Scrutinizing Algerian EFL Learners' Collocational Knowledge and Vocabulary Level

Chadia Chioukh[*],

University of Mohammed Seddik Ben Yahya, Jijel, (Algeria),

chioukh.chadia@gmail.com

Abstract:

The present study investigates the relationship between collocational knowledge and vocabulary proficiency among Algerian EFL Master one students at Jijel University. A sample of 53 (out of 110) participants was examined using Laufer and Nation (1999) The Vocabulary-Size of Controlled Productive Ability Test, to assess their vocabulary level and the COLLEX 5 test, created by Gyllstad (2007) to scrutinize their collocational knowledge. Similarly, the study aims to determine the sample's proficiency in the two language aspects: vocabulary and collocations. More importantly, it seeks to disclose whether a correlation exists between these two aspects. Despite the well-documented significance of vocabulary and collocations in second/ foreign language acquisition, research in the Algerian context remains scarce. Hence, the present research attempts to fill the gap in this area by providing empirical evidence on any existing interplay between vocabulary level and collocational knowledge. The results yielded in both tests were analysed via SPSS through the use of Pearson correlation. The findings revealed that many of the participants showed an average level of English collocational knowledge. Meanwhile, a considerable portion demonstrated a low vocabulary level. As for the interconnectedness of the two aspects, the explanatory correlational analysis revealed a strong interplay (p-value=.670). Eventually, the findings underscore the imperative of integrating pedagogical materials to instruct vocabulary and collocations in Algerian higher education effectively.

Keywords: COLLEX 5- Collocation- Collocational knowledge-Correlation- Vocabulary Level-Vocabulary Level Test- COLLEX 5

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[*]Chadia Chioukh.

1- **INTRODUCTION**:

In the realm of language learning and acquisition, a substantial body of research has been conducted to examine the nature and strength of the connection between collocational knowledge and vocabulary level. Vocabulary is perceived as an essential component of language proficiency since it paves the way for learners to communicate effortlessly as they are endowed with access to a plethora of lexical backgrounds. Concurrently, having a good command of collocations lays the groundwork for facilitating language comprehension and production alike. Notwithstanding their inherent differences, these language aspects are convolutedly intertwined, as progression in one area frequently corresponds to development in the other. Hence, this study endeavours to divulge Algerian EFL Master one students' vocabulary proficiency and disclose their collocational knowledge. Similarly, it attempts to put into plain words the subtle interplay between the two variables. In examining the nature of this interconnectedness, the research might reveal facts about the gaps and portray the deficits characterizing participants' linguistic competencies, with particular reference to collocational knowledge and vocabulary level. Despite the crucial importance of vocabulary and collocations for any language learner in achieving linguistic competence, there is a notable gap in research in the Algerian context to gauge these aspects. Hence, further research is required to disclose the nature of the two variables' relationship for developing effective instructional strategies which should be tailored to primarily promote both Algerian EFL learners' lexical background and collocations. To be more insightful about the two variables and to get a deep understanding of their relationship, exploratory research is followed to answer the subsequent questions:
1. To what extent are Algerian EFL Master one students at English Language Department of Jijel University knowledgeable of English collocations?
2. What is their vocabulary level?
3. What is the relationship between their collocational knowledge and vocabulary level?

2- Literature Review

2.1. Collocational Knowledge: An Overview

In the first section of the literature review, issues related to collocation concept, such as definitions, categories, importance of possessing a collocation knowledge and ways of testing this knowledge are exposed.

2.1.1. Collocation Study Dimensions

In the latter half of the 20thcentury, the study of collocation has been shaped by dual perspectives. As for the first, namely the frequency-based tradition, it endeavours to scrutinize the frequency of statistical patterns to understand collocations. This approach to collocation study is closely tied with corpus linguistics and computational linguistics that attempt to introduce statistical data relevant to the occurrence of collocations. Phraseological tradition – as the second perspective- is embedded in the Russian phraseology, and whose contribution has elaborated the scope of collocation study. It is more associated with lexicography that attempts to compile and arrange dictionaries and the focal aim of this approach is to present the possible words that collocate to form natural meaning and idiomatic usage. Likewise, the phraseological approach is associated with language pedagogy as an efficient language learning/ teaching implies a good command of how words naturally collocate and combine in authentic language use (Gyllstad, 2007 p.6).

2.1.2. Collocations: Basic Definition

So diverse are the definitions given to the term 'collocation' in the literature, given the fact that it is not consistently defined across different fields of inquiry. Hence, this diversity in defining the concept, which is primarily attributed to the interdisciplinary nature of research investigating collocation and to the aims and the methods used by researchers, led to a range of interpretations (Gyllstad, 2007, pp.6-7).

Collocations can be defined as arbitrary combination of limited lexemes such as ' to be make decision' (Nesselhauf, 2005, p.1). They are one type of expressions-alternatively known as prefabricated components, prefabs, phraseological elements, lexical chunks- words of multiple elements, or formulaic classifications that are composed of more than a word, and they are, by and large, lexically and syntactically fixed (Nesselhauf, 2005, p.1). Palmer (1933) defined collocations as a sequence of two or more words that need to be learned as a single unit, rather than being constructed from individual components. (as cited Kurosaki, 2012, p.31). Likewise, Joshi (2020) elucidated that collocations are a combination of words frequently used together and seem natural together. O'Dell and McCarthy (2017) consider a collocation as a pattern of two and more words often occurring concurrently. Similarly, Celce-Murcia and Olshtain (2000, p.83) viewed collocation as chunks of language that native speakers possess and thereby they easily access language production and comprehension.

In a broad sense, regardless of the countless provided definitions to the term, collocations are then defined as a set of words, generally more than one word, coalesced to form a single meaning. Despite the different attempts to elucidate the concept of collocation, all the provided definitions consent that the natural co-occurrence of two words and more is what is known as collocations. That is, a collocation is a word that can naturally juxtapose with another word frequently to mean a distinct meaning.

2.1.3. Collocation Categories

Benson, Benson and Ilson (1997) categorized collocations into two broad types that are based on word classes: grammatical collocations and lexical collocations. Congruent with Benson et al. (1997)'s classification, Lewis (2009) and Hausmann (1989) put forward that collocations are either grammatical or lexical (p.134). As for grammar collocation, it comprises a word; principally an adjective, a verb, or a noun, accompanied by a grammatical component commonly a proposition, for example; 'eager to', 'reflect on', 'bad at' or a certain structural pattern, such as an infinitive or a clause. Grammar collocations are intriguing as they demonstrate systematically that many words have a particular preference in regard to their grammatical formulation. Put simply, a grammatical collocation is a connection between a word (a content) and either a complementing phrase or a function word (Bartsch, 2004). Yet, the content word in the grammatical collocations dominates and is deemed a more influential constituent compared to the function component (Bartsch, 2004).

The most common types of grammar collocations are listed subsequently:
* Noun + Preposition/ to infinitive/ that clause (such as response to, belief that…),
* Preposition + Noun (with regard to, in addition)
* Adjective + Preposition/ to infinitive/ that clause (proud of, eager to, aware that…)
* Verb + preposition/ an infinitive with to (e.g., adjust to, strive to), a verb ending in suffix –ing (such as keep being)

However, a lexical collocation does not include any grammatical items; it rather embraces only lexical ones. In contrast to grammar collocations, Lexical collocations do not comprise prepositions, infinitives, or clauses (Benson, Benson, & Ilson, 2010). Examples of

lexical collocations include: 'zesty spice', 'break down in tears', and 'uttered quietly'. Hence, the second type is believed to be more challenging and problematic in the process of learning English (Benson et al., 1997). It is worth mentioning that lexical collocations can be of free or fixed combinations. As for free combinations, it explained by Benson et al., (2010), they are instances where the two elements do not frequently appear together; they are not specifically linked to one another and can occur freely with other lexical items. Therefore, a phrase like 'condemn murder' is considered a free combination (p. XXXI). Thus, the verb 'condemn' can collocate with an unlimited number of nouns, such as 'condemn the abuse of power', 'condemn abortion', 'condemn the acquittal'…etc. (Benson et al., 2010, p.XXXI). On the other hand, fixed combinations pertain to those words that collocate with a limited number of nouns. An instance of this type is '*commit a murder* '. That is, the verb '*commit*' collocates with a few nouns whose meaning is crime and wrongdoing, and it specifically collocates with murder (Benson et al., 2010, p.XXXI)

Benson et al., (2010) categorized lexical collocations into seven major classes that are elucidated and inserted subsequently:

Table 1. Lexical Collocation Categories and Examples

Categories	Examples
Verb (usually transitive) + Noun/ pronoun (or prepositional phrase)	This type of collocations consists of a verb denoting creation and/or activation and a noun/pronoun. These collocations embrace fixed lexical combinations. Examples include: come to an agreement, make an impression, compose music, set a record, reach a verdict, inflict a wound.
Verb + Noun	With the verb meaning essentially eradication and/or nullification and a noun. Instances of these fixed lexical collocations. Examples include: reject an appeal, lift a blockade, break a code, reverse a decision, dispel fear, squander a fortune, demolish (raze/tear down) a house, repeal a law.
Adjective + Noun	Pairs such as strong tea; warm regards, chronic alcoholic; a pitched battle; a formidable challenge; a crushing defeat. In many instances, more than one adjective (or more than one form of the same adjective) can collocate with the same noun. Examples include: strong tea, warm regards, chronic alcoholic, pitched battle, formidable challenge, crushing defeat, warm/warmest regards, kind/kindest regards.
Noun + Verb	The verb, an action characteristic of the person or the thing nominated by the noun. Examples include: alarms go off (ring), bees buzz (swarm), blood circulates (clots, congeals, runs).
Noun + Noun (Noun of noun)	This type of collocation may indicate one of the two following meanings: (a) A larger unit to which a single member belongs, (b) A specific, concrete small unit of something that is larger and more general. Examples include: (a) a colony (swarm) of bees, a herd of buffalo, a pack of dogs, a bouquet of flowers, a pride of lions; (b) a bit (piece, word) of advice, an article of clothing, an act of violence.
Adverb + Adjective	This type of collocation comprises examples such as: deeply absorbed; strictly accurate, closely (entirely) acquainted, helplessly addicted, sound asleep; keenly aware.
Verb + Adverb	Examples of this category include: affect deeply, amuse thoroughly, anchor firmly, apologize humbly, appreciate sincerely, argue heatedly.

Benson et al., (2010)

2.1.4. Importance of Collocation Knowledge

Lewis (2009) clarified that collocational knowledge is by large demonstrated in the analysis of students' written and spoken output that apparently reveals the lack in their collocational knowledge (p.49). Lewis (2009) put into plain words that the lack of collocation competence may lead learners to make grammar mistakes. As they might not be competent enough at using collocations and not possess the accurate collocation to express what they exactly mean to say, learners are likely to produce longer sentences (Lewis, 2009). He further clarified that in their attempt to correct their learners' grammatical mistakes, teachers eventually fail as these mistakes do actually stem from their lack of collocation competence. In analysing learners' written essays, a deficiency in collocation competence is often exhibited in the learners' inability to know key collocates of a key word (Lewis, 2009).

In this respect, Lu (2020) advocated that collocation competence can only be seen as a part of Communicative Competence introduced by Hymes (1972) (as cited in Lu, 2020) as the latter comprises four knowledge competence, of which is what is actually performed via language. Put otherwise, Lu (2020) stressed that what can be performed via language-as a basic notion in communicative competence-is strongly intertwined in collocation competence. Hence, to perform language correctly entails good aptitude at using collocations. Likewise, Widdowson (1989) ascertained that communicative competence is far beyond being merely restricted to the good mastery and knowledge about grammar rules. Rather, it is aligned with a good command of collocation competence, predefined frameworks and a set of guidelines, next to the ability of the learner to apply those rules adequately to respond to contextual demands (as cited in Lu, 2020).

Having an appropriate collocational knowledge is significant to succeed in second/foreign language use. Being knowledgeable at fittingly implementing collocations is required particularly in areas such as speech production, idiomaticity and language comprehension as highlighted by Bonk (2000). In speech production, collocations are frequently accessed as language users, who are knowledgeable of collocation use, manage at using them accurately and thereby this contributes, by and large, to enhance their language fluency. Likewise, possessing a suitable knowledge of collocations mirrors a target –like lexical knowledge of idiomaticity in a speech community (Bonk, 2000). Put otherwise, language users (speakers and writers) who can appropriately select and use different expressions and vocabularies for several social situations and registers can only but disclose their native-like language use. The put into practice of collocations points out their good control, their fluency and the lack or the overuse of collocations may make their conventional phraseology and output (written or spoken) sound unnatural or 'accented' and foreign (Bonk, 2000; Siyanova and Schmitt, 2008). Finally, collocation knowledge is deemed of paramount importance at language comprehension level. Bonk (2000) elucidated that Language comprehension is another area where collocational knowledge may have significant impact (p.8). Thus, having access to collocational knowledge may potentially reduce the cognitive load for second/foreign language listeners or readers, as the familiarity with word combinations paves the way for them to understand immediately the meant messages and thereby interact accordingly. As Lewis (2000) asserted, teaching collocations must be an integral part of language instruction to enhance fluency and comprehension. Conversely, unconventional collocations may cause many difficulties and hinders ultimately comprehension (Bonk, 2000). Nation (2001) highlighted that acquiring a good knowledge of collocations can meaningfully improve the efficiency of language processing and comprehension.

2.1.5. Significance of Learning Collocations in ESL/EFL Classroom

Reckoning the significance of collocation in the learning process of English as a second (ESL)/ foreign language (EFL), Brown (1974) underscored the incorporation of collocation instruction in ESL/ EFL classrooms. In doing so, Brown (1974) argued that EFL/EFL learners' increased knowledge of collocation enhances many aspects some of which are listening comprehension, oral proficiency, and reading speed. Correspondingly, instructing collocations paves the way for ESL/EFL learners to be more knowledgeable about native speakers' language chunks used in both the spoken and the written form (Brown, 1974). In the same vein, O'Dell& McCarthy (2017) stressed that learning collocations helps learners to speak and write English in a more natural and accurate way (p.4). Furthermore, mastering collocations is likely to render ESL/EFL writing and speaking skills impressive and creative (O'Dell& McCarthy, 2017, p.4). Contrariwise, being unaware of collocations may make ESL/EFL learners' language unnatural, ambiguous, and may cause confusion while interacting with others.,

As proven in much research, collocation is deemed a sign of distinction between native speakers and non-native speakers of English (Bui, 2021). Put otherwise, an EFL learner's language would not sound natural and fluent unless s/he has a good knowledge and command of using collocations conveniently. Moreover, collocations enable ESL/EFL learners to develop their language skills, boost their communicative competence, and more importantly lead to native-like fluency achievement (Bui, 2021). Similarly, Gitsaki (1999) put collocation learning at the heart of vocabulary learning. Furthermore, many studies corroborated the prominence of having good collocation knowledge and command in developing EFL learners' language performance in general, style and usage, clarity, writing quality, and sentence generation (Alamro, 2015, p. 2241).

In addition, enhancing learners' range of vocabulary is correlated with the learning of vocabulary (O'Dell &McCarthy, 2017, p.7). To avoid using unsuitable words in given contexts and to be more precise about the intended meaning to express, learners should have a good knowledge of collocations. At an advanced level in the English language, as elucidated by O'Dell& McCarthy (2017), learners attempting to impress their interlocutor, especially in their written exams, often make use of collocations, and they are, by and large, awarded marks specifically for the proper use of collocations which makes their productions creative and genuine.

Not competently know the appropriate word combinations in a second/foreign language may hinder learners' fluency, as they may tend to transfer English collocations to equivalent ones in their mother tongue (Bui, 2021). As highlighted by McCarthy (1990) (as cited in Bui, 2021), achieving fluency is closely aligned with learners' mastery at the two levels of collocational knowledge the *productive* and *receptive*. Introducing vocabulary to them without emphasizing collocations presents an incomplete understanding of the language. Given that, integrating collocations in the teaching materials that should advocate the teaching and the drilling of collocations is no more than an option, it becomes an urgent need.

2.1.6. Testing Collocational Knowledge

The importance of acquiring good collocational knowledge in the process of learning a second/foreign language has been customary for researchers to investigate. Thus, testing collocational knowledge is approached in twofold distinction: receptive and productive

knowledge (Gyllstad, 2007). Demonstrating awareness of how words collocate and what types of lexical items commonly combine in a language is what stands for the receptive collocation repertoire. Conversely, knowing how to use collocations while producing language orally or in writing and being able to select the appropriate word with which a target one in a given context is what is conventionally recognised as productive collocational knowledge (Gyllstad, 2007).

Probing second language learners' collocational knowledge encompasses the use of two types of data categories, namely elicitation data and production data. While the former refers specifically to naturally occurring or spontaneous data, the latter incorporates data gathered through tasks principally designed to elicit specific responses from learners (Men, 2018, p.35).

Many elicitation methodologies have been so far developed for the evaluation of second language learners' proficiency in phraseological expression and comprehension., with much more emphasis on techniques such as translation tasks, blank filling tasks, cloze tests, and word combination tests. Such tasks allow researchers to directly assess learners' collocation production and comprehension (Men, 2018, pp.36-39). Some studies such as the one conducted by Bahns and Eldaw (1993) (as cited in Men, 2018, p.36) used translation and cloze tests to assess German students' active knowledge of English verb-noun collocations. Likewise, Farghal and Obeidat (1995) (as cited in Men, 2018, p.36) implemented both blank filling and translation tasks to assess Arabic learners' productive knowledge of frequent English collocations. In another study, Irujo (1993) (as cited in Men, 2018, p.36) relied on translation tests to examine the use of English idioms by bilingual native Spanish speakers. Additionally, Hoffman and Lehmann (2000) (as cited in Men, 2018, p.36) devised a gap filling task to measure native and non-native speakers' knowledge with adjective-noun and noun-noun collocations. As Laufer and Nation (1995) highlighted, these tasks are effective in measuring depth of vocabulary knowledge and collocational competence. Hence, elicitation tasks provide a systematic method for assessing L2 learners' phraseological production and comprehension, allowing researchers to compare collocation knowledge across different skill levels and linguistic backgrounds. Conclusively, this type of tests gives an organized technique to assessing and comparing L2 learners' collocational knowledge, providing useful information about their competency and learning processes. Furthermore, Schmitt (1998) underscored that these tasks offer insights into the cognitive processes involved in collocation use. More importantly, elicitation data-based tasks provide insights into L2 learners' collocation performance (Men, 2018, pp.36-38).

On the other hand, genuinely data-driven on second language collocation studies focus on L2 learners' natural production of collocations either in conversational or written texts (Men, 2018, p.40). Put otherwise, dissimilar to elicitation techniques that set learners to produce or recognise predetermined sets of collocations, spontaneous data based techniques elicit data from produced essays or from oral interviews in which the researcher controls, in a very limited way the production of data as only the topic of the production or time is controlled (Nesselhauf, 2005, p.40). Many researchers (for instance, Ädel and Erman 2012; Durrant and Schmitt 2009; Fan 2009; Granger 1998a; Howarth 1996, 1998a, b; Hsu 2007; Kaszubski 2000; Laufer and Waldman 2011; Li and Schmitt 2010; Lorenz 1999; Martelli 2006; Men 2010; Nesselhauf 2005... etc) (as cited in Men, 2018, p.40) opted for such type of tasks in which new methodologies, genuine and authentic language use have been attained, allowing for the accumulation of tangible evidence regarding learners' proficiency in phraseology.

2.2. Vocabulary Learning Challenges and Testing L2 Vocabulary Knowledge

The second section of the literature review is devoted to expose issues in connection to vocabulary notion, the challenges faced in learning vocabulary, ways of testing L2 learners' vocabulary level and the connection between vocabulary level and collocation knowledge.

2.2.1. Vocabulary and Vocabulary Learning Challenges

Being an indispensable facet of language knowledge that second/foreign language learners need to acquire, possessing a good vocabulary background is ultimately not more an option but a must, as denoted in the words of Wilkins (1972): "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (p.111). In simple words, vocabulary refers mainly to single words and sometimes to very tightly two-or three word combinations (Scrivener, 2011, p. 186). Similarly, Hatch and Brown (1995, p.1) put into plain words that vocabulary refers to lists or sets of words relevant to a given language, or lists or sets of words that the individual speakers of a language might use to communicate. Alternatively, Richards and Schmidt (2010) went further in defining the term vocabulary as they included not only single words, but also compounds and idioms: "a set of lexemes, including single words, compound words, and idioms" (p.629). Hence, vocabulary refers to the total set of words that individuals possess and utilized to communicate in a given language, it compasses individual words, compounds, phrases, and idioms.

Laufer and Nation (2012) summarized three hurdles pertaining to the learning of vocabulary in a second/ foreign language context, namely: a quantitative, a qualitative and environmental obstacle. Language researchers and field practitioners alike corroborate the intricacy of learning vocabulary in a foreign language context given the fact that vocabulary is about open sets of thousands of items, thereby its immense quantity makes it so challenging and demanding to learn in a second/ foreign language context). Furthermore, learning new vocabulary entails the mastery of word various features and patterns, by this means the process of improving vocabulary repertoire can only but denote a qualitative challenge (Laufer & Nation, 2012). Moreover, being less frequently brought into play and reinforced in second/ foreign language input, compared to grammatical structures, makes a lot of low-frequency vocabulary items inadequately exposed and insufficiently instructed. Given that fact makes the difficulty of learning second/ foreign language vocabulary environmental (Laufer& Nation, 2012).

2.2.2. Testing L2 Vocabulary Knowledge

The upsurge in interest and vigorous growth on second language learning vocabulary has started to prevail since 1990's with the introduction of a significant and ongoing body of research in the field of vocabulary acquisition (Laufer& Nation, 2012). Hence, the proliferation in the research literature on vocabulary acquisition and learning brought forth to a wide-reaching research agenda on testing vocabulary level.

In vocabulary literature, since the twentieth century, two dimensions of lexical knowledge are acknowledged to exist: vocabulary breadth and vocabulary depth. These two terms are used to distinguish between two aspects of an individual' vocabulary knowledge (Read, 2004, p.210). The number of words an individual knows all along the knowledge of their basic meaning is what is referred to as vocabulary breadth-alternatively known as vocabulary size (how many words are known) (Gyllstad, 2007); (Schmitt, 2014). Being knowledgeable about words' parts, collocations, their grammatical functions and association all along the constraints in their use is what is known as vocabulary depth or quality

(Gyllstad, 2007, p. 43). Vocabulary depth then denotes the concept of how well those words are known (Schmitt, 2014).

As the present study's focal aim is to scrutinize the correlation between EFL learners' vocabulary level and collocational knowledge, choosing a vocabulary size level-aiming principally at inspecting the overall receptive vocabulary knowledge-seems to be more appropriate than relying on a vocabulary depth (productive) test.

Several studies such as Ellegård (1960); Goulden et.,al (1990); D'Anna et al (1991); Hazenberg & Hulstijn (1996) (as cited in Gyllstad, 2007, p.43) have been conducted so far to assess a learner's vocabulary size via the use of two most commonly used conventional methods, namely the dictionary-based technique and the frequency-based technique (Gyllstad, 2007, p.43). As for the former, a representative sample of words is selected from a dictionary to be tested on, allowing generalisation-out of the test score- to the total number of words in the dictionary. The frequency list, principally based on general or specialized corpus, is arranged in different groups to be tested on (Gyllstad, 2007).

2.2.3. Vocabulary Acquisition and Collocational Knowledge

Crucially significant is the learning of collocations in developing learners' vocabulary acquisition. Given that, many studies in the field of language acquisition research have been carried out to ponder the relation that may lay between learners' collocational knowledge and vocabulary level. Nation (2001), underscored that words frequently occur in predictable patterns and collocations, therefore it is urgently if not mandatory to learn them to attain fluency and to be deemed natural in using a second language as knowing word combinations and using them appropriately paves the way for learners to be insightful about the second/ foreign language intricacies. Similarly, Bahns and Eldaw (1993) highlighted the efficacy of instructing collocations explicitly to EFL learners, as the findings of their study corroborated that instructing explicitly word combination facilitates their EFL learners' vocabulary acquisition, thereby their language proficiency. In an attempt to investigate the use of concordances in the instruction of collocations, Channell (1981) conducted a study to probe the efficacy of concordances and offered insights into how to improve collocational understanding. Moreover, Mutlu and kaşlioğlu (2016) carried out research involving 326 high school students to examines the correlation between receptive vocabulary size and productive and receptive verb-noun collocational knowledge of Turkish EFL learners. The findings showed that the participants' vocabulary size positively correlated with their collocational knowledge. Involving 86 Arabic-speaking university learners of English, and with the implementation of collocational knowledge, vocabulary knowledge and general language proficiency measures, Masrai (2022) scrutinized how receptive collocational competence and receptive vocabulary knowledge contribute to determining overall language proficiency. The results of the latter showed positive correlations between three variables, namely collocational knowledge, vocabulary knowledge and language proficiency. Interestingly, the results also revealed that collocational knowledge strongly reflects a good overall language proficiency. Moreover, the findings of Masrai (2022) study corroborated that learners' collocational knowledge increases as long as their vocabulary knowledge does.

To date, no empirical studies investigating the correlation between collocational knowledge and vocabulary level have been conducted in the Algerian context. This gap in the literature is a significant area for research. Hence, the present research attempts to address this gap by investigating the nexus between collocational competence and vocabulary level among Algerian EFL learners.

3- **Method**:

Scrutinizing the nexus between EFL learners' collocational Knowledge and their vocabulary level entails the use of a correlational study. Dorney (2007) stated: " The two core purposes of statistics are to look at the difference between variables and to examine the relationship between variables. The statistical procedure to achieve the second purpose is called correlation analysis" (p.223). Hence, attempting to unveil the nature of the relationship between two variables and to evaluating the strength and the direction of their association implies the reliance on statistical data via the implementation of a correlation coefficient. As denoted by Dorney (2007) to disclose the strength and the direction of this association, researchers need to compute a correlation coefficient between the two variables, which can range between -I - + I . Thus, in a correlational study, the researcher measures two or more variables as they naturally occur with no manipulation and then analyse the degree to which the changes in one variable is associated with the changes with the other variable. To voice the strength and the direction of the connection of the two variables, data are quantified using one of the correlation coefficients. In the current study, the Pearson correlation coefficient (r) is precisely implemented as it is suitable for parametric data, and it is most often used to assess the linear association between variables (Dorney, 2007).

Aligned with the research question guiding this study, two tests were given to 53 Master one students out of 110 at the English Language Department of Jijel University. A convenience sampling was adopted to select the participants. The two tests were administered in the period between March, 17th and March, 21st, 2024.The selection of these informants precisely stems from the researchers' expectation that the samples' vocabulary background and collocational knowledge are good compared to undergraduate EFL learners. The first test administered is COLLEX 5, designed by Gyllstad (2007) to principally measure learners' knowledge of English collocations. Given the fact that COLLEX 5 test proved to have a high coefficient reliability through Cronbach alpha, observed at .89 (Gyllstad, 2007), the test was selected. Collex 5 is in a form of a twofold, forced-choice layout that consists of a comparatively large number of items (40 items). Each item is composed of two word sequences that are horizontally contrasted and the word combination comprises a verb and Noun Phrase. In every item, there is a common and frequently used lexical English collocation, along with two other proposed word combinations, which are not conventional and whose function in the test is a distractor or a pseudo-lexical collocation (Gyllstad, 2007). The test-takers are supposed to opt for the option they think is more appropriate in English.

To gauge the participants' overall vocabulary level, the Vocabulary-Size of Controlled Productive Ability Test designed by Laufer and Nation (1999) is administered as a second test in the current study. It is a frequency-based technique, principally devised to measure test-takers' vocabulary level. The high reliability and wide implementation of this test in investigating learners' vocabulary of English are the criteria of the test selection. Moreover, the test is reckoned practical, valid, and reliable at capturing test respondents' vocabulary level. Likewise, it can be completed in a short time and easily marked, as there is only one possible correct answer for the18 items included in each level. As for the format, the test consists of 4 series of levels, principally based on the occurrence frequency (only university level was dropped from the test). Each level comprises a set of 1000 words made up of the most frequent 1000 words in the English language, then the next 1000 frequent words are introduced and so on.

Both tests, namely Vocabulary-Size of Controlled Productive Ability, were scored as such: 1 point was awarded for each correct answer, meanwhile zero points were given for every wrong answer. Every target collection inserted in COLLEX 5 test was worth 1 point, and any falsely selected pseudo- collocation was given a zero. Hence, COLLEX 5 was scored out of 40 as it included 40 items. As for the test of vocabulary, the overall items are 72; henceforth, every correct answer was worth 1 point and any incorrect or missing or left answer was given a zero. All the scores were computed using IBM SPSS Statistics 29, rescaled to Z score and standardized to be normally distributed and to provide quantitative data that may disclose the relationship between these two variables and may provide insights into the interconnection between these two linguistic aspects.

4-Results:

### 4.1. Collocational Knowledge Test (COLLEX 5)

As far as the first question of the study that aims at eliciting information about the sample's knowledge of English collocations, the findings collected are inserted subsequently in table 2.

Table 2: COLLEX 5 Test

Very Knowledgeable Scores (30-40)		Knowledgeable Scores (20-29)		Not knowledgeable (0-19)	
N°/53	%	N°/53	%	N°/53	%
4	7.55	25	47.17	24	45.28

Table 2 displays the findings yielded from COLLEX 5 test, which reveals the informants' knowledge about English collocations. 47.17% of the participants got from 20 to 29 out of 40. This indicates that half of them are qualified as being knowledgeable. 45.28% of them, which is a considerable portion, got less than 20 out of 40, which means that they are not knowledgeable. Surprisingly, only 7.55% of the involved Master one students of English are regarded as very knowledgeable. The findings are graphically portrayed in figure 1.

Figure 1. COLLEX 5 TEST
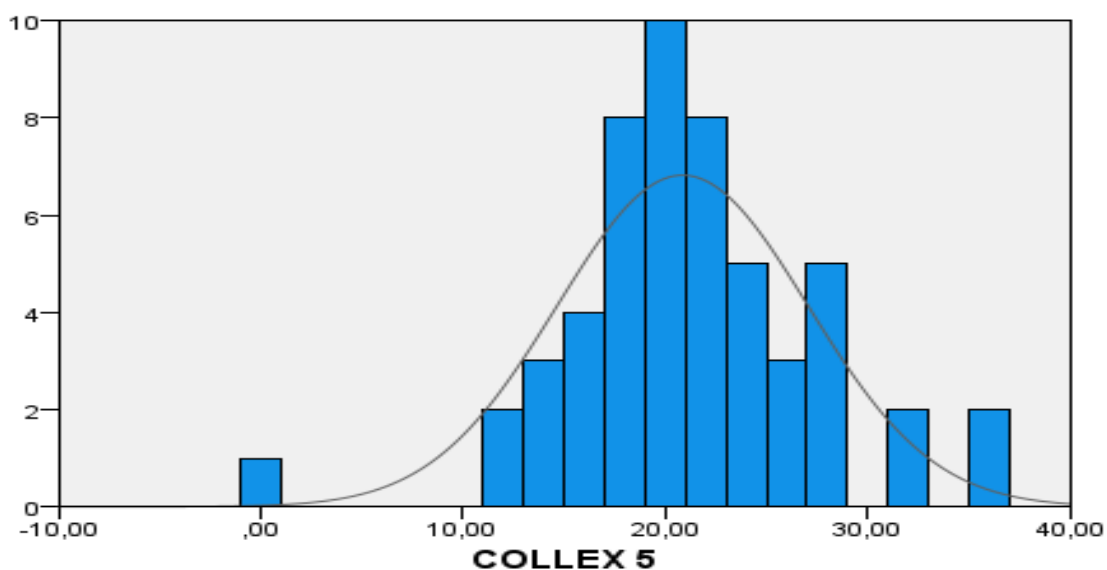
The findings of COLLEX 5 shown in figure 1 clearly divulges that the portion of 'very knowledgeable' category is the lowest in the graph, while 'knowledgeable category' is more prevailing compared to the sample who demonstrated no knowledge.
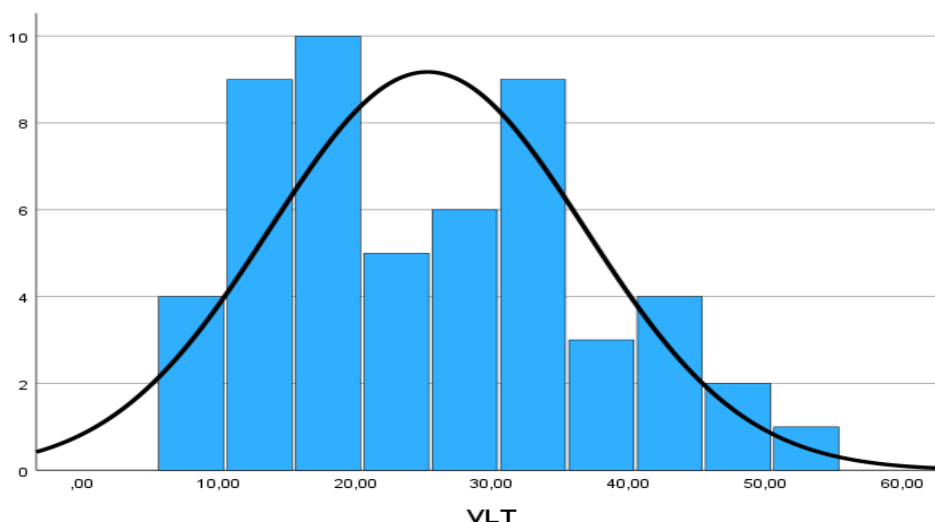
4.2. Vocabulary Level Test

Table 3 demonstrates the findings yielded from the test given to gauge the informants' overall vocabulary level (VLT).

Table 3: Vocabulary-Size of Controlled Productive Ability Test

Good Performers Scores (49-72)		Average Performers Scores (25-48)		Poor Performers Scores (0-24)	
N°/53	%	N°/53	%	N°/53	%
2	3. 77	23	43.39	28	52.84

Based on the scores obtained, the participants are classified into three categories: good performers, average performers and low performers. While 28 out of 53 (i.e., 52.84%) are classified as poor performers as their scores range from 0 to 24 out of 72, only 3.77% of them (i.e., 2 participants) are viewed as good performers given that their scores range from 49 to 72. Moreover, 23 of them (i.e., 43.39%) are categorized as average performers since their marks scaled between 28 and 48. The following figure portrays the finding collected from the test.

Figure 2. Vocabulary-size of controlled productive ability test results

As shown in figure 2, the frequency of the participants representing a poor vocabulary level in the VLT is the highest compared to the two other categories (average and good performers).

4.3. Collocational Knowledge and Vocabulary Level Correlation

To respond to the third addressed question in the present study that aims at probing the interconnectedness of the Master one students' vocabulary level and collocational knowledge, descriptive statistics are inserted in table 4.

Table 4. Descriptive Statistics of VLT and COLLEX 5

	N°	Mini	Maxi	Mean	SD	Variance
VLT	53	8,00	52,00	**25,2830**	**11,52485**	132,822
COLLEX 5	53	,00	36,00	**20,3585**	**6,27601**	39,388
Total	53					

As demonstrated in table 4, VLT variable spans from a minimum value of 8.00 to a maximum value of 52.00, indicating a wide range of scores observed across participants. Conversely, the scores from the COLLEX 5 test range from a minimum of 0.00 to a maximum of 36.00, suggesting a narrower distribution of scores compared to the VLT. The mean score for the VLT is computed to 25.2830 (out of 72), with a corresponding standard deviation (SD) of 11.52485. The relatively high standard deviation indicates considerable variability or dispersion of scores around the mean. In contrast, the mean score for the COLLEX 5 test is 20.3585 (out of 40), with a lower SD of 6.27601, suggesting less variability in scores compared to the VLT. Furthermore, the variance of the COLLEX 5 test scores is calculated to be 39.388, which is lower than the variance of VLT scores. This indicates that the scores on the COLLEX 5 test are less variable compared to those on the VLT.

To interpret the nature and strength of the interplay laying between vocabulary level and collocational knowledge, the following table is introduced:

Table 5: Correlation between Learners' Vocabulary Level and Collocational Knowledge

		Score Z(VLT)	Score Z(COLLEX 5)
VLT	**Pearson Correlation**	1	
	Sig. (2-tailed)	**<0.001**	
	N°	53	
COLLEX 5	**Pearson Correlation**	**0.670****	
	Sig. (2-tailed)	<0.001	
Total	**N°**	53	

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

Table 5 is introduced to assess the relationship between learners' vocabulary level, as measured by the Vocabulary Level Test (VLT), and their collocational knowledge, evaluated through COLLEX 5 test. The Pearson correlation coefficient between the two variables is calculated to 0.670. This indicates a moderately strong positive correlation between the two variables. This finding suggests that as scores on the VLT increase, a corresponding tendency for scores on the COLLEX 5 test increases as well. The correlation is statistically significant at the 0.001 level (2-tailed). Hence, the p-value indicates that the correlation between vocabulary level and collocational knowledge is unlikely to have occurred by chance alone. The Correlation analysis provides empirical data supporting the interconnectedness of vocabulary level and collocational knowledge among learners. Conclusively, the changes of vocabulary level values are strongly associated with the values of collocational knowledge, as portrayed in the following scatter plot.

Figure 3. Scatterplot of Vocabulary Level Test scores against Collocation Test scores (N = 53).
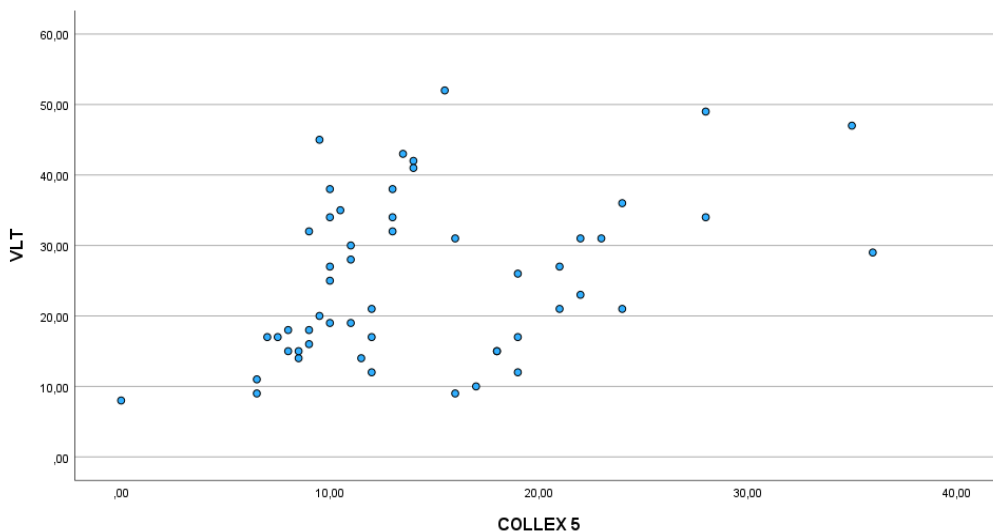
The scatterplot disclosing the nexus between the participants' collocational knowledge and vocabulary level highlights a moderate to strong positive relationship. The high collocational knowledge the respondents demonstrate, the broader their vocabulary size is and the reserve is also true. Though the points on the scatterplot do not form a perfect linear position as there are some outliners shown on the figure and this might denote data variability, the correlation of the two variables is clear.

5-Discussion:

In assessing Master one English language students' collocational knowledge, the implemented test (COLLEX 5) revealed that very few participants were deemed 'highly knowledgeable', while a large portion were identified to have a very moderate knowledge on English collocations. Notably, less than half of them were perceived as being not knowledgeable enough. Overall, and in response to the first addressed research question of the present study, the findings indicate that a significant number of respondents do have a moderate level of collocational knowledge. As the majority of Master one students of English are expected to be future teachers, they should demonstrate a strong command of collocations to be qualified enough for such a profession. They should be aware enough of the use and production of English collocations to create a learning environment conducive to promoting language accuracy and fluency, on the one hand, and to decreasing communication breakdown that is likely to result from the lack of collocational knowledge on the other. Henceforth, this variability in the findings calls for further research to identify the factors underlying this striking moderate level in identifying English collocations. Research on that scope would hopefully shed light on the significance of introducing pedagogical interventions aiming at fostering EFL learners' proficiency on collocations. Alternatively, opting for other research instruments, such as longitudinal studies, to investigate progress in collocational knowledge among EFL learners over time might provide insights into understanding the complex nature of foreign language learning process in general and collocations in particular.

The scores obtained from the VLT reveal notable performance disparities among participants. Surprisingly, more than half of the sample were perceived as having a limited vocabulary level, less than half of the targeted sample demonstrated an average performance in the vocabulary test. Conversely, only a very small minority were qualified as good performers. The prevalence of the 'poor performers' category in the test, which is the answer of the second question guiding this research can only denote that the participants exhibit a poor vocabulary proficiency level. Thus, this finding is disconcerting, given the fact that the participants are advanced learners who are, expectedly, on the verge of being teachers of English and such findings are far beyond the expected level of future teachers of English. Put otherwise, having more than half of the participants identified with a poor vocabulary proficiency level poses a high risk for both their academic success and professional career alike. Having a poor proficiency in the overall English vocabulary load may render future teachers ill-equipped to boost their learners' vocabulary background. Thus, the suboptimal in English vocabulary proficiency might be a cause for concern. It is noteworthy to underscore that the findings yielded from the VLT may reflect the complex and multifaceted nature of vocabulary. Nevertheless, categorizing the participants into three distinct groupings may oversimplify the intricate and complex nature of the vocabulary learning process and may not rigorously mirror the informants' vocabulary background. Hence, assessing EFL learners' vocabulary proficiency using instruments other than the one used in this study warrants a variance of data collection tools to get a more valid and comprehensive evaluation.

In the hope of delineating the nexus that may lie between EFL Master one students' vocabulary level and collocational knowledge, and to figure out the nature of the interconnectedness between the two variables, this correlational analysis was carried out. The findings corroborated the results of the studies conducted by Mutlu& kaşlioğlu (2016) and Masrai (2022), as the present research unveiled that the higher EFL learners' vocabulary proficiency level is, the more knowledgeable learners are deemed to be in terms of collocational knowledge. This is consistent with findings yielded from the study of Meara (2009) who demonstrated a strong association between vocabulary size and collocational competence. The data of the correlation test meant for answering the third question of the present study revealed a positive interconnectedness of the two language constructs that was computed to 0.670. Thus, the empirical data recorded ultimately elucidate that students with high vocabulary level tend to demonstrate greater knowledge on English collocations and vice versa. Similarly, Laufer &Nation (1999) confirmed that vocabulary knowledge considerably reflects proficiency in collocation use among EFL learners. Relatedly, further investigations are highly requisite through conducting longitudinal and experimental studies to provide valuable insights into the delineation of the connection between collocational knowledge and vocabulary proficiency. In light of the findings discussed, more instructional procedures and assessment practices should be underscored to mingling the two language facets in hope of fostering Algerian EFL learners' overall linguistic proficiency. It is then high time to reconsider the incorporation of collocation and vocabulary instruction into the Algerian English language university curriculum for achieving better learning outcomes.

6-Conclusion:

The present study attempted to cast light on the multifaceted relationship between collocations and vocabulary level among 53 Algerian Master one learners of English. Through an exploratory study conducted to unveil any existing relationship between the two variables, the findings confirmed a significant moderate positive interconnectedness between the participants' collocational knowledge and their vocabulary level. Moreover, the findings yielded revealed a moderate performance in the collocational knowledge test and a limited level in the vocabulary proficiency. Hence, these findings call for the urgent need for more rigorous incorporation of collocations and vocabulary instruction in both undergraduate and advanced learners' syllabi for a better language performance and for optimizing the language learning outcomes as well. More efforts should be invested to query more about the nuanced mechanisms of this relationship. Likewise, more concern and pedagogical interventions should be directed to these linguistic competencies in the teaching/ learning processes given the centrality of vocabulary and collocations in the language learning enterprise. Moreover, more attempts should be devoted to tailor teachers' training and align it with EFL learners' needs to be qualified enough and to achieve a higher language proficiency in collocations and vocabulary.

APA system[1].

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