The Comparison of Native English and Persian Elementary School Students’ Performance on Lexical and Grammatical Collocations

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Abstract. The importance and howness of language learning/acquisition has been a great concern for decades. There are many factors that play important roles in this regard. This research compared the performance of native Persian and English elementary students to see if there is any significant difference between the two groups and which type of collocation they performed better within the groups. For this purpose, 60 English and Persian students were selected from elementary schools in Kashan, Iran and New Castle, England. Two tests of collocation (lexical and grammatical) each containing thirty items were adopted. An independent t-test was run and no significant difference between the two groups in lexical collocation was found. But a significant difference was seen between the two groups regarding grammatical collocation. Based on the result of the dependent t-test, the two groups performed better on the lexical collocation test.
Keywords: Lexical collocation, grammatical collocation, L1 performance on collocation

1. Introduction
No one can deny the importance of language acquisition/learning, no matter it is one's first, second or foreign language. The howness of this phenomenon has also been of great importance. Crystal (1992) knows language learning as the process of internalizing a language including one's first language or foreign language. Gold (1967) and Baker (1979) believe that children have to learn a language from the evidence they encounter (cited in Cook & Newson, 1997). They later clarify that language acquisition has two important sources, namely positive evidence, including all the sentences one hears in a language, and negative evidence, including the corrections of erroneous utterances.

There are many aspects of language that have made the linguists scratch their heads like the components of language that has a very significant effect on one's proficiency or fluency. One of these aspects is vocabulary. Martynska (2004) asserted that the significance of vocabulary was identified by the time Lewis (1994) developed lexical approach theory. Since then vocabulary domain and its learning effects and strategies were what many linguists and researchers focused on. There are some pieces of evidence that show the effects of vocabulary learning on learners' proficiency in a language. As Jarvis (2013) believed, the range, variety, or diversity of words found in learners’ language use is believed to reflect the complexity of their vocabulary knowledge as well as the level of their language proficiency. According to Taeko (2005), there are two reasons that have made the acquisition of vocabulary the major focus of studies since 1980s.

The first reason is the tendency towards pragmatics that is mostly concerned with the study of the use of language in communication. The second reason deals with the ease of investigating a word or a phrase via computer. In another part of the very study he signified the importance of learning collocation and that learners of any language try to master different aspects of language by learning words, forms, and meanings of that language, while if they want to be fluent and accurate in speech and
writing, they had better learn it through combining words into phrases and texts. Inkpen and Hirst (2002) also knew collocation as words that mostly appear together but not randomly of course.

Sadeghi (2009) admitted that the significance of collocation has long been identified in teaching foreign languages. He claimed that collocations are important in language learning because words are better learned and later used this way. According to Koya (2003) collocation teaching and learners’ development of their collocation competence are necessary and important in order to achieve the globalized standards of their language. While many admitted the effect of learning collocation on language learning as a whole, Moehkardi (2002) said it is generally admitted that collocations are both essential and problematic for language learners and that they subsequently should play an important part in second language teaching, especially at an advanced level because Jennie (2010) believed that collocational information is not included in glossaries and it makes second language learning difficult. In another study done by Nation (2003), teaching collocations in the form of matching and tables was suggested as a useful experience for vocabulary learning. All these show the importance of learning collocation in language proficiency.

On the other hand, in a study performed by Laufer (2008), it was revealed that the irregularity of collocations could be an interfering factor in learning vocabulary. Learners' difficulties with collocations have not been investigated in much detail so far, though and the effect of collocation learning awareness has not been studied carefully in first language settings. So, the present study tries to compare learning collocation among English and Persian native speakers who are learning their first language to see which group performs better and if so what the reason could be.

1.1. Statement of the problem
Although much research has been done on the importance of the different types of collocation on one’s language proficiency, no special research has ever been done to show the role of collocations and how the students learn them or if they are exposed to different types of
collocations through explicit teaching in L1. So, this research aims at comparing the performance of Persian and English native speakers to see which group performed better or which type of collocation seemed easier for the students to answer. In this regard, the following research questions were raised:

1. Is there a significant difference between English and Iranian elementary school learners regarding their performance on lexical and grammatical collocation tests?

2. Do English and Iranian elementary school learners perform better on Lexical or grammatical test of collocation?

2. Literature Review

2.1. Language learning/acquisition
Kumaravadivelu (2006) saw language as a vital part of human life. Perhaps that is why the researchers and linguists keep focusing on language learning/acquisition and the different aspects in this regard. Some has seen and described language as a system. As Bavin (2009) asserted, there are different aspects in child's developing language system to be considered like phonological, lexical, grammatical, semantic, and pragmatic aspects. That is why different methods have been tried out to teach these different aspects. Mac Whinny (2005) also believed that language is made up of the mentioned components. He later certified that learning a language as a whole has been ignored because people look at this process like other natural things as breathing or routine activities, while the process of learning / acquiring a language, its different components, and the effect of each of these components on one's proficiency cannot be denied. Maclin (2014) believed that language comprises five components namely: phonology, semantics, syntax, pragmatics, and lexicon. They believed, however, that a child must know all these components to be able to communicate and that these components, while studied separately, cannot work independently.

2.2. The importance of vocabulary
Yoshida (2013) asserted that vocabulary acquisition is one of the most important aspects of language to achieve. She believed that having
certain amount of knowledge of vocabulary helps them to improve their communicative competence and hence to maintain their communication. Campillo (1995) declared that vocabulary is an important component of language because meaning is mostly carried through lexicon. Vocabulary is known to have a very outstanding role in learning a language to the extent that she believed the students should be aware of it. McCarten (2007) claimed that the acquisition of vocabulary is arguably the most critical component of successful language learning. She emphasized this importance stating that teachers should clarify the usefulness of building up their knowledge of vocabulary by presenting materials to the students so that they are provided opportunities to use their vocabulary meaningfully. Ellis (1997) proposed two aspects of vocabulary acquisition: 1. The acquisition of a word forms, its collocations, and its grammatical-class information, and 2. The acquisition of a word semantic properties.

2.3. Definition of collocation and its classification and significance

2.3.1. Collocation
As defined in Wikipedia (2013), the knowledge of collocations seems to be vital for the competent use of language. Monya (2010) remarked the importance of collocations in SLA and TEFL. He later cited a definition for collocation from Palmer (1981) as a succession of two or more words that must be learned as an integral whole and not pieced together from its component parts. He also mentioned that "it is widely accepted that the word collocation was coined by Firth in 1957"(p.11). Firth (1975, cited in Martynska, 2004) defined collocations as words associated together. Benson, Benson and Ilson (1986, cited in Bahns, 1993) quoted that collocations are fixed, recognizable and non-idiomatic phrases.

2.3.2 Types of collocations
Monya (2010) mentioned four types of collocations as Lexical vs. Grammatical, Technical vs. Academic, Strong vs. Weak, and Open vs. Restricted. Since only the first classification is considered in this study, it is explained in details.
2.3.2.1 Grammatical collocations versus lexical collocations

Benson (1989, cited in Monya, 2010) declared that grammatical collocations consist of an adjective, a noun, and a verb that is almost accompanied by a preposition, while lexical collocations include just the lexical words. In fact these collocations show a kind of syntactic relation. Firth (1980) illustrated this type of collocation through the following pattern:

| V + Prep | rely on         |
| Adj + Prep | interested in |
| N + Verb | strength to move |

This is while, according to Benson et.al (1986), there are 8 types of patterns for grammatical collocations:

- Noun + Preposition
- Noun + to + Infinitive
- Noun + That Clause
- Preposition + Noun
- Adjective + Preposition
- Adjective + to + infinitive
- Adjective + That Clause
- Verb + Preposition

Firth (1980) believed that Lexical collocations are predictable connections within the words. According to Bahardoust (2012), lexical collocations seem to be easier to learn or even to make because they are more flexible than grammatical collocations. The following patterns were posed by Firth (1980):

- Adv + Adj | terribly beautiful
- Adj + Noun | unbearable pain
- N + V | lion roars
- V + N | commit suicide
2.4 Importance of Collocation in language learning/Acquisition

Based on Wikipedia report (2013), knowledge of collocations seems vital for the competent use of a language. So, they play an important role in language learning. As Cerqueira and Honde (2009) asserted collocations are known as a part of communicative competence. They also help us recognize important aspects of culture and cultural events. They also believed that collocations show different meanings of a word. The result of their studies showed that collocations play an important role in widening the students' knowledge of vocabulary. That is why many researchers have mentioned the importance of teaching collocations. Moreover, it was claimed by Brown (1974, cited in Namavar, 2012) that the knowledge of collocations has a positive impact upon learners listening comprehension, reading speed, and oral communication. Namavar (2012) mentioned that lack of knowledge about collocation especially by non-native speakers would result in poor performance; he later concluded that collocations are beneficial in improving and helping learners' native-like fluency. In the same paper, he mentioned that collocations are important enough to be studied carefully by linguists and also by teachers.

As cited in Kuo (2009), Bahns (1993) and Nesselhauf (2003) believed that the teachers should point out the accurate form of collocation if there is any error on the part of the students. If the teachers neglect it, the students will create their own words or word combinations to convey the meaning they want, which show the significant role of collocations both in language teaching and learning settings. Kuo (2009) mentioned further that collocation teaching should be a 'top priority' and that the teachers should draw students' attention to collocations. Lewis (2000, cited in Kuo) also quoted that teachers should help students learn vocabulary in the form of collocations to improve their collocational competence which signify the role of collocations. Celik (2011) also mentioned that the learners need to know details about collocations which may foster language learning.

In a study done by Monya (2010), it was concluded that the higher the level of the students, the easier learning the collocations. He further mentioned that learning collocations would improve their writing and
make it more natural and native-like which may show the importance of learning collocations in language learning. Hsu (2007) found a correlation between writing proficiency and knowing collocations. Bahardoust (2012) also concluded that having the knowledge of collocations help the students to be proficient in writing.

Sung (2003) conducted a study in this regard and concluded that there is a strong relationship between the use of English lexical collocation and speaking fluency. In another study carried out by Rahimi and Momeni (2012), a strong correlation was found between learners' overall proficiency and their command of collocation. They concluded that teaching collocation made a good improvement in language proficiency. In yet another study, Ebrahimi-Bazzaz (2014) found out that collocation knowledge is advantageous for learners to improve their language proficiency. Goudarzi (2012) believed that collocation competence has a great effect on learners' overall language ability. Collocation learning has an effective role in successful and native-like performance of EFL learners. She confirmed that collocation learning role is outstanding both in language accuracy and language fluency. Yoshida (2013) asserted that the introduction of collocation has been ignored by teachers, while it is highly recommended not just to help vocabulary teaching but mainly because it is known as the most beneficial technique to develop communicative competence. As seen above, there are many studies carried out on the importance and role of collocations for academic purposes; yet, not enough has been done in different first-language settings. This made the authors of this paper compare the performance of native Persian and English elementary students to see which one performed better on collocation tests.

3. Method

3.1. Participants
The subjects in this study included 60 English and Persian students. Both groups were studying at elementary schools. Their ages ranged from eight to ten. The thirty Iranian students were studying in the third grade at an elementary school called "Mostafavi Elementary School" in Kashan, Iran. The other thirty participants were English native students.
whose elementary school is located in New Castle, England (Our Lady and St. Anne's Primary School). The former group, the Persian students, included only female students, while the latter (English students) consisted of both male and female learners. It is worth noting that both mentioned groups were studying during the educational year of 2013.

3.2. Instruments
Two tests of collocation were adopted in the present study. One test of Persian collocations consisting of thirty items was used for the Iranian students. It included 14 matching and 16 multiple-choice items. The test of English collocations including thirty items was also adopted for English learners. The test consisted of 12 matching and 18 multiple-choice items. Both above-mentioned tests were meant to evaluate the performance of elementary students on their mother tongue collocations. English items were meticulously chosen from the internet while the Persian items were mostly selected from Persian literature book of the third grade at Iranian elementary schools.

3.3. Procedure
As the first step, two English and Persian collocation tests were provided based on the procedure mentioned above. Thirty English students were asked to match the collocations in two columns in the first section of the test and then to choose the best options in multiple-choice part (the second section). Simultaneously, thirty other Persian collocation tests were distributed among thirty Iranian learners. Time limit allocated for 30 items was 15 minutes for both groups. After compiling the papers, the researchers initiated marking the tests.

3.4. Data analysis
To see the difference between the mean of the two groups, descriptive statistics was used. To see the difference between the performance of the two groups on lexical collocation and grammatical collocation, an independent $t$-test was run. To compare the performance of the two groups, a dependent $t$-test was run.
4. Results and Discussion

Descriptive statistics was carried out to compare Persian native speakers and English native speakers. Table 1 below shows the pertaining results.

Table 1. Descriptive statistics and summary of independent t-test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Persian</th>
<th></th>
<th>English</th>
<th></th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td>M</td>
<td>SD</td>
<td>Min</td>
</tr>
<tr>
<td>Lexical</td>
<td>9</td>
<td>23</td>
<td>16.43</td>
<td>3.97</td>
<td>3</td>
</tr>
<tr>
<td>Grammatical</td>
<td>0</td>
<td>5</td>
<td>3.22</td>
<td>1.44</td>
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</tr>
</tbody>
</table>

To compare Persian native speakers (n=23) and English native speakers (n=23) with two types of collocations (lexical & grammatical), descriptive statistics including minimum, maximum, mean, and SD was calculated shown in Table1. As seen in Table 1, the mean score of English students is less than Persian students considering the two variables. But is this difference significant? To answer this question, an independent $t$-test was calculated, the summary of which has been reported in Table1. There was no significant difference between the two groups in lexical collocation ($p<0.05$). But a significant difference was seen between the two groups in grammatical collocation. How about the grammatical and lexical collocations in each group? To answer this question, a dependent $t$-test was used. Since the maximum was different for the two variables, the grades were calculated out of 100.

Table 2. Descriptive statistics and summary of paired t-test

<table>
<thead>
<tr>
<th>Language</th>
<th>Lexical</th>
<th></th>
<th>Grammatical</th>
<th></th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>T(22)</td>
</tr>
<tr>
<td>English</td>
<td>60.51</td>
<td>21.09</td>
<td>40.57</td>
<td>18.68</td>
<td>3.92</td>
</tr>
<tr>
<td>Persian</td>
<td>68.47</td>
<td>16.56</td>
<td>53.62</td>
<td>24.07</td>
<td>3.18</td>
</tr>
</tbody>
</table>

As seen in Table 2, the mean of the two groups was higher in lexical part than the grammatical one. The result showed a significant difference ($p<0.01$). All in all, the results indicate that the performance of Persian speakers was better on both lexical and grammatical collocations; however, this difference was only significant in grammatical part of the test. It was also seen that both English and Persian students had a
better performance on lexical part and that the difference in their performance (Persian & English) on two variables was significant.

5. Conclusion
This study was performed to examine whether there is any difference between the performance of Persian and English native speakers to see which learners learn the collocations better. Based on the research questions the following results were drawn. There was not a significant difference between the two group’s performances on lexical-collocation tests. However, there was a significant difference for the grammatical collocations. On the whole, the Persian students were found to be better in their performance on collocation tests. One reason could be the exposure of these students to collocations in their 1st language. And that the better performance of the students in the two groups on the lexical items could be the variety of grammatical collocations, lack of explicit teaching of such items, and lack of enough materials in two groups.

6. Suggestions for Further Research
The domain of first language acquisition is so broad that one research is by no means complete in taking all aspects into account. Here are some implications for further study.

1. Gender is a factor that can be considered.
2. There can be a review over the material they study in elementary school to see how much they are exposed to collocations.
3. The environment can be studied to see if the differences are related to cultural factors.

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