></p> <p><i>make money (d18.s10.m15)</i></p> <p><i>make a move (d10.s14.m13)</i></p> <p><i>make any preparation (d9.ms13.m9)</i></p> <p><i>make this problem (d13.s21.m13)</i></p> <p><i>make a legal punishment (d4.s13.m9)</i></p> <p><i>making a new relationship (d17.s1.m11.5)</i></p>	<p><i>reduce congestion</i></p> <p><i>reduce crime</i></p> <p><i>reduce the number of cars</i></p> <p><i>reduce gas emissions</i></p> <p><i>reduce pollution</i></p> <p><i>reduce supply</i></p>

	<i>made a requirement</i> <i>(d19.s1.m15)</i> <i>make a strict punishment</i> <i>(d10.s14.m13)</i> <i>made some research</i> <i>(d25.s17.m9)</i> <i>make a revision</i> <i>(d17.s1.m11.5)</i> <i>made a new rule</i> <i>(d11.s24.m9)</i> <i>make any sense</i> <i>(d14.s11.m10)</i> <i>make a good strategy</i> <i>(d24.s21.m12)</i> <i>make a statement</i> <i>(d12.s7.m13)</i> <i>make a turn (d7.s3.m13)</i>	
VPO (Verb+Preposition+Object)		<i>make up the loss</i>
Ungrammatical structures	<i>make new friend</i> <i>(d15.s9.m9)</i> <i>make problem (d7.s14.m11)</i> <i>make a sense (d20.s8.m12)</i>	

The lexical verb *make* is also a transitive verb that requires a noun. Like *reduce*, it is difficult for *make* to occur with a noun that is physically affected by it. Almost all the samples of *make + noun* collocations in Table 4 have the syntactic pattern of Verb + Object, except one, *make up the loss*, used by a native learner, which falls under the syntactic pattern of VPO (verb + preposition + object). The *make + noun* collocations used by Malay ESL learners did not use any other syntactic patterns other than VO. From the samples shown in the above table, it seems that *make* that is followed by countable nouns must either be in plural form or is part of a noun phrase that is preceded by an article, or a pronoun, such as, *make their argument*, *make a change* or *make decisions*. On the other hand, *make* that has an uncountable noun as its collocate cannot be in plural form or be preceded by an article, but can be preceded by a determiner, for examples, *make any sense* or *make more money*. It seems that the uncountable nouns that occur with *make* may also appear directly following the verb *make* as there are two

instances of *make + noun* collocations where the verb *make* is followed by an uncountable noun, i.e. *make money* and *make room*. Semantically the noun *room* in the latter collocation does not literally mean the physical room but rather it indicates space, and therefore it is considered as uncountable here. A noun phrase which is followed by the verb *make* may also consist of an adjective to modify the noun, as in, *make a good strategy*, *make a long journey* and *make a big difference*, used by Malay ESL learners; and *make a strong case*, *make the right choices* and *make important contributions*, used by native learners. At the same time, some ungrammatical structures involving the use of incorrect nouns are found in WECMEL. Some Malay ESL learners are still not able to distinguish between the use of plural and singular nouns, and the use of countable and uncountable nouns; in *make new friend*, *make problem* and *make a sense*, these learners used singular nouns instead of plural nouns, and used the indefinite article *a* with an uncountable noun *sense*. Although *sense* may also be countable, for example, *there are 5 different senses*, the *sense* used in *make + collocation*, denotes the abstract noun.

4.3.3 *take + noun* collocations

Table 6 Syntactic patterns of *take+noun* collocations in WECMEL and LOCNESS

Syntactic patterns	<i>take + noun</i> collocations in WECMEL	<i>take + noun</i> collocations in LOCNESS
VO (Verb + Object)	<i>take an alcoholic drink</i> (d9.s1.m10) <i>taking drug</i> (d10.s10.m11) <i>taking medicine</i> (d1.s3.m11) <i>take action</i> (d16.s16.m11) <i>take attention</i> (d10.s23.m14) <i>take a chance</i> (d20.s19.m7) <i>take more hours</i> (d9.s23.m10) <i>take the initiative</i> (d13.s13.m13) <i>take a nap</i> (d14.s22.m12) <i>take note</i> (d10.s10.m11) <i>take part</i> (d17.s16.m10.5) <i>take place</i> (d4.s6.m17)	<i>take this mental action</i> <i>take a chance</i> <i>take credit</i> <i>take decisions</i> <i>take effect</i> <i>take about 3 hours</i> <i>take their own life</i> <i>take notice</i> <i>take part</i> <i>take place</i> <i>taking precautions</i> <i>take responsibility</i> <i>take the risk</i> <i>take the opposing side</i> <i>take more time</i>

	<i>take a precaution</i> <i>(d6.s1.m12)</i> <i>take a good preparation</i> <i>(d9.s13.m9)</i> <i>take the responsibility</i> <i>(d8.s21.m16)</i> <i>take a rest (9.s17.m10)</i> <i>take the risk (d18.s27.m10)</i> <i>take a big step</i> <i>(d3.s10.m13.5)</i> <i>take time (d4.s12.m10)</i> <i>take the call (d10.s5.m9)</i> <i>take the challenge</i> <i>(d6.s15.m12)</i> <i>take driving class</i> <i>(d10.s2.m12)</i> <i>take an example</i> <i>(d8.s14.m16)</i> <i>take a long journey</i> <i>(d7.s12.m12)</i> <i>take a driving license</i> <i>(d3.s7.m17)</i>	<i>reduce congestion</i> <i>take its toll</i> <i>taking a more long term view</i> <i>take many years</i> <i>take the course</i> <i>take the job</i> <i>take the medication</i>
VPO (Verb+Preposition+Object)	<i>take into account</i> <i>(d22.s2.m14)</i> <i>taken into consideration</i> <i>(d10.s20.m13)</i> <i>took your life away</i> <i>(d9.s1.m10)</i>	<i>take into account</i> <i>take away boxing</i> <i>take into considération</i> <i>take away another person's life</i> <i>take power away</i> <i>take up less space</i>
VA (Verb+Adverb Phrase (adverb+noun))		<i>take up to 20 years</i>
VOPO (Verb+Object+Preposition+Object)	<i>took great importance of</i> <i>students' participation</i> <i>(d26.s3.m12)</i> <i>take care of their health</i> <i>(d22.s6.m12.5)</i>	<i>take advantage of the system</i> <i>take care of the house</i> <i>take the law into their own hands</i>

	<i>take care about their body</i> (d23.s19.m10)	
VO+to+inf (Verb+Object+to+infinitive)	<i>take this advantage to do</i> (d6.s16.m16)	
Ungrammatical structures	<i>take an action</i> (d14.s6.m11) <i>taking consideration</i> (d9.s20.m11) <i>Taking example</i> (d11.s18.m12.5) <i>take a very long hours</i> (d8.s11.m12) <i>take license</i> (d10.s12.m14) <i>take your life</i> (d9.s1.m10) <i>take initiative</i> (d13.s5.m12) <i>take preventive measure</i> (d1.s10.m11.5) <i>take on drastic measure</i> (d17.s12.m11) <i>take nap</i> (d11.s1.m10) <i>take precaution</i> (d7.s8.m10) <i>take enough preparation</i> (d6.s16.m16) <i>take risk</i> (d13.s25.m12) <i>taken many step</i> (d3.s10.m13.5) <i>take care their safety</i> (d9.s13.m9)	

Table 6 above shows the syntactic patterns of take + noun collocations. It appears that take + noun collocations can fall under 5 different syntactic patterns, i.e. VO, VPO, VA, VOPO and VO + to + infinitive, with the first being the most common syntactic pattern. Like the lexical verbs *reduce* and *make*, *take* also is a lexical verb that is not often associated with a physical object. Similar to *reduce+noun* and *make+noun* collocations, the most common syntactic pattern of *take+noun* collocation is Verb + Object. In this syntactic pattern, the lexical verb can directly be followed by a noun, as in, *take action*, *take attention* or *take note*, which are used by Malay ESL learners; or *take credit*, *take effect* or *take notice*, used by native learners. Some commonly shared *take+noun*

collocations in this syntactic pattern are *take part* and *take place*. These collocations could be classified as fixed expressions as the possibility for *take* to occur with these nouns in this syntactic pattern would be high. The verb *take* in this syntactic pattern can also be followed by a noun phrase consisting of an article and a noun, as in, *take a nap*, *take a precaution* and *take the responsibility*, used by Malay ESL learners; and *take the course* or *take the job*, used by native learners. There are commonly shared *take+noun* collocations in this syntactic pattern which are *take the risk* and *take a chance*. Besides an article, the noun phrase can also have an adjective or a determiner, as in the samples *take a long journey*, *take more hours* and *take many years*. Noticeably, most of the objects in these collocations are not physical ones. Samples of *take + noun* collocations with nouns being the physical object come from Malay ESL learners, i.e. *take an alcoholic drink*, *taking drug* and *taking medicine*; the nouns used here appear to be edible nouns; hence, it can be said that edible nouns can be followed by the verb *take* to form a *take + noun* collocation.

The VA syntactic pattern of *take + noun* collocation is also not common in the two learner corpora. There is only instance used by a native learner, which is, *take up to 20 years*. The adverb phrase in this *take + noun* collocation, signifies time and consists of two prepositions followed by a determiner and a noun. Malay ESL learners, on the other hand, came up with an instance of VO + to + infinitive, i.e. *take this advantage to do*. This syntactic pattern was not found in LOCNESS. Both native and non-native learners did come up with a few instances of VOPO; interestingly, some *take + noun* collocations in this syntactic pattern were also shared by these two different groups of learners, i.e. *take into account* and *take into consideration*. Both of these verb-noun collocations can therefore be considered as fixed expressions that are commonly used in academic writing.

There are also a few occurrences of *take+noun* collocations by Malay ESL learners which are in ungrammatical structures. *Take an action* is considered incorrect as *take action* is a fixed expression, where the noun *action* cannot be used in plural form or preceded by an article when it is preceded by the verb *take*, like the collocation *take effect*. Other ungrammatical structures include missing of a preposition, as in *taking consideration*, *take your life*; missing of an article or incorrect use of a singular noun, as in *taking example*, *take license*, *take risk*; *take preventive measure*, *take precaution*, *take initiative*; and missing or incorrect use of a preposition, as in, *take care their safety* and *take on drastic measure*. These incorrect structures of *take+noun* collocations, suggest that some Malay ESL learners were not able to apply some basic English grammar when it comes to forming verb-noun collocations.

V Summary and conclusions

This study investigated the lexical verbs and verb-noun collocations used by Malay ESL learners and native English learners. Most commonly used verb form of lexical verbs and verb-noun combinations appears to be VVI (verb infinitive). The lexical verbs with the highest percentage of noun collocates also seem to be the transitive type. The most commonly shared lexical verbs with a high frequency of verb-noun combinations are *reduce*, *make* and *take*. Possible collocations were then extracted from these verb-noun combinations and syntactically analyzed. Even though, in terms of syntactic patterns, the use of these verb-noun collocations differs considerably between Malay ESL learners and native English learners, it was found that the most common syntactic pattern for both groups of learners is Verb + Object (VO). The finding also reveals that the lexical verbs *reduce*, *make* and *take* do not normally take physical nouns as their noun collocates as most of the nouns that occur in the verb-noun collocations are abstract or non-physical nouns. This could suggest that the verbs *reduce*, *make* and *take* are delexical verbs that require appropriate use of nouns for delexicalization. This further indicates that these verbs could only collocate with a certain type of nouns. Finally, it was found out that although the Malay ESL learners who contributed the texts for the non-native corpus were said to have a high proficiency of English compared to learners of different groups, some of them did not display an acceptable proficiency of English when it comes to using verb-noun collocations.

From the above findings, it can be concluded since it is integral for second language learners to have collocational competence as it is part of communicative competence, verb-noun collocations should be taught both explicitly and implicitly to second learners of English, especially to second learners of English who aim to have native-like proficiency like the Malay ESL learners in this study. Since they are prominent features in native writing, learners need to know what the verb-noun collocations are and how they are used. But before learners are taught verb-noun collocations, they should be introduced to the features of a list of transitive verbs that are most likely to have a high frequency of noun collocates followed by the syntactic and semantic features of the verb-noun collocations in order for them to be able to construct proper verb-noun collocations. The grammatical structures of the syntactic patterns of the possible verb-noun collocations should also be given attention as ungrammatical structures would only reveal the incompetency of the L2 learners in using appropriate verb-noun collocations. The concordances from the corpora used in this study could assist language instructors or even material designers to come up with classroom materials that highlight both the use of collocations by native learners and the non-native use of verb-noun collocations by non-native learners. Further analysis is needed to find out the semantic uses and degree of collocability of the commonly used verb-noun collocations in

this study in order to come up with the characteristics of verb-noun collocations that could help second learners to use and understand verb-noun collocations better; hence improve their English proficiency and generally enhance second language learning and teaching.

Notes

- ¹⁾ LOCNESS was pioneered by Professor Sylviane Granger in University of Louvain in Belgium.
- ²⁾ WordSmith Tools is a computer lexical analysis software that was developed by Mike Scott at the University of Liverpool.
- ³⁾ The tags used in this study are based on BNC Tagset which is available from <http://www.natcorp.ox.ac.uk/docs/c5spec.html>

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