

Full Length Research Paper

Impact of note taking during reading and during listening on comprehension

Hüseyin Özçakmak

Department of Turkish Language Education, Faculty of Education, Hatay Mustafa Kemal University, Turkey.

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This study aims to determine possible impact of note taking during reading and listening on Turkish Language prospective teachers' comprehension success. Moreover in the study comprehension scores of the groups were investigated in terms of academic score and gender variables. Study was designed in causal-comparative research. The study was conducted with 72 s graders studying at the Department of Turkish Language Teaching at Education Faculty of Hatay Mustafa Kemal University. The Comprehension Achievement Test was employed in the study to determine reading and listening comprehension achievement scores of the students. In the study, an informative text containing 640 words and named as "Childhoods of the Famous Scientists" was used. At the end of the study it was found that Listening-Note Taking groups' comprehension scores were statistically more successful than Reading, Reading-Note Taking and Listening groups. There was a positive-way relation determined between the students' comprehension scores and their academic grade point averages. And in terms of gender there was no statistically significant difference between female and male students.

Key words: Note taking, listening, reading, comprehension, gender, academic score.

INTRODUCTION

Note taking is a skill that is frequently applied during school years. Note taking, mostly used from primary school to university years, is preferred in everyday life after university as well. When it is regarded in terms of timing, note taking is a skill that has two components. The first one is about the moment when note is taken, about focusing on the things seen, read or listened, and about concentrating on that moment. The latter one is about recording notes for using in the future.

There are a great number of definitions made about note taking. Boch and Piolat (2005) described note taking

as shortening important information for later use and writing in symbols rapidly; in other words, as creating external memory. According to Piolat et al. (2005), note taking is a complex activity that requires one to understand and choose information and necessitates written production processes. Moreover, Zhang (2012) described note taking as writing main idea and important points regarding the information presented during listening. On the other hand, there are some researchers who described note taking as a negative activity. For instance, Zuckerman (2016) stated that note taking is a

E-mail: huseyinozcakmak@gmail.com.

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miscellaneous and complex process that leads students to take unfruitful or incomplete notes.

Benefits of note taking

Note taking is a technique that is highly effective on comprehension. Taking notes during lesson helps students reach aim of the course more comfortably and makes them to understand what is taught easily (Kiewra, 1991). The students who take notes are advantageous in terms of getting the most important points of the course and recalling content of the course (Kiewra and Fletcher, 1984). Note taking has many advantages the foremost of which is relieving students of reading the whole book. It improves students' comprehension skills since it attracts students' attention to the material that is read or listened. It prevents students from missing the things taught during the lessons. Additionally, it helps students recall the important information they learnt and makes them independent (Bahrami and Nosratzadeh, 2017; Saravani, 2019; Umaadevi and Rekha, 2019). Kiewra (1991) claimed that note taking is important as it increases students' attention during lesson and enables coding the things taught during lesson into long-term memory. It was concluded in a study conducted by Faber et al. (2000) that note taking was effective in ninth graders' comprehending low-interest passages. Note taking can help students to recall some details about the subjects taught and to specialize in listening (Roy et al., 2014) as well as improving writing skill of an individual through different methods and techniques (Walker et al., 2017). Note taking is among the most crucial tools that improve comprehension (Kobayashi, 2005). However, comprehension is not only dependent on note taking. The primary thing to be successful is related to students' reviewing their notes (Van Matre and Carter, 1975).

Note taking is generally regarded within the context of courses. Notes taken during lessons mostly provide students with course materials and help them study their exams using these notes (Witherby and Tauber, 2019). Note taking is not only associated with courses. Notes are taken with the aim of a deeper understanding, long-term learning and reviewing previous knowledge as well, and note taking is applied in various fields of life such as daily life and professional life. For instance, a person's keeping clear and right records for his or others' use facilitates producing ideas and participating in the meeting. Notes which provide records in hospitals to be used as a reference in patient care and long-lasting treatments can be used in courts for referring later and can sustain reliability of judicial system (Mueller and Oppenheimer, 2016).

Effective note-taking

Although students are taught various techniques to comprehend and to write texts during their school life, it is

understood that only few students get the skill of basic note taking. Even though students are asked to take notes comprehensively year-round, and it is known that note taking is useful for learning, keeping knowledge taught and thinking, the case is like that (Boch and Piolat, 2005). Although they complete a great number of notebooks, few students have the knowledge of note taking and reviewing (Kiewra, 1987). Reasons of this matter should be worked through. Is not instruction enough, or cannot note taking be taught functionally? Students' mislearning note taking causes them to be insufficient in effective note-taking. Some students perceive note taking as writing everything they hear. In a study carried out by Sutherland et al. (2002) with 25 students whose mother tongue was English or who learnt English as a foreign language, it was found that 17 students did verbatim transcription. If every word that is heard is noted, knowledge cannot be synthesized. Since working memory of a student who writes everything that is told or read is active, he/she cannot analyze the incoming knowledge (Hill and Miller, 2006).

Note taking instruction

Speaking speed, comprehension speed and writing speed should be mentioned for note taking. Comprehension speed is more than speaking speed, and speaking speed is more than writing speed. Each word spoken can be understood, yet writing may be problematic. Therefore, trying to write everything a teacher tells may make note taking a skill that is too difficult to overcome. Students should be trained about note taking methods and techniques to prevent this. In some studies (Oğuz, 1999; Çetingöz, 2010), it was concluded that students having received training about note taking learned more than the ones that followed the lessons without training. There may be some students who do not know how to take notes effectively in the classrooms. Teachers are required to help those students to take notes and to encourage them to realize remarkable facts of a subject rather than to get angry (Bretzing et al., 1987; Murphy, 1996; Jacobs, 2013).

Individual differences

Another matter to be touched on about note taking is the fact that students who take notes use different methods and techniques, or each student has a unique note taking style. Even the contractions that students use for the same word may be different from each other's. This is both surprising and closely related to students' individual differences (Hadwin et al., 1999; Piolat et al., 2005). Being cognitively different may result in students' adopting different note taking strategies and their getting different efficiency (Bui and Myerson, 2014; Jansen et al., 2017). It is quite normal that students take notes

differently and use different contractions. Students' previous learning may directly affect the notes they take about the topics they read or listen. Taking notes about information firstly met by regarding it important and disregarding information previously met and learnt completely are products of prior learnings. Prior learnings being complete or incomplete or null related to the same topic shows only one side of individual differences.

Note taking and technology

There have been some changes in students' note taking styles with the developments in technology. Today, students can take notes through some programs installed in computers or mobile phones instead of through notebook and pencil. Even students who take a photo of the writings on the board (in other words take notes) are frequently seen (Özçakmak and Sarigöz, 2019). This proves that note taking keep up with changing technology and it still keeps its popularity. Technological advancements have provided students some conveniences and have lessened amount of time they spent for writing. Students who get accustomed to typing through keyboard rather than using pencil and notebook are able to write the same words in a shorter time and to focus on their courses in remaining time.

Note taking during listening/reading

When note taking is considered, writing based on the things listened or read comes to mind. Such that, in the study carried out by Özçakmak and Sarigöz (2019) with university students, it was revealed that the students mostly regarded note taking as "note taking from listening" (61%), and it was followed by "note taking from reading" (31%). Notes generally used in academic learning can be taken from a course or a written document. Notes that are mostly taken under a deadline of time during a lesson can be written on intended speed while being taken from a written document (Olive and Barbier, 2017). Taking notes during listening or reading is regarded as a useful strategy in terms of developing storage of information (Carrier and Titus, 1979). When it is regarded in terms of linguistic skills, it forms a basis for improving listening, reading, speaking and writing skills. It is not possible for a student to tell a matter without understanding it. When this is taken into consideration, the importance of reading and listening skills appear by itself. In our study it was investigated how *reading and note taking during reading* and *listening and note taking during listening* affected students' comprehension success. Furthermore, note taking during reading and note taking during listening which are two components of note taking were compared with regard to their effect on the students' comprehension success. When the literature was searched, no studies were found revealing which of

the skills that were note taking during reading and note taking during listening was more effective.

Aim of the study

In the study, it was aimed to determine possible impact of note taking during reading and listening on Turkish Language prospective teachers' comprehension success. Sub-problems of the study are as follows:

- 1). Are there any statistically significant differences between comprehension scores of the Reading Group (RG) and of the Listening Group (LG)?
- 2). Are there any statistically significant differences between comprehension scores of the Reading Group (RG) and of the Reading-Note Taking Group (RNTG)?
- 3). Are there any statistically significant differences between comprehension scores of the Listening Group (LG) and of the Listening-Note Taking Group (LNTG)?
- 4). Are there any statistically significant differences between comprehension scores of the Reading-Note Taking Group (RNTG) and of the Listening-Note Taking Group (LNTG)?
- 5). Is there any statistically significant relationship between comprehension scores of the groups and their academic achievement mean scores?
- 6). Are there any statistically significant differences between comprehension scores of the groups by gender?

METHODOLOGY

Model

In the study, causal-comparative research model was employed. This is a model that is used to investigate reason or result of a difference existing between groups or to reveal the effect of an independent variable on another dependent variable (Brewer and Kuhn, 2010; Fraenkel et al., 2011). In this model, it is aimed to compare situations in their natural environments without any interventions (Karasar, 2016). The aim of the researcher is to find if there were any effects of the independent variable on the dependent variable.

Study group

The study was conducted with 72 second graders studying at the Department of Turkish Language Teaching at Education Faculty of Hatay Mustafa Kemal University. The students' ages ranged from 18 to 21. The students were randomly assigned to the groups considering A and B classes. The students' distributions by their academic achievement levels and by their genders are shown in Table 1.

Data collection tool

Comprehension achievement test

The comprehension achievement test was employed in the study to determine reading and listening comprehension achievement

Table 1. Distribution of demographic information of the study group.

Variable		N	%
Groups	Reading	17	23.6
	Reading-Note Taking	18	25.0
	Listening	18	25.0
	Listening-Note Taking	19	26.4
	Total	72	100.0
Academic Achievement (GPA)	Low (Less than 2.75)	24	33.3
	Medium (Between 2.75-3.00)	19	26.4
	High (Greater than 3.00)	29	40.3
	Total	72	100.0
Gender	Female	52	72.2
	Male	20	27.8
	Total	72	100.0

scores of the students. The test consisted of 10 questions 5 of which were open-ended and 5 of which were true-false questions. One person who was experienced in assessment and evaluation gave support for preparation of the test. Each open-ended question of the Comprehension Achievement Test was 15 points and the maximum score to be taken from these open-ended questions was 75. Each of the other 5 questions which were true-false questions was 5 points, and the maximum score to be received from these 5 questions was 25. Thus, the maximum score to be received from the whole Comprehension Achievement Test was 100.

Reliability and validity

The questions having been prepared within the context of Comprehension Achievement Test were conducted on 5 students before the implementation. By looking at the students' responses, they understood the questions accurately, and there were not any questions that they did not understand. This is important to assure that there no meaning is lost. Coherence between the evaluators was searched to provide reliability. For that purpose, the students' responses having been analyzed by the researcher were also evaluated by a Turkish language education expert. Coherence between the coders was found as 0.91 according to Miles and Huberman (1994) formula.

In order to ensure validity, the test included an informative text named "Childhood of the Famous Scientists". In this regard, the titles of "Albert Einstein", "Thomas Edison", "Alexander Graham Bell" and "Isaac Newton" were included in the open-ended (5 questions) and true-false questions (5 questions) of the test to ensure content validity. An expert of assessment and evaluation was consulted to make sure that the questions had content validity, and it was assured by the expert.

Process

Selection of the students

The study was carried out with 72 university students who agreed to participate in the study voluntarily among 88 students studying at the Department of Turkish language teaching. The classroom variable affected assignment of students to the groups. Thus, that

which student would be in which group was not considered, but that students in which classroom would be in which group was taken into consideration. As a result of lot, class-A which included 35 students was selected for reading skills, and class-B which consisted of 37 students was selected for listening skills. With drawing the second lot, 17 students were assigned to the Reading group, and 18 students were assigned to the Reading-Note Taking group in class-A. Likewise, 18 students were assigned to the Listening group, and 19 students were assigned to the Listening-Note Taking group in class-B.

Selection of the text

In the study, an informative text of medium difficulty containing 640 words and 7 paragraphs and named as "Childhoods of the Famous Scientists" was used. The same text was used in all phases of the implementation. Supposing that the students' note taking and comprehension achievements would be affected positively by a text they met before the implementation, a text they had never met before was selected. The texts were intended to include information that most of the students did not know by asking for expert's opinion. Consequently, the informative text which was about childhoods of the famous scientists was selected among 10 candidate texts. The informative text mentioned about childhood years of the four scientists, Albert Einstein, Thomas Edison, Alexander Graham Bell and Isaac Newton.

Implementation

Certain facts were paid attention to in order to provide reliability and validity of the data obtained from the study before the implementation. Firstly, it was investigated whether the groups were equal or not, and the implementation started after enabling equality. Academic averages reflected general averages of the students for all the courses they received in the first and second grade. Means related to academic achievements of the groups are presented in Table 2.

When Table 2 is analyzed, it can be seen that mean in the reading group was 2.81, in the reading-note taking group was 2.93, in the listening group was 3.01, and in the listening-note taking group was 2.93. Grade point average was 2.92 in total. ANOVA test

Table 2. Groups' academic achievement distributions.

Groups	N	Mean	Std. deviation
Reading	17	2.81	0.40517
Reading-Note Taking	18	2.93	0.24583
Listening	18	3.01	0.27030
Listening - Note Taking	19	2.93	0.44984
Total	72	2.92	0.35368

Table 3. ANOVA analysis regarding academic achievements of the groups.

Groups	Sum of squares	df	Mean square	F	P
Between Groups	0.343	3	0.114	0.911	0.441
Within Groups	8.539	68	0.126		
Total	8.882	71			

was employed to determine if academic means caused any significant differences between the groups. Findings regarding ANOVA Test are illustrated in Table 3. It was understood from Table 3 that as a result of ANOVA test, there were not any significant differences between the groups ($p>0.05$). Thus, it was concluded that the reading group, the reading-note taking group, the listening group and the listening-note taking group were academically equal. Before implementation, the texts were selected meticulously in order to ensure that students were at an equal distance to the texts. Text selection was made among the texts that the students (at least most of them) had not seen before. The text which was selected under the guidance of an expert was asked to the students after the implementation, and it was questioned if the students had seen it before. Then, it was revealed that 65 of them (90.3%) had never seen it before, and the rest of them knew some of this information. Additionally, similarity of group distribution of the students knowing the information partially increased validity of the study. The students were assigned to the groups by lot before the implementation. 17 students of class-A consisting of 35 students were assigned to the *Reading* group, and the rest 18 were assigned to the *Reading-Note Taking* group. Moreover, 18 students of class-B consisting of 37 students were assigned to the *Listening* group, and the rest 19 were assigned to the *Listening-Note Taking* group. The students were informed about the implementation before the intervention, and the student groups which were determined by lot were gathered. The implementation started with class-A in which *Reading* and *Reading-Note Taking* groups were included. The students in the *Reading* group were asked not to use pencil and sheet, while the students in the *Reading-Note Taking* were informed that they could take notes during reading. Then, the informative text, "Childhoods of the Famous Scientists", which consisted of 640 words was handed out to the groups of *Reading* and *Reading-Note Taking*. The implementation lasted for 40 min. While the students in the *Reading* group gave back the texts they read without taking notes, the students in the *Reading-Note Taking* group gave back the texts on which they took some notes.

On another day, implementation was performed in class-B in which the groups of *Listening* and *Listening-Note Taking* were included. The students were informed about the implementation before the intervention, and they were told about the group they would be in. They clustered based on their groups. Then, the students were asked to listen to the informative text, "Childhoods of the Famous Scientists", which consisted of 640 words. The

students in the *Listening* group were asked not to use pencil and sheet, while the students in the *Listening-Note Taking* were informed that they could take notes during listening. The implementation lasted for 40 min. The notes taken by the students in the *Listening-Note Taking* group were collected.

Data analysis

The data of the study were analyzed using IBM SPSS Statistics 20 package program. Some measurements had been made before the analysis to determine the types of analyses to be used (parametric or non-parametric). As a result of Levene's Test, it was found that variances were equal ($p>0.05$). Moreover, it was understood as a result of Shapiro Wilk Test that the data showed normal distribution ($p>0.05$). Thus, parametric measurements were applied. In the study, some descriptive statistics including percentage, frequency, mean and standard deviation were employed. Furthermore, Independent Sample T-Test, ANOVA Test, Post Hoc Benferroni Test and Pearson Correlation Test were used. The findings obtained as a result of the analysis are presented in tables in the section of "Findings".

FINDINGS

In the section of findings, descriptive statistical tables related to the groups were presented, and the analyses showing whether there were significant differences between the groups and if the groups differentiated by gender were shown in tables. In addition, an analysis was performed to test if there was a correlational relation between comprehension achievement scores and academic point averages of the groups.

Table 4 shows mean scores which the groups received from the Comprehension Achievement Test. It can be seen in the table that the Listening-Note Taking group received the highest score ($\bar{X}=81.05$) while the Reading group received the lowest score ($\bar{X}=59.41$). The average

Table 4. Distribution of comprehension achievement means of the groups.

Groups	N	Mean	Std. deviation
Reading	17	59.41	15.39910
Reading-Note Taking	18	66.94	9.72246
Listening	18	65.28	10.77473
Listening - Note Taking	19	81.05	9.65789
Total	72	68.47	13.88177

Table 5. Anova analysis regarding comprehension achievements of the groups.

Source	Sum of squares	df	Mean Square	F	Sig.
Between Groups	4628.324	3	1542.775	11.587	0.000
Within Groups	9053.621	68	133.141		
Total	13681.944	71			

Table 6. Post Hoc Benferroni test results regarding comprehension achievements of the groups.

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.
Reading	Reading-Note Taking	-7.53268	3.90238	0.346
	Listening	-5.86601	3.90238	0.825
	Listening - Note Taking	-21.64087 [*]	3.85218	0.000
Reading-Note Taking	Listening	1.66667	3.84623	1.000
	Listening - Note Taking	-14.10819 [*]	3.79529	0.002
Listening	Listening - Note Taking	-15.77485 [*]	3.79529	0.001

comprehension achievement score for all of the groups was 68.47. ANOVA was employed to see if the scores that the groups received from the Comprehension Achievement Test were statistically significant or not, and the findings are shown in Table 5.

Table 5 indicated that there was a significant difference between mean scores that the groups received from the Comprehension Achievement Test ($p < 0.01$). The findings of Post Hoc Benferroni Test used to understand between which groups the difference was and in favor of which groups are presented in Table 6. As it can be seen in Table 6, there was a significant difference between the Reading and the Listening-Note Taking groups (in favor of the latter one) ($p < 0.01$), between the Reading-Note Taking and the Listening-Note Taking groups (in favor of the latter one) ($p < 0.01$) and between the Listening and the Listening-Note Taking groups (in favor of the latter one) ($p < 0.01$). In other words, scores that the students who took notes during listening received from the Comprehension Achievement Test were higher than scores of the students who just read and took the exam,

than scores of the ones who took the exam after taking notes during reading and scores of the ones who just listened and took the exam. Before conducting an analysis about testing if there was a relation between the students' academic grade points and their comprehension achievement scores, their academic grade point averages and comprehension achievement scores are shown in Table 7.

Table 7 illustrates the students' comprehension scores and their academic grade point averages. According to the table, the mean score that the students received from the Comprehension Achievement Test was 68.47, while their academic grade point averages were 2,92 out of 4,00. The results of Pearson correlation analysis employed to determine if there was a relation between the students' comprehension scores and their academic grade point averages are presented in Table 8.

Table 8 indicated that there was a positive-way relation (even if it was weak) between the students' comprehension scores and their academic grade point averages ($p < 0.05$). This finding revealed that there was a

Table 7. Descriptive statistics regarding academic point averages and comprehension achievement scores.

Variable	Mean	Std. deviation	N
Comprehension achievement score	68.47	13.88177	72
Academic grade point average	2.92	0.35368	72

Table 8. Correlation between academic grade point averages and comprehension achievement scores.

		Comprehension achievement score	Academic grade point average
Comprehension achievement score	Pearson correlation	1	0.264 [*]
	p		0.025
	N	72	72

Table 9. Analysis of the students' comprehension scores by the variable of gender (Independent Sample T-Test).

	Gender	N	Mean	Std. Deviation	t	df	Sig.
Comprehension achievement score	Female	52	70.38	13.85662	1.920	70	0.059
	Male	20	63.50	12.98785			

linear proportion between academic grade point averages and comprehension scores. In other words, it showed that students with high academic grade points can get higher scores from the Comprehension Achievement Test. Since distributions of the students to the groups varied in terms of gender, analysis regarding gender was made considering comprehension achievement scores of the all groups. Distributions of the students' comprehension achievement scores by gender are expressed in Table 9.

According to Table 9, when the scores that the students received from the Comprehension Achievement Test were analyzed, although the female students' scores ($\bar{X}=70.38$) were higher than the male students' scores ($\bar{X}=63.50$), Independent Sample T-Test results showed that no statistically significant differences were found between female and male students ($p>0.05$).

DISCUSSION

In the study, note taking during reading and note taking during listening which are two components of note taking skill were handled. A great number of studies related to note taking during reading (Faber et al., 2000; Badger et al., 2001; Hebert et al., 2014; Chang and Ku, 2015) and note taking during listening (Çetingöz, 2010; Ahour and Bargool, 2015; Zuckerman, 2016; Park, 2019) have been carried out. However, that no studies were found revealing which of the skills that were note taking during

reading and note taking during listening was more effective made this study important.

In this study, impact of reading and listening skills as sub-components of note taking on students' comprehension achievement was investigated as well, and it was found that there were not any differences between comprehension achievement scores of the *Reading* and *Listening* groups. This finding can be interpreted as that reading and listening skills are not superior to each other, and students' reading or listening to any informative materials affect their comprehension levels in a similar way. Some students can learn better by listening while others can learn better by reading even though none of these two skills is superior to the other. This is closely related to the students' learning styles.

The fact that the *Reading* and *Reading-Note Taking* groups were similar in terms of their comprehension achievements asserted that students' reading a text and their taking notes after reading this text did not affect their comprehension. However, this result was found to be controversial with some other studies (Faber et al., 2000; Belet, 2005; Tok and Beyazit, 2007). Some factors such as the text's being informative and not being too long (640 words), and its being interesting as it was about childhood years of the famous scientists may have caused comprehension achievement scores of the *Reading* and *Reading-Note Taking* groups to be close. When it was considered with regard to the *Listening* and *Listening-Note Taking* groups, it was seen that note taking during listening affected the students'

comprehension achievement levels positively. There are a lot of studies supporting this finding (Durukan and Maden, 2010; Kocaadam, 2011; Ceran, 2015). The result obtained in our study should be considered based on the informative text used. Taking notes during listening may not always be more advantageous than listening without taking notes. For instance, the case may be exact opposite in a study in which a narrative text is used and students' success of note taking during listening and of listening without note taking is compared.

When the results obtained in our study were considered with regard to *Reading-Note Taking* and *Listening-Note Taking*, it was revealed that note taking during listening affected comprehension achievement more compared to note taking during reading. The reason may be the fact that taking notes while listening to a lesson has certain advantages compared to taking notes while reading a material. While note taking during listening is simultaneous with the text, note taking during reading requires students to go between skills of reading and note taking (Kiewra, 1991). In other words, while note taking during listening is formed in one step, note taking during reading necessitates two steps. In a study carried out by Riley and Dyer (1979), a text containing 2.000 words was read by a group of participants while it was listened by another group of participants. Both groups were split into two groups within themselves as the group taking notes and the group not taking notes. As a result of that study, it was found that note taking provided some advantages for the listeners, yet it did not cause any differences for the readers.

In our study, it was found that there was a positive weak relation between the students' comprehension scores and their academic grade point averages. This proved that there was a linear proportion between the students' academic grade point averages and their comprehension scores. In other words, it was inferred that the possibility of receiving a high score from the Comprehension Achievement Test by the students who had high academic grade point averages was higher compared to the ones who had low academic grade point averages. In his doctoral thesis, Daly (1983) suggested that there was a high level of positive relation between general grade point average and note taking achievement. Similarly, in the studies conducted by Kiewra and Benton (1988) and Luo et al. (2016), it was found that amount of notes taken was closely related to academic achievement. Although these findings showed that note taking skill was highly dependent on academic achievement, academically low or mediocre students' note taking success can be improved with the help of well-structured note taking instruction. This is because of the fact that quality of the notes is important rather than amount of them regardless of the way they were taken (by listening or by reading). In other words, amount of the basic units of the text caught is more important than amount of the note taken. Otherwise, verbatim note taking would be invaluable.

When the scores that the students received from the Comprehension Achievement Test were analyzed, although the female students' scores ($\bar{x}=70.38$) were higher than the male students' scores ($\bar{x}=63.50$), Independent Sample T-Test results showed that no statistically significant differences were found between female and male students. In some studies, it was claimed that female students recorded more important ideas than the male students, yet they were less successful than the male students (Hartley, 1976; Daly, 1983). However, in many studies (Reddington et al., 2015; Morehead et al., 2019), it was revealed that females took notes more effectively than males. On the other hand, there are also some studies (Rahmani and Sadeghi, 2011; White, 2017) suggesting that there are no significant differences between female and male students with regard to note taking success.

Limitations

In our study, an informative text was used. It is possible to obtain different results by using narrative or argumentative texts. Furthermore, length of the text used in the study was 640 words. Conducting the study with longer or shorter texts may result in different findings.

Implications

Our study which was carried out by using an informative text is not generalizable for other types of texts. Therefore, different academic studies can be conducted on the impact of note taking on narrative and argumentative texts in terms of note taking during reading and note taking during listening. In the current study, an informative text containing 640 words and 7 paragraphs was employed. In further studies, the possible effect of the text length on note taking and on comprehension achievement can be investigated.

In the current study, university students were selected as the sample. In further studies, different samples such as primary school, middle school and high school can be chosen. Additionally, impact of note taking styles (reading and listening) on comprehension achievement can be investigated in the field of teaching language to the foreigners.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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