Improving Turkish EFL Learners’ Lexical Knowledge through Topic Interest-Based Reading

Yabancı Dil Olarak İngilizce Öğrenen Türk Öğrencilerin İlgi Alanına Dayalı Okuma ile Sözlüksel Bilgilerinin Geliştirilmesi

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ABSTRACT: Vocabulary acquisition in terms of lexical knowledge is one of the basic elements of second language acquisition. Interesting reading studies presented in the classroom positively affects the learners’ acquisition of new words. In this context, this study aims to demonstrate that Turkish EFL learners have a positive effect on the vocabulary knowledge by the help of topic interest-based reading passages. This study carried out experimentally in the context of pre-test and post-test was conducted with 52 Turkish EFL learners who were divided into two groups as experimental and control. While the experimental group was exposed to reading components for 12 weeks, the control group was trained with traditional reading passages. According to the results, vocabulary knowledge of the students exposed to topic interest-based reading passages increased significantly when they were compared to the control group. Consequently, interesting reading activities increase vocabulary knowledge of the students incidentally.

Keywords: Lexical Knowledge, reading skill, topic interest-based reading, incidental vocabulary acquisition

ÖZ: SözcükSEL edinim bağlamında sözcük kazanımı ikinci dil ediniminin temel öğelerinden biridir. Sınıf ortamında gerçekleştirilinen ilgi çekici okuma çalışmaları öğrencilerin sözcük becerileri kazanımını oluşturmaktadır. Bu bağlamda, bu çalışma İngilizceyi yabancı dil olarak öğrenen Türk öğrencilerin ilgi alanı da etkileyen konu açılımı sunulan okuma parçalarının onların sözlüksel kazanımlarını oluşturmalarını yönde etkilediğini göstermektedir. Ön-test ve son-test bağlamında deneysel olarak gerçekleştirilen bu çalışma, deney ve kontrol grubu olarak ikiye ayrılır ve ilgi alanına dayalı okuma parçaları ile 12 hafta boyunca eğitim verildi. Son test sonucunda, deney grubunda öğrencilerin sözlüksel bilgileri anlamlı ölçüde artmıştır. Kısaca, ilgi alanı okuma aktiviteleri öğrencilerin sözlüksel bilgilerini rastlantısal olarak arttırmaktadır.

Anahtar sözcükler: Sözlüksel Bilgi, okuma becerisi, ilgi alanına dayalı okuma, rastlantısal sözcük edinimi

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Introduction

Vocabulary teaching has been a vital area of all language use and thus it should be learned to express meaning, to communicate effectively and to be understandable in a new language. This knowledge of vocabulary cannot be compressed in a simple area of language teaching. From lexicology to syntax, semantics to morphology, in any area of linguistics, one can encounter vocabulary acquisition process. Vocabulary knowledge and its acquisition play a crucial role in second language environment (Nation, 2001). This acquisition process can be gained by inductively while learning process occurs deductively in general. At this learning process, the deductive way of vocabulary teaching can be challenging since most languages have very large vocabulary items. Single words, multi-word verbs, phrasal verbs, collocations, idiomatic expressions, parts of speech and similar word constructions can differ from language to language. As Goulden, Nation & Read (1990) estimated, there are almost 54,000-word families in English and every word families have several members inside (e.g. argue, argument, argumentative, argumentation). As Schmitt (2010) expressed, teaching vocabulary tended to focus on individual words and so the studies on vocabulary try to analyse the best way to teach single words. While teaching these single words, not the semantic but the lexical level is the basic level of representation at which form and meaning bridge can be established (Hulstijn, 2002) and this bridge emphasized the importance of L2 learners’ vocabulary knowledge level to encounter the linguistic demands of L2 skills (Nation, 2001) such as reading. As Cheng and Matthews (2018) expressed, despite the capacity to set up structure and meaning links is a major initial phase in dealing with a specific word, the multidimensional idea of word knowledge discovers that setting up this connection is simply part of the challenge faced by L2 students. At this point, in literature we can come across large number of studies dealing with incidental vocabulary acquisition, reading aspect on teaching vocabulary structures and glosses using (Chen & Truscott, 2010; Grabe & Stoller, 2001; Gui, 2015; Saz, Lin & Eskenazi, 2015; Tanaka, 2017; Van Zeeland & Schmitt, 2013). Most of the studies on vocabulary teaching have emphasized acquisition of new vocabulary items from reading. In second language environment, the meaning of new words and other components of them can be gained from reading in an L2 context (Zahar, Cobb, & Spada, 2001; Pellicer-Sanchez, 2015; Pellicer-Sanchez & Schmitt, 2010). The knowledge of words in a given context or speech facilitates reading comprehension (Cheng & Matthews, 2018). In literature, there are numerous studies investigating multiple aspects of word knowledge (Li & Kirby, 2014; Matthews & Cheng, 2015), analysing the relationship between L2 vocabulary knowledge and L2 reading skill (Li & Kirby, 2015; Qian, 2002), or demonstrating the relationship between a single measure of vocabulary knowledge with multiple macro-skills (Stahr, 2008). The framework of L2 vocabulary knowledge and reading ability has been tried to establish by emphasizing incidental vocabulary acquisition, topic interest value on reading or reading development procedure. In this paper, vocabulary acquisition through reading has been investigated to examine to what extent learners’ vocabulary size improves by the help of interesting reading activities.
Reading, Topic Interest and Incidental Vocabulary Acquisition

Learning to read is one of the most challenging academic goals of university level students. The term of ‘interest’ refers to the extent of students’ enjoying tasks, which are related to reading. In academic setting, reading ability is an important skill in second language environment, in which learners are required to read and complete related tasks about reading (Anderson, 2015). From early to the late stages, L2 learners are exposed to reading in various contexts. Some studies examining the children in the beginning of their school age demonstrated that interest, self-concept ability and reading performance are correlated to each other meaningfully ( Nurmi & Aunola, 1999; Viljaranta, Tolvanen, Aunola, & Nurmi, 2014). Some studies on adult learners showed that there are some significant effects of topic interest on reading comprehension (LeLoup, 1993; Ercetin, 2010). LeLoup (1993) reported that topic interest has a vital effect on L2 reading comprehension and vocabulary acquisition. In this study, the researcher investigated 206 high school students learning Spanish and found a strong relationship between interest and reading comprehension. According to the results, the interest variable was 9% of the overall variance in second language reading comprehension. It is not difficult to generalise this factor to the second language vocabulary and in turn reading knowledge. In academic context, for instance; a basic component is how this ability can be developed during second language learning period. In literature, it was proved that high interest in reading and high reading self-concept promote reading skills (Ecalle, Magnan & Gibert, 2006; Quirk, Schwanenflugel & Webb, 2009). Based on the preliminary studies, reading ability can be developed gradually when they are exposed to meaningful and interesting input or extensive reading (Suk, 2016; Van, 2017). In other words, the interest of the learners on the topic or reading passage is an important factor that effects second language acquisition (Dörnyei, 2005). It was also reported that learners remembered twice the number of the unknown words in more interesting stories than less ones (Elley, 1989). This interest can facilitate learners’ adaptation to new words incidentally. At this point, incidental vocabulary acquisition appears on literature in a parallel way with interesting reading passages and is expressed as a subconscious and implicit vocabulary learning process.

As West (2017) defined, this term “refers to learning vocabulary implicitly and subconsciously through exposure to spoken or written language” (p.179). From another perspective, incidental vocabulary learning occurs when learners’ attention and focus is on understanding messages without a specific intention to learn a set of words (Ellis, 1999). Ellis (2008) also expressed that implicit learning is “acquisition of knowledge about the underlying structure of a complex stimulus environment by a process which takes place naturally, simply, and without conscious operations” (p. 121).

In second language teaching literature, incidental vocabulary acquisition process is considered with reading and writing skill. Especially, reading comprehension and vocabulary teaching are emphasized together in materials. From this perspective, students should be encouraged to improve their extensive reading in a parallel way with vocabulary acquisition and reading comprehension process (Ellis, 1997; Laufer, 2001).
Present Study

In literature, there is a limited number of topic interest studies especially in Turkish EFL context and that is the reason why this study has searched the significant effect of topic interest on vocabulary acquisition. Additionally, this paper expects to study the effect of high interest level reading passages on L2 vocabulary learning process during one semester. From this perspective, the main aim of this study is to provide additional information about the relationship between reading ability based on topic interest and vocabulary knowledge development. The most significant point of the study is to test the development of vocabulary knowledge of Turkish EFL learners experimentally during one semester by presenting them topic interest-based reading passages. In addition, this study contributes to the ability to be an additional source of literature studies in the field of vocabulary teaching.

On the other hand, there are some limitations of the study. First, this study was limited to only one public university. Second, since reading comprehension is a one-semester course, the study period is limited to only one semester. Moreover, the average number of participants is not considered sufficient since the number of classes consists of two branches and an average of 25 people.

This research also answers the following questions:

1. Do topic interest-based reading activities significantly affect learners’ L2 vocabulary acquisition performance?

2. Do the learners who get topic interest-based reading treatment gain more success in vocabulary achievement than the other learners who are exposed to traditional reading passages?

Methodology

Procedure

The aim of this study is to investigate improvement of vocabulary size in second language environment based on reading and topic interest. From the way of this aim, this study was conducted at Bolu Abant Izzet Baysal University in Turkey. The materials used in this study were adapted from Lee’s (2014) study with some differences in applied reading passages. The reading passages in this study were selected conscientiously according to the level of the participants. Since the participants' English level was at B1-B2, the difficult words in the selected reading texts were replaced with synonymous words that are appropriate to the students' level. In addition, through the pilot study at the beginning of the study, it was possible to distinguish the reading passages appropriate to the level and the interest of the students. The process of the study lasted 12 weeks. In the first week, the participants completed Nation’s Vocabulary Level Pre-test, Topic Interest Inventory (to see their interest on the topics), Prior Topic Knowledge Test, Reading passages on different topics and Vocabulary Pre-test. After the data was taken, the results were recorded. They were then grouped into experimental and control groups according to participants' comments, following the implementation of the Prior Topic Knowledge Test, which included True / False questions about the subject. Participants in the experimental
Participants who were interested in different reading material and scored below 5 points in the interest test were included in the control group. Afterward, experimental group took vocabulary-teaching process through topic interest-based reading passages for 10 weeks while control group took traditional instruction-based reading activities. At the end of the instruction period, the participants were asked to read two reading passages in high and low level of topic interest. Afterward, they completed reading comprehension questions about passages and answered Nation’s Vocabulary Level Post-Test and Vocabulary-Post Test to see their reading proficiency in second language.

Participants

This study which emphasizes vocabulary teaching based on topic interest was conducted with 52 freshmen studying in Translation and Interpreting Department. Their ages were between 17-19 (M=18, 6 months) years old. They all studied English for over 2 years at a high school. Participants from two different classes were divided into experimental and control group according to the preferences of their topic interest on reading passages. Incidental vocabulary teaching based on topic interest and reading was presented to the experimental group (N=26), while control group (N=26) took traditional vocabulary teaching based on spontaneous reading passages without analysing them according to topic interest. In total, 52 students (24 female, 28 male) participated in the study. According to Oxford Quick Placement Test Score, 52 % of the students ranked at an intermediate and 48 % of them ranked at a low-intermediate level. The majority reported that their reading and writing ability is better than the other skills such as listening and speaking.

Pilot Study

Before present study processed, pilot study was applied to see the instruments’ reliability measuring of the study with randomly selected participants from the first grade students during the first semester. The participants consisted of first year students (N=28) studying at the Translation and Interpreting department at the same university. For internal validity testing, pre- and post-test equivalence factor was analysed to see the frequency level of two vocabulary items lists. After this study, correlation coefficient was calculated, and vocabulary lists were designed. At the end of the pilot study, exploratory and confirmatory factor analysis were performed by statistics experts and internal consistency by Cronbach’s alpha coefficient was calculated and found for pre-test (.81) and post-test (.76). The target words in the pre-test and post-test which were chosen from two reading passages were shaped after the pilot study. For instance, words in which students find it so difficult to remember their meaning or cannot make any sense from the context have been replaced by their synonyms. As a result of the interview with the students, it was determined which words they had difficulty in understanding, the reasons were tried to be understood and finally the items were tried to be simplified without any change in meaning. Both reading passages used in the study were also analysed and the reliability for the first passage was 0.81 and the second one was 0.73.
Materials

Nation’s Vocabulary Level Pre-test (2001)

At the beginning of the study, Nation’s Vocabulary Level Test was used to see the participants’ level of vocabulary size. In this test, there are different word levels as 2,000, 3,000 and 5,000 words. In each part, there are 10 different sections in which 6 different vocabulary items and 3 different meaning or synonyms. The participants in this study were supposed to choose the correct item and write the number of each as in the example.

\[
\begin{align*}
1. & \quad \text{business} \quad _6\text{part of a house} \\
2. & \quad \text{clock} \quad _3\text{animals with four legs} \\
3. & \quad \text{horse} \quad _4\text{something used for writing} \\
4. & \quad \text{pencil} \\
5. & \quad \text{shoe} \\
6. & \quad \text{wall}
\end{align*}
\]

When the results were analysed, it was seen that there were no significant differences between two groups \((t = .27, p = .84)\). Their scores were 45.74 out of 100 for experimental group and 43.82 for control group.

Topic Interest Inventory and Prior Topic Knowledge Test

Topic Interest Inventory was applied before the reading passages. This inventory (see Appendix A.) showed the topic interest rate of the participants on reading passages and helped researcher on deciding which topic should be used during the study.

Prior Topic Knowledge Test for each passage was assessed through true-false test with 5 items (see Appendix B). The sentences in this test demonstrated the participants’ knowledge about the reading passages. Participants were asked to read the sentences and decide whether they are true or false. According to Cronbach’s alpha reliability analysis, prior topic knowledge test showed had a reliability of 0.73.

Reading Passages

In a parallel way to the Lee’s (2014) study, after the topic interest levels of the six different reading passages were analysed, two of them (one with a high level and the other with a low level of topic interest) were used in this study. Based on the result of the topic interest inventory taken from participants, “The Social Network” (as the high-interest passage) and “Home-Schooling” (as the low-interest passage) were chosen to use in the study. The first text was taken from an article on the website (www.mondadorieducation.it) and the second one was used from another article on the website (www.studfiles.net). In Translation and Interpreting department, two experts were chosen to decide whether there should be any changes in the structure of the reading passages. According to their feedback, one of the reading passages (The Social Network) was shortened without any change in meaning. It was then decided that both reading passages were similar to each other in their proficiency level.
**Vocabulary Pre-test**

In this test, the participants would sign “yes” if they know the meaning of the word given and write definition in their native language or second language (Turkish or English) and “no” if they do not have any idea about the meaning of them. After they completed the list, the first reading passage (The Social Network) and comprehension questions about it were distributed to them. This session lasted 20 minutes during the course. When they finished, they were handed out the second reading passage (Home-Schooling) and the comprehension questions again.

**Treatment**

The participants were divided into experimental and control group according to the Nation’s Vocabulary Level Test and Topic Interest Inventory results. After the participants were classified, different reading materials in a parallel way of their interests were presented to the experimental group on a weekly basis, and vocabulary studies were conducted in this direction. The control group has been exposed to different reading passages that change every week during the process without any intention to their interest level. At the end of the semester, two sets of reading passages and comprehension questions were presented to the participants again. After they were completed, the participants were given the Nation’s Vocabulary Level Post-Test and the vocabulary post-test.

**Nation’s Vocabulary Level Post-test (2001)**

In this test, 140 vocabulary items with four choices are presented. The main aim of using this test is to see relationship between pre-test and post-test. The participants were supposed to find and answer the closest meaning of the key words as in the example.

e.g. RESTORE: It has been restored.
   a. said again
   b. given to a different person
   c. given a lower price
   d. made like new again

**Vocabulary Post-test**

The main aim of using this post-test is to find out the improvement level of vocabulary acquisition level of the participants during reading sessions. Participants completed the vocabulary post-test including 50 vocabulary items used in the reading passages. In this test, they were instructed to answer “yes” if they know the meaning of the vocabulary items (similar to pre-test) or “no” if they do not. They were also asked to translate and define the words in their native language or second language if they signed as “yes”. The vocabulary items consisted of 30 target words and 20 distractors which were chosen from Nation’s 10,000 word-level vocabulary list. The reason of using 20 distractors as a different procedure from pre-test is to prevent their familiarity to these vocabulary items. Each correct answer was signed as 1 point and wrong ones were signed as 0 point. The reliability of this test was found as 0.76 according to Cronbach’s alpha reliability
result (see 3.3. Pilot Study). Participants completed all tasks during 30 minutes in course time.

**Data Analysis**

This research was used to test the hypothesis whether the topic interest on reading passages helps learners to improve vocabulary knowledge or not. The results were based on pre- and post- vocabulary items tests and reading passages. All the answers of the participants were recorded in Excell. To begin with, each correct answer given by the participants for the Nation’s Vocabulary Level Test was coded as 1, and each incorrect answer was coded as 0. The answers of the participants for Topic Interest Inventory are then recorded in Likert type 1 through 7. Similarly, for the 5-item-Topic Knowledge Test, the correct answers given by the participants were coded as 1 and the incorrect answers were coded as 0. Vocabulary Test (pre- and post-) responses of the participants after the reading passages were coded as 1 for correct answers and 0 for wrong answers similarly. After the data was collected, the results of the study were analysed by the help of paired samples t-test in SPSS-20.

**Results**

This study was applied for testing the *first hypothesis* that topic interest on reading passages improves vocabulary knowledge of second language learners. The results of the study were based on vocabulary pre- and post-test dealing with high and low interest of two different reading passages. The findings obtained from pre-tests of high-level frequent reading passage from both groups showed that there were no significant differences between them (Eg*: M=7,61, SD=1,26; Cg†: M=7,73, SD=.53) \((t(25) = -.48, p=.631)\). Prior to treatment and topic interest inventory, these results show that vocabulary performance for both groups were similar to each other. On the other hand, when analysed the post-test results of both groups it can be seen that there were significant differences between them (Eg: M=11,50, SD=1,42; Cg: M=8,26, SD=1,37) \((t(25) = 8.55, p=0.000)\). After the treatment, it can be said that experimental group is more successful than the control group in gaining new vocabulary items since the reading passage is in their interest level (see Table 1).

After analysing the high-level frequent reading passage findings, low frequent level of reading passage results for both groups were supposed to be measured to see the topic interest effect for both groups. The findings obtained from pre-tests of low-level frequent reading passage from both groups showed that there were no significant differences between them (Eg: M=5,46, SD=1,52; Cg: M=5,92, SD=1,41) \((t(25) =-1.40, p=0.173)\). Not surprisingly, the post-test results of both groups did not show any significant differences between them again (Eg: M=6,88, SD=0,99; Cg: M=6,57, SD=1,96) \((t(25) =0.77, p=0.444)\) (see Table 1).

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* Eg: Experimental Group  
† Cg: Control Group
Concerning the second hypothesis that learners who get topic interest-based reading treatment gain more success in vocabulary achievement than the other group, their pre-test and post-test results were investigated comparatively. When analysed the experimental group’s improvement degree inside itself, it can be underlined that the group got the expected success after treatment and topic interest inventory. According to the findings, there were significant differences between pre- and post-test results of experimental group (Pre: M=7.61, SD=1.26; Post: M=11.50, SD=1.42) ((t (25) = -9.59, p=0.000). However, control group could not get the similar success rate when they are compared with experimental group. Pre-and post-test result of control group did not show any significant differences between them (Pre: M=7.73, SD=.53; Post: M=8.26, SD=1.37) ((t (25) =-1.82, p=0.080) (see Table 2).

The findings taken from the pre and post test results of experimental group are analysed to see whether there were any differences between the participants’ performance after treatment. Surprisingly, it can be seen that there were significant differences between the participants’ performances after the treatment without looking at the frequency level of reading passage. The results showed that there were significant differences between the pre- and post-test results (Pre: M=5.46, SD=1.52; Post: M=6.88, SD=0.99) ((t (25) =-4.09, p=0.000). While experimental group had a significant success during the process, control group could not get a measurable success improvement. As stated in the findings, there were no significant differences between pre- and post-test results of control group (Pre: M=5.92, SD=1.41; Post: M=6.57, SD=1.96) ((t (25) =-1.75, p=0.01) (see Table 2.).

Table 1. Paired Samples Statistics of Experimental and Control Groups’ Pre- and Post-tests Results (High and Low Frequent Reading Passages)

|         | M     | N  | SD    | SEM  | t    | df | p     |
|---------|-------|----|-------|------|------|----|-------|
| Pair 1  | HF-pretest-Exp | 7.6154 | 26  | 1.26734 | .4855 | -4.86 | 25  | .000  |
|         | HF-pretest-Con. | 7.7308 | 26  | .53349  | .10463 | 1.0463 | 25  | .310  |
|         | HF-posttest-Exp. | 11.5000 | 26  | 1.42127 | .27873 | 2.5  | .012  |
|         | HF-posttest-Con. | 8.2692 | 26  | .37281  | .26923 | 1.27692 | 25  | .248  |
| Pair 2  | LF-pretest-Exp | 5.4615 | 26  | 1.52920 | .29990 | -1.758 | 25  | .081  |
|         | LF-pretest-Con. | 5.9231 | 26  | 1.41204 | .27692 | 1.41204 | 25  | .157  |
|         | LF-posttest-Exp. | 6.8846 | 26  | .99305  | .38500 | 1.9475 | 25  | .157  |
|         | LF-posttest-Con. | 6.5769 | 26  | 1.96312 | .38500 | 1.9475 | 25  | .157  |

Table 2. Paired Samples Statistics of Experimental and Control Groups’ Pre- and Post-tests Results (High and Low Frequent Reading Passages)

|         | M     | N  | SD    | SEM  | t    | df | p     |
|---------|-------|----|-------|------|------|----|-------|
| Pair 5  | HF-pretest-Exp | 7.6154 | 26  | 1.26734 | .4855 | -9.590 | 25  | .000  |
|         | HF-posttest-Exp. | 11.5000 | 26  | 1.42127 | .27873 | 2.5  | .012  |
| Pair 6  | HF-pretest-Con. | 7.7308 | 26  | .53349  | .10463 | 1.0463 | 25  | .310  |
|         | HF-posttest-Con. | 8.2692 | 26  | .37281  | .26923 | 1.27692 | 25  | .248  |
| Pair 7  | LF-pretest-Exp | 5.4615 | 26  | 1.52920 | .29990 | -4.09 | 25  | .000  |
|         | LF-pretest-Con. | 5.9231 | 26  | 1.41204 | .27692 | 1.41204 | 25  | .157  |
|         | LF-posttest-Exp. | 6.8846 | 26  | .99305  | .38500 | 1.9475 | 25  | .157  |
|         | LF-posttest-Con. | 6.5769 | 26  | 1.96312 | .38500 | 1.9475 | 25  | .157  |
The different frequency levels of reading passages were used to see the topic interest effect on vocabulary teaching. To analyse this, experimental group’s performance on two different passages were also analysed and showed that there were already significant differences between pre- and post-test results of experimental group (HL: M= 7.61, SD= 1.26; LL: M= 5.46, SD= 1.52) ((t (25) = 8.98, p=0.000). The findings from control group for high and low frequency level passages were similar to experimental group. There were also significant differences between two passages’ vocabulary pre-tests results (HL: M= 7.73, SD= 0.53; LL: M= 5.92, SD= 1.41) ((t (25) = 5.67, p=0.000) (see Table 3.).

Finally, when analysed the post-test results of experimental group in terms of high and low frequent level of reading passages, it showed that there was a significant difference between them. Besides, the difference level was higher than the pre-test results. In other words, they showed a significant success after the treatment and topic interest inventory (HL: M= 11.50, SD= 1.42; LL= M=6.88, SD= 0.99) ((t (25)= 14.92, p= 0.000).

Similarly, although the success rate is not as high as experimental group’s success rate, the control groups’ post-test results for high and low frequent reading passages also demonstrated a significant differences between them (HL: M= 8.26, SD= 1.37; LL: M= 6.57, SD=1.96) ((t (25)= 4.24, p= 0.000) (see Table 3.).

### Table 3. Paired Samples Statistics of Experimental and Control Groups’ High- and Low-Frequent Reading Passage Results (Pre-tests and Post-tests)

|       | M     | N | SD    | SEM  | t      | df  | p    |
|-------|-------|---|-------|------|--------|-----|------|
| Pair 9 HF-pretest-Exp | 7.6154 | 26 | 1.26734 | .24855 | 8.981 | 25 | .000 |
|       | LF-pretest-Exp | 5.4615 | 26 | 1.52920 | .29990 |     |     |
| Pair 10 HF-pretest-Con. | 7.7308 | 26 | .53349 | .10463 | 5.671 | 25 | .000 |
|       | LF-pretest-Con. | 5.9231 | 26 | 1.41204 | .27692 |     |     |
| Pair 11 HF-posttest-Exp | 11.5000 | 26 | 1.42127 | .27873 | 14.926 | 25 | .000 |
|       | LF-posttest-Exp | 6.8846 | 26 | .99305 | .19475 |     |     |
| Pair 12 HF-posttest-Con. | 8.2692 | 26 | 1.37281 | .26923 | 4.240 | 25 | .000 |
|       | LF-posttest-Con. | 6.5769 | 26 | 1.96312 | .38500 |     |     |

The results show that incidental vocabulary acquisition based on topic interest level on reading passages increased second language learners’ vocabulary knowledge and helped them improve vocabulary learning ability incidentally.

### Discussion and Conclusion

This study investigated the first research question that topic interest phenomenon on vocabulary acquisition process of second language learners. Based on the findings and results, the present study proves the positive impact of topic interest-based reading activities which facilitates the second language vocabulary acquisition performance. The results can be explained by Lee and Pulido’s (2017) research hypothesis that topic interest significantly has an impact on incidental vocabulary learning. In their study, it was found that second language learners gained more success in vocabulary when it was thought through the story which they found more attracting and compelling. In their study, the reading passage called ‘Psy’s Gangnam Style’ affected the learners’ level of inclusion to the text and its meaning. This procedure helped learners gain vocabulary incidentally. Similarly, Ainley, Hidi and Berndorff (2002) found in their study that topic interest also
facilitates reading comprehension and in turn reading comprehension affects incidental vocabulary acquisition process (Pulido, 2004). The results of these study also support the previous research analysing the effectiveness of reading in incidental vocabulary acquisition in terms of form and meaning (Brown, Waring, & Donkaewbua, 2008; Pellicer-Sanchez, 2015, 2017; Pellicer-Sanchez & Schmitt, 2010). In the process of reading activities, the learners were exposed to many similar high-frequent English reading passages and words in them; therefore, these exposures have contributed to incidental acquisition of new vocabulary items. The result also suggested that L2 vocabulary knowledge is measured to acquire accurate information about the degree to which a learner’s current vocabulary knowledge supports fundamental language skill such as reading. These measures are likely to provide a diagnostic information about lexical knowledge which is most likely to be inhibiting L2 reading performance. In the light of specificity of incidental vocabulary knowledge and its strong relation with L2 reading, it is significant to emphasize the reading texts which learner acquire in the classroom.

Concerning the second research question, learners who got topic-interest based reading treatment gained more success in vocabulary achievement when they were compared with the other group who took traditional instruction on reading and vocabulary. The results of the study indicate that topic-based reading treatment can lead to the improvement of learners’ vocabulary gain. This supports the results of Lee (2014), suggesting that topic-based reading treatment can also lead to acquisition of vocabulary incidentally. Not surprisingly, results have also demonstrated that the students gain more success after the treatment which is based on interesting reading passages and these passages gave a chance to the learners to enhance the meaning of single words similar to the single word studies (Webb, 2007a, 2007b; Brown et al., 2008; Lee, 2009; Viljaranta et al., 2017). Findings also suggest that reading interesting topics in course time are not only motivating than the prosy ones, but learners are also more certain to acquire and get the knowledge from these passages. Within the instruction period presented in this study, results have also shown that learners are more precise about their ability to recognize the correct definition of the unknown words, providing further evidence that acquiring knowledge of the definition of the new words may be not actually more difficult than the other second language skills. When encountering new words in any reading passage, L2 learners seem to try to get the information about the form, meaning and comprehension of passages at the same time and with the same level of difficulty. University level students can understand the problem which occurs due to their lack of knowledge or input in second language. However, if they are motivated with appealing topics at least while teaching reading and vocabulary, they can consolidate their interest with vocabulary background knowledge and reach incidental vocabulary acquisition process. The difficulty in the incidental acquisition of vocabulary knowledge might not therefore lie in their short period of time in written texts that learners encounter but in the restricted and boring texts during this time. Understanding that implicit vocabulary teaching can be expanded by classroom topic interest based-reading activities, which necessarily focus on the acquisition of vocabulary is very important in terms of pedagogical implication. According to Boers and Lindstromberg (2009), vocabulary acquisition occurs as a by-product of a meaning-based
activity if materials are manipulated and designed to stimulate learners’ paying attention to these tasks. If instructors would like to ensure that learners are exposed to enough vocabulary input in reading passages, they should modify and form sufficient reading passages. If this is considered as a key issue, the potential of learning vocabulary incidentally can be maximized in second language learning environment.

Reading and vocabulary acquisition skills are integral parts for each other. In this sense, in order to be more successful in gaining new vocabulary items, some suggestions can be made to the educators about the activities carried out in the classroom. To begin with, it is indisputable that there is a need for a more planned and focused study to improve reading skills and vocabulary acquisition incidentally and subconsciously. It is also thought that word processing should be regarded as basic skills in order to have enough preliminaries in second language acquisition. From this perspective, second language acquisition without vocabulary can be a problem in the production stage. Besides, lexical studies should be emphasized more in language teaching curricula. In addition, the reading skill as a basic skill of language acquisition must be emphasized in this sense. On this aspect, pedagogical approaches that emphasize the development of incidental vocabulary knowledge and reading ability are recommended since these approaches will assist L2 learners acquire vocabulary. From pedagogical perspective, language educators need to be more selective about the selection of reading materials. Reading passages that increase students’ motivation, interest and appeal to them can increase their vocabulary, as well as increase their interest in English. For further research, it may be possible to reach more clear information by making interviews with the students about the reading comprehension and lexis course.

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Appendix A. Topic Interest Inventory
Please rate your interest in the topic on the following scale.

| Title                        | Not Interesting | Very Interesting |
|------------------------------|-----------------|------------------|
| 1 A National Disease         |                 |                  |
| 2 The Cash Machine           |                 |                  |
| 3 Home-Schooling             |                 |                  |
| 4 A rose-Red City            |                 |                  |
| 5 A Survey on Education      |                 |                  |
| 6 Social Networks            |                 |                  |

Appendix B. Topic Knowledge Test
Please read the sentences and check True or False.

Social Networks

| Sentence                                                                 | T | F |
|--------------------------------------------------------------------------|---|---|
| 1 Mark Zuckerberg founded Facebook by himself.                            |   |   |
| 2 Facebook organised students by class schedule for the first time.       |   |   |
| 3 Facebook was launched in 2004 as an alternative to the traditional student directory. |   |   |
| 4 Facebook did not make important product decisions that ensured harmony and trust between the offline community and the online service. |   |   |
| 5 The number of social network (facebook, instagram, twitter etc…) users increased dramatically. |   |   |

Home-Schooling

| Sentence                                                                 | T | F |
|--------------------------------------------------------------------------|---|---|
| 1 In the United States all children must be educated.                    |   |   |
| 2 Parents can teach their children reading and math more effectively.    |   |   |
| 3 Education in regular schools is more interesting as children’s interests and questions determine the subject of the lessons. |   |   |
| 4 Schools will continue to be the centre of education.                   |   |   |
| 5 Majority of parents don’t have the time or patience to teach their children at home. |   |   |

Appendix C. Vocabulary Pretest
If you answer “Yes,” please provide the meaning of the words. If you answer “No,” go on to the next question.

| Yes | No | Meaning (in English or Turkish) |
|-----|----|--------------------------------|
| 1   |    | launch                         |
| 2   |    | networking                     |
| 3   |    | hobbyist                       |
| 4   |    | precursor                      |
| 5   |    | corporate                      |
| 6   |    | interaction                    |
| 7   |    | moderate                       |
| 8   |    | cater                          |
| 9   |    | acquaintance                   |
| 10  |    | manifestation                  |
| 11  |    | funky                          |
| 12  |    | register                       |
| 13  |    | ultimately                     |
| 14  |    | mass                           |
| 15  |    | acquaintance                   |
| 16  |    | tuition                        |
| 17  |    | compulsory                    |
| 18  |    | controversial                  |
| 19  |    | detractors                     |
| 20  |    | bullying                       |
| 21  |    | discrimination                 |
Appendix D. Vocabulary Posttest
If you answer “Yes,” please provide the meaning of the words. If you answer “No,” go on to the next question.

| Yes | No | Meaning (E or T) | Yes | No | Meaning (E or T) |
|-----|----|-----------------|-----|----|-----------------|
|     |    | launch          |     |    | algebra         |
|     |    | networking      |     |    | demand          |
|     |    | hobbyist        |     |    | recreational    |
|     |    | precursor       |     |    | negate          |
|     |    | corporate       |     |    | interact        |
|     |    | interaction     |     |    | banner          |
|     |    | moderate        |     |    | captive         |
|     |    | eater           |     |    | default         |
|     |    | acquaintance    |     |    | entail          |
|     |    | manifestation   |     |    | inhale          |
|     |    | funky           |     |    | junction        |
|     |    | register        |     |    | overthrow       |
|     |    | ultimately      |     |    | replicate       |
|     |    | mass            |     |    | retention       |
|     |    | acquaintance    |     |    | revenge         |
|     |    | tuition         |     |    | sour            |
|     |    | compulsory      |     |    | submission      |
|     |    | controversial   |     |    | utterly         |
|     |    | detractors      |     |    | wheat           |
|     |    | bullying        |     |    | infuse          |
|     |    | discrimination  |     |    | elicit          |
|     |    | defend          |     |    | diversion       |
|     |    | downsides       |     |    | charitable      |
|     |    | extension       |     |    | ascend          |
|     |    | fractions       |     |    | adore           |