

THE EFFECTS OF NOTE-TAKING WHILE LISTENING STRATEGIES INSTRUCTION ON STUDENTS' NOTE-TAKING SKILLS

Dinlerken Not Alma Stratejileri Eğitiminin Öğrencilerin Dinleme Becerilerine Etkileri

Öğr. Gör. Ceyda SERT AKTUĞ

Usak University, School of Foreign Languages, Basic English Department, Uşak/TURKEY

ORCID ID: <https://orcid.org/0000-0002-3223-2784>

ABSTRACT

The present study aims to investigate students' opinions concerning their existing note-taking strategies and the effects of note-taking while listening strategies instruction on students' note-taking skills. In line with this purpose, forty students in two homogenous inter-mediate classes (experimental and control groups) who enrolled in the department of English Language & Literature (ELL) at Uşak University and studied in compulsory preparation classes were selected. A quasi-experimental, pre-test / post-test research design was used in the study. In addition to the note-taking strategies provided by the course book, extra listening and note-taking strategies were instructed to the experimental group during the study, whereas the control group received only the note-taking strategies provided by the course book. Both groups were asked to listen and take notes of the same recordings. Their notes of the recordings were then examined in respect of note taking strategies (total notations, content words, abbreviations, arrows and highlights) suggested in the literature. The results were analyzed via SPSS 23.0 by using Mann Whitney U test since the results did not show a normal distribution. In addition, a questionnaire was given to the experimental group and asked to share their opinions related to their previous experience and knowledge on note-taking and the process they experienced in this class. The results proved that experimental group had a significant difference in terms of noting down total notations, total content words, using abbreviations, arrows and highlights while listening.

Key Words: note-taking strategies in L2, note-taking while listening, note-taking strategies instruction

ÖZET

Bu çalışma öğrencilerin mevcut not alma becerilerine ilişkin düşüncelerini ve dinlerken not alma stratejileri eğitiminin öğrencilerin not alma becerilerine etkilerini araştırmayı amaçlamaktadır. Bu amaçla, Uşak Üniversitesi İngiliz Dili ve Edebiyatı bölümüne kayıtlı ve zorunlu İngilizce Hazırlık programında okuyan, orta seviyede İngilizce bilgisine sahip iki homojen sınıfta bulunan kırk öğrenci (deney ve kontrol grubu) seçilmiştir. Çalışmada yarı deneysel model, ön-test/son-test araştırma deseni kullanılmıştır. Öğrencilerin ders kitabında bulunan not alma stratejilerine ek olarak, çalışma boyunca deney grubuna daha fazla dinleme ve not alma stratejileri eğitimi verilirken, kontrol grubu sadece ders kitabında önerilen not alma becerileri eğitimi almıştır. Her iki grup da aynı ses kayıtlarını dinlemiş ve not almışlardır. Öğrencilerin dinledikleri ses kayıtları üzerine aldıkları notlar daha sonra alan yazında önerildiği üzere not alma stratejileri açısından incelenmiştir (toplam kelime sayısı, içeriğe ait toplam kelime sayısı, kısaltma kullanımı, ok işareti kullanımı, vurgulama işareti kullanımı). Sonuçlar SPSS 23.0 analiz programı kullanılarak ve sonuçlar normal dağılım göstermediğinden Mann Whitney U Testi ile analiz edilmiştir. Ayrıca deney grubundaki öğrencilere bir anket verilmiş ve not alma ile ilgili önceki deneyimleri ve bilgilerini ve bu sınıfta deneyimledikleri süreç hakkında fikirlerini paylaşmaları için bir anket verilmiştir. Sonuçlar, deney grubunda bulunan öğrencilerin dinlerken not aldıkları toplam kelime sayısı, içeriğe ait toplam kelime sayısı, kısaltma kullanımı, ok işareti kullanımı, vurgulama işareti kullanımı açısından önemli bir fark olduğunu kanıtlamaktadır.

Anahtar Kelimeler: ikinci dilde not alma stratejileri, dinlerken not alma, not alma stratejileri eğitimi

1. INTRODUCTION

Communication is one of the basic needs of the individuals living in a society. Therefore, listening and speaking skills take place on the basis of communication. Furthermore, the most commonly skill used in daily life, listening can be considered as a functional tool to prepare the individual for reading, writing and speaking and it is also appraised as a competence that provides an essential access to information (White, 2006). In many current studies, it is reflected that listening takes an active key role in the process of improving communication skills and is an active skill (Morley 2001; Vandergrift 2004; White, 2006).

While learning a second language, listening is regarded as the most important skill and main purpose is to understand what the speaker intends to say (Rost, 2011). Listening is also regarded as an essential skill while learning a foreign language, however, required attention has not been paid and therefore these skills have been neglected ((Farhady, Jafarpoor and Birjandi, 1994; Gorbani, 2011). Chastain (1998), Brown (2000) and Harmer (2011) also emphasize the importance of listening skill and they stated that listening skill has the main role in language learning.

According to Rost (2001) listening comprehension is very essential in using and learning a language for being the basic channel in L2 acquisition; therefore, great priority should be given to the development of this skill in instruction. Although listening is a challenging skill while learning a foreign language, students need to be trained in order to improve their listening skills. Hunsaker (1990) also suggests that while acquiring a language and improving the knowledge related to it, the largest input is provided through listening. Nunan (1999), one of the experts in the field, names listening skill as “Cinderella” because he believes that “listening has been overlooked by its elder sister: speaking” (p.199). Nunan also explains that common belief among most of the people is that knowing a language is related to the ability to speak and write in that language.

Although listening skill is considered as an essential and determinant skill in the process of language learning, it has been a least popular topic for researchers for many years and teaching listening skill is neglected by the teachers to a large extent (Brown, 2008). However, it is a scientific fact proved by research findings that the improvement on listening skill has positive effects on other three basic language skills-reading, writing and speaking while learning a language (Badian, 1999; Bergman, 1999; Berninger, 2000; Morris ve Leavey, 2006).

On the other hand, note-taking is also an essential skill which needs to be acquired while learning a foreign language. It is the teachers who should encourage students on note-taking and note-taking strategies should be taught to the students in order for them to grasp the main idea and key words while listening to a text. Note-taking is not necessarily about how much to write, but about the written output which is controlled to improve the efficiency of recalling once the text has been completed (Haswell and Lee, 2013). On the other hand, since the students are unsure what to note down and have to deal with focusing, understanding, interpreting the content, Gilbert (1989) observes how difficult it is to take notes from a lecture in a foreign language.

According to Oxford (1990), note-taking needs a metacognitive strategy called "organizing". In order to organize, five basic steps of note-taking should be taught to students, these are; decoding the message given, understanding, identifying the main points, deciding when to record the main points and speed writing (Oxford, 1990 cited in Flowerdew, 1994). Besides, it is well-known fact that note-taking activates working memory and helps improve problem solving skills (Boch & Piolat, 2005; Gür, Dilci, Coskun and Delican, 2013). Moreover, Boch and Piola (2005) suggest that note-taking helps learners both in learning and improving their writing skills.

For some researchers, note-taking is considered to be given just in advanced levels (Ahour and Bargool, 2015). Gür et al. (2013) point out the importance of note-taking and state that developing “academic listening skills” for students “is highly significant to be successful in higher education context” (p. 93). Especially in higher education context, students listen to different types of lectures, such as, informative, narrative and philosophical since the most used method in universities is lecturing due to the number of the students (Gage and Berliner, 1984).

In Turkey, students who study at English Language Teaching (ELT) and English Language and Literature (ELL) departments in universities are required to take central tests for checking their level of English prior to their enrollment at a university. These central tests assess the grammatical knowledge, vocabulary and

reading comprehension skills of the students. However, in this central test, there is no section assessing listening or writing skills. For that reason, studies related to central tests in high schools focus more on those accepted topics such as reading, vocabulary and grammar. Nevertheless, listening and note-taking skills which are regarded as essential while learning a language are mostly ignored. Therefore, students may come across with some difficulties note-taking while listening at university since they have very limited experience on note-taking. .

To sum up, all the aforementioned studies point out that note-taking while listening to a lecture can be challenging for non-native speakers or the learners of English as a second language. However, note-taking and listening components of English language learning should be considered as essential skills and special importance should be given to equip students accordingly.

With those in mind for the researcher, training students on note-taking while listening instruction for eight weeks was needed and intervention study was carried out. The current study aims to find out whether this special training had any effects on students' note-taking while listening strategies and seeks answers to these research questions:

1. Does providing students with instructions on note-taking while listening have an effect on university students at compulsory English prep classes?
2. What are the perceptions/opinions of the students in the experimental group on note-taking while listening to a lecture instruction?

2. REVIEW OF LITERATURE

2.1. Related Studies

In the literature, it appears that there are some numerous recent studies indicating essentialness of students' note-taking and listening skills. İpek (2018), for instance, conducted a study with 61 freshman ELT students at a state university on listening and note-taking in L2. The participants of the study received both listening and note-taking instructions for 24 weeks and 2 hours every week both in fall and spring terms. Participants were given a questionnaire with 8 questions to evaluate their listening and note-taking skills in terms of separating and organizing main ideas, leaving space for additional information, writing down only the most important content words, using own words when possible, noting down sufficient examples, using abbreviations and symbols, listening for signal words and expressions, and identifying when the speaker shifts from the topic and returns to the lecture topic. One open-ended question was also asked to the participants in order to determine their opinions on note-taking while listening instruction for eight weeks. Following the intervention study conducted, the participants stated that "they learned about different note-taking formats, improved their note-taking skills in general, they could organize their notes and write neatly, improved their listening comprehension. Moreover, they noted that the course contributed to their pronunciation, they learned which note-taking skills to use and comprehended different accents and different speeds" (p. 214) with the help of 24 weeks listening and note-taking instructions.

Another study on listening and note-taking in L2 was conducted by Crawford (2015) who also is the developer of the questionnaire that is used as a data-gathering tool in this present study. Participants in his study were 21 freshman university students at a medium-size university who were all non-English majors. The students received a course named Academic Listening Strategies I and the course lasted for a year. In this course, participants were taught how to highlight important information, indicate relationships between ideas by using arrows and indentations. The course also included Cornell note-taking method. For the study, students' three exams were analyzed: spring midterm, spring final and fall final. Students listened to the listening passages in the exam and took notes. These notes were then analyzed in terms of total notations, content words, abbreviations, arrows and highlights. Results of the study showed that "effects of the training and practice were positive for most of the students" (p. 422). Although students regarded listening as a challenging activity, the results proved that they made a progress.

Haswell and Lee (2013) also conducted a quasi-experimental study with 37 students (22 students as treatment group, 15 students as control group) at a university where students had to take their major classes in a second language. Researchers of the study sought to find the effects of a structured note-taking activity in L2. While the treatment group in their study received specific instruction on note-taking, control group did not receive specific instructions on note-taking. Both groups underwent a pre-test and post-test

processes and the notes that students took were analyzed in terms of “total number of words written, total number of individual points made, number of points written in the three categories and number of points correctly identified” (p. 19). Results indicated that the students in the treatment group improved their ability to listen effectively, take and organize notes of a spoken text and identify points in the text with greater accuracy when compared to the control group in the study.

Note-taking while listening and post-listening summary writing in L2 was another concern for researchers. Ahour and Bargol (2015), conducted a quasi-experimental study in order to find the effects of note-taking and summary writing. They studied with experimental and control groups with 30 students in each group. In their study, experimental group was asked to listen and take notes after listening the audio for once which took 20 minutes and control group was asked to listen to the recording and write a summary about the text. Both groups were provided with 15 multiple-choice comprehension questions. The process lasted 20 sessions. The results showed that both groups were positively affected on note-taking while listening and post-listening summary writing after practicing 20 sessions. When the pre-test and post-test results were compared, however, researchers realized that no significant difference was observed between the post-test results of two groups in terms of listening comprehension.

In a quasi-experimental study conducted by Gür et al (2013), whether note-taking while listening had any effects on students' listening comprehension and whether students were able to understand different types of lectures (informative, narrative or philosophical) were investigated. The study was conducted with 122 participants and the groups were equally designed as experimental and control groups. A pre-test with 25 items gap-filling test was given to the students. As an instruction, experimental group received a four-hour practical training regarding note-taking techniques. On the other hand, control group only listened to the lectures and both groups were given comprehension questions at the end of the lectures. The results of the study showed that the listening comprehension of the students who had taken notes while listening to the lectures was positively affected and a highly significant difference was found between the two groups.

Hayati and Jalilifar (2009) conducted a research study with sixty undergraduate students majoring in English. The aim of their study was to find out whether instructions regarding note-taking strategies improve listening comprehension skills in academic situations. The second aim of the study was to observe any differences between their listening skills and note-taking strategies. First, they selected their sample group through a TOEFL test after a six week course. Three groups each with 20 students were designed. The first group took no notes during listening, the second group took notes on their usual manners and the third group was named as Cornell note-takers and they took notes according to Cornell note-taking method. One week later, Cornell method note-takers were given an achievement test with 30 multiple choice questions and their knowledge related to Cornell Method was checked. The results showed that students who were instructed through Cornell Method scored higher than the other none note-taking group and who took notes in their usual manners and showed higher levels of language gains.

Örsdemir and Yilmazer (2016) conducted an action research with 38 ELT students at a state university in Turkey. The course that the students took was a skill-based course, 24 hours a week and the students were required to complete the preparatory class with success at the end of the academic year. This action study included note-taking process while listening to lectures. Instead of listening and answering the comprehension questions, teachers in the class asked students to close the books and note-down detailed notes related to what they heard. The note-taking while listening process lasted eight weeks. Data was collected through exam results, reflection reports and interviews which were conducted with seven students. When the exam results were investigated, it was found out that students did better at the 2nd mid-term exam than the 1st mid-term exam on listening. Results of the reflection reports in the study reflected that 27 students benefited from the note-taking process. When the results of the interviews were decoded, it was found out that students were content and satisfied with the note-taking process since this process enabled them to answer the questions easily and understand the whole text, improved themselves and enhanced their concentration and self-confidence. However, some students also stated that they had difficulties in keeping up with the text and found this process time consuming.

2.2. Introducing Note-taking Methods

In order to conceptualize the framework of this current study, it is worth describing the note-taking methods that were introduced to the participants in the study. There are five common and proven to be successful

note-taking methods in the literature. These are: Cornell Method, Outlining Method, Mapping Method, Charting Method and Sentence/Paragraph Method and will be presented here in detail.

Cornell Method: In order to help the students take better notes at university, Walter Pauk (1974) developed the Cornell Method. Cornell Method is a popular note-taking method for students at university level. In this method, students are expected to draw a vertical line on a piece of paper, leaving 2 inches on the left, 6 inches on the right (in other words “main space”) and 2 inches at the bottom of the paper to summarize the lecture (Pauk,2001). Students are required to use the main space to take notes during a lecture. On the left part of the paper students write down cue words only. It is considered as a simple and efficient way of taking notes and this way of note-taking helps students remember and summarize, if required, each detail in the lecture that was given in the class.

Outlining Method: As the name suggests, students are required to outline while listening to a lecture. Students start taking notes with general information (major point) on the left and write specific facts or supporting ideas (minor points) related to the major point indented to the right. If the outlining can be done correctly in the class and the notes are organized neatly, it can help students to see the relationship between the major and minor points

Mapping Method: Mapping Method is a suitable way to take notes for visual learners. It is important to find out the main concept in the lecture and draw the connections and organize the relationship between the ideas. Students are required to put the main concepts in a circle and draw lines when the supporting ideas are presented. Although it is easy to relationships between the ideas, it may be visually overwhelming.

Charting Method: Students are required to determine the categories in a lecture and draw a chart to write the headings and fill in as the lecture continues. Every piece of important information should be written in appropriate columns. It is easy to find out the sequenced information and helps students memorize and compare the information on the chart.

Sentence Method: Students are required to note down every thought and concept on a piece of paper. Students can also number every line while taking notes. However, it can be overwhelming for the students to take every piece of information and be difficult to detect the major and minor points of the lecture by looking at the notes. If students prefer to use this method to take notes during a lecture, they should be able to use abbreviations in order to catch up with the lecture.

3. METHOD

3.1. Design

The overall purpose of this study was to introduce note-taking while listening strategies in L2 to compulsory English preparation class students and find out whether these instructions had any effects on their note-taking skills. Another purpose of the study was to collect and report the perceptions/opinions of the students related to note-taking in L2. Since there were two intact and available groups for an experimental study, this study was conducted using a quasi-experimental, pre-test/ post-test research design. Creswell (2014) states that “because of the practical constraints, working with “non-equivalent groups” has become an accepted research methodology in field studies where randomization is impossible or impractical” (p.117). Creswell (2014) also indicates that although a quasi-experimental design is vulnerable to threats in terms of validity when compared to full experimental design, “it is generally accepted that properly designed and executed quasi-experimental studies yield scientifically credible results” (p. 118).

The questionnaire, which helped to collect the opinions of the students, related to note-taking while listening in L2 constitutes the quantitative data of the study. To support the quantitative data, participants were asked to share their experiences and progress about note-taking while listening to an audio-taped lecture in L2.

3.2 Participants

The study was conducted with the students who enrolled in English Language and Literature (ELL) Department and failed to succeed in proficiency exam that had been held in the beginning of the academic year. Therefore, these students had to study one year in prep class to revise and improve their language skills. At Uşak University there were two compulsory English preparation classes in 2018-2019 academic

year. These classes were intact, there were 20 students in each class, and they were assigned as experimental group (Group A) and control group (Group B). The participants were both female and male students with the age range of 18-20 and all the students had inter-mediate English level according to their proficiency test results they had taken in the beginning of the fall academic year. The students had all studied in English language classes in high schools. They all underwent the same process in order to enroll in the ELL department at university. In compulsory English preparation classes both groups had 25 hours English language class per week and the first semester they studied an integrated skills book to start and refresh their knowledge in English. As they completed studying the book, two classes continued with skills lessons and the same topics and same tasks were given correspondingly. Participants in the experimental group were also informed about the present study and its aim and they agreed to be the subjects of the study voluntarily by signing a consent form provided by the researcher.

3.3 Process

First of all, the groups were assigned as experimental and control groups. Following that, pre-recorded audios were selected from Lecture Ready 2, a course book published by Oxford University Press. Each listening material lasted almost 9 minutes. Various topics were determined in order to be used for listening in the classrooms. These were: 1. Men & Women spending money, 2. Advertisement / advertisers, 3. Work, 4. Leisure Time, 5. Diet & health, 6. Problem of air pollution, 7. News & Media. In order to observe whether the training made an impact on students' progress, the recording, Men & women spending money was played as a post-test in the 8th week.

The study was carried out by the researcher in the second term as the students got accustomed to the syllabus and improved their knowledge in English. A pre-test was conducted with both experimental and control groups. The students were asked to prepare a piece of paper and a pencil to take notes while listening to a lecture. For the pre-test, the topic "men and women spending money" was selected. The lecture was a pre-recorded audio and it was played two times in both classes. The students neither had any comprehension questions nor received a worksheet with comprehension questions on the topic, they were asked to note down only what they heard. As the students finished listening and note-taking, these notes were collected by the instructor and saved for the analysis.

After the pre-test week, experimental group was given instructions on note-taking strategies while listening to a lecture. The students were introduced to note-taking while listening strategies. The presentation included Cornell note-taking method, Outlining Method, Charting Method, Mapping Method and finally Sentence Method. Also, students were given instructions on listening for key words, how to abbreviate, focusing, finding main ideas and concepts, paraphrasing and finding cues and clues, and identifying signal of importance while listening to the lectures. The instructions and clues were reminded every week before each listening and students were asked to feel free for any method to use. For the lectures there were neither comprehension questions nor the students were asked to write a summary or an essay about the lecture in order for students to focus merely on what they were listening. The aim was to find out what students gained about note-taking, how they progressed and how much they could note down.

Listening lectures and note-taking activities in L2 lasted for eight weeks. As for the post-test, both experimental and control groups listened the pre-recorded audio that had been used for the pre-test in order to find out whether instructions and practices of listening and note-taking in L2 had any effects on compulsory prep class students' note-taking skills.

3.4 Data Gathering Instruments

The instructions and practices for note-taking while listening to a lecture took eight weeks and students were given a pre-test and post-test listening and note-taking tasks. The sheets that students used to take notes during pre-test and post-test were collected with their approval. These worksheets then were brought together and were examined in terms of number of total notations, content words, abbreviations, arrows and highlights that the students noted in both experimental and control groups' writings. They were counted by using a spreadsheet.

In order to gather students' perceptions and the practices that were conducted for the study, a questionnaire was used by the permission of its author. Pazzaglia, Stafford and Rodriguez (2016) state that researchers of the same topic can skip the survey development stage and may use an existing survey or use an existing survey by adding some items of particular interest to their contexts if the surveyed topic has been used in

similar settings. Therefore, while searching for the literature, the researcher of the present study came across with a questionnaire that had been developed by Crawford (2015) in Japanese context for similar purposes. He was contacted through e-mail and his approval for using his developed questionnaire was granted. In the questionnaire there were 27 statements (for the last 7 statements students had to rate for frequency and helpfulness, that is, in total there were 34 items to mark). After a scrutinized examining process of the questionnaire, one question related to Dokkyo University and questions related to summary/response essay writing part were taken out of the questionnaire so as to cover the variables of the present study since the present study focused only students' perceptions on listening and note-taking in L2. For this study, the adapted questionnaire included four parts:

Part 1: three statements where students circle "yes" or "no" for their previous note-taking experiences

Part 2: eleven statements where students mark from 5 (strongly agree) to 1 (strongly disagree) about the note-taking in their class, general opinions on note-taking and Cornell Method

Part 3: seven statements where students rate for the frequency of each statement from 5 (very frequently) to 1 (very infrequently) and for the helpfulness of the same statements from 5 (very helpful) to 1 (very unhelpful)

Part 4: where students share their comments about the note-taking activities that were conducted in the classroom.

In total, there were 21 statements in the questionnaire of which seven statements in the last part had to be answered for both frequency and helpfulness, that is, students marked 28 items in the questionnaire. For the reliability of the questionnaire, a Cronbach's alpha was found as 0.75, which is an acceptable range.

3.5 Data Analysis

The results of the study were analyzed via using SPSS 23.0. Total number of notations, content words, abbreviations, arrows and highlights that the experimental and control groups had noted down while listening were logged into the system. Skewness, Kurtosis and Kolmogorov-Smirnov (One Sample K-S) normality tests were performed in order to determine whether the pre-test scores of the groups were normally distributed. Since the distribution appeared to be non-parametric, Mann Whitney U test was applied for analyzing the data. Furthermore, descriptive statistics were computed related to the questionnaire which was selected as an instrument to gather the students' opinions regarding their previous knowledge on listening and note-taking skills and the training they received throughout the term. Both groups were designed as 20 students but in the experimental group two students did not show up at the time of pre-test, therefore the data of these students were omitted from the study. As a result, data of 19 students of the control group and 18 students of experimental group were included into the study.

4. FINDINGS

In order to find out whether the data were normally distributed, Skewness and Kurtosis normality tests were computed. When the Skewness and Kurtosis values of the groups' pre-test and post-test scores were examined, it was determined that that they showed non-parametric values and the values were not between +1.96 and -1.96 as in Table 1.

Table 1. Descriptive Statistics Results For The Pretest And Posttest Results Of The Groups

Variables	Group	N	M	Skewness	Kurtosis
Total notations pretest	Control group	19	81.52	0.68	0.38
	Experimental group	18	71.27	0.37	-0.21
Total notations posttest	Control group	19	40.73	-0.17	-1.98
	Experimental group	18	73.38	-0.09	-0.57
Total content words pretest	Control group	19	53.52	-1.40	2.31
	Experimental group	18	50.55	0.42	0.21
Total content words posttest	Control group	19	28.78	-0.20	-2.01
	Experimental group	18	48.61	-0.51	-0.83
Abbreviations pretest	Control group	19	2.31	1.23	0.55
	Experimental group	18	5.33	1.06	0.47
Abbreviations posttest	Control group	19	1.26	1.67	2.29
	Experimental group	18	9.11	-2.60	8.76

Arrows pretest	Control group	19	1.21	3.46	13.31
	Experimental group	18	3.27	0.99	-0.79
Arrows posttest	Control group	19	1.52	1.68	2.09
	Experimental group	18	3.00	2.13	5.91
Highlights pretest	Control group	19	0.26	2.35	4.33
	Experimental group	18	0.33	0.77	-1.59
Highlights posttest	Control group	19	0.42	2.65	6.88
	Experimental group	18	3.00	1.69	1.89

Since the values were not found to be parametric, and the number of the groups were less than 30, the strongest non-parametric test, Mann Whitney U test was computed in order to gather valid results. Table 2 shows the pre-test results for both control and experimental groups analyzed through Mann Whitney U Test.

Table 2. Mann Whitney U Non-Parametric Test Pre-Test Results Of Control And Experimental Groups

Groups		N	Mean Rank	Sum of Ranks	U	p
Total notations	Control group	19	20.74	394.00	138.00	0.31
	Experimental group	18	17.17	309.00		
Total content words	Control group	19	19.92	378.50	153.50	0.59
	Experimental group	18	18.03	324.50		
Abbreviations	Control group	19	14.95	284.00	94.00	0.01
	Experimental group	18	23.28	419.00		
Arrows	Control group	19	17.29	328.50	138.50	0.28
	Experimental group	18	20.81	374.50		
Highlights	Control group	19	17.74	337.00	147.00	0.33
	Experimental group	18	20.33	366.00		

$p > 0.05$

In Table 2, the results indicate that before the listening and note-taking strategies in L2 training, there were no significant differences between the control and the experimental group ($p > 0.05$) in terms of noting down total notations, total content words and using arrows and highlights. The only significant difference was found at using abbreviation ($p < 0.05$).

Table 3. Mann Whitney U Non-Parametric Test Post-Test Results Of Control And Experimental Groups

Group		N	Mean Rank	Sum of Ranks	U	p
Total notations	Control group	19	15.42	293.00	103.00	0.03
	Experimental group	18	22.78	410.00		
Total content words	Control group	19	15.53	295.00	105.00	0.04
	Experimental group	18	22.67	408.00		
Abbreviations	Control group	19	13.16	250.00	60.00	0.00
	Experimental group	18	25.17	453.00		
Arrows	Control group	19	14.37	273.00	83.00	0.00
	Experimental group	18	23.89	430.00		
Highlights	Control group	19	16.18	307.50	117.50	0.04
	Experimental group	18	21.97	395.50		

$p < 0.05$

After the note-taking while listening instruction, Mann Whitney U test was run again in order to see whether the instruction had any effects on the participants in the experimental group. The results in Table 3 prove that, there is a significant difference between the control and the experimental group in terms of noting down total notations ($U = 103.00$, $p = 0.03$), total content words ($U = 105.00$, $p = 0.04$), using abbreviations ($U = 60.00$, $p = 0.00$), arrows ($U = 83.00$, $p = 0.00$), and highlights ($U = 117.50$, $p = 0.04$). The mean rank values of the variables for the control group is lower than the experimental group, that is also to say there is a significant difference between the groups.

In order to give them an opportunity to express their opinions in relation with the training process, the participants were given a questionnaire at the end of the training which had been developed by Crawford (2015). The day that the questionnaire was given, there were 20 students in the classroom, therefore the data of these 20 students were included to the analysis. The questionnaire consists of four parts. In Part 1,

the students were asked to respond to first three questions by marking *Yes* or *No*. Here, the item numbers are given as in the original questionnaire.

Table 4. Questionnaire: Previous Experience With Note-Taking

Items	Yes	No
1. Before taking this class, I learned how to do note-taking in another English class.	3	17
2. I learned how to take notes in high school.	1	18
3. I learned about the Cornell Method of note-taking for the first time in this class.	17	1

By looking at the results in Table 3, it can be observed that the participants of the study neither learned how to do note-taking in another class (N= 17) nor they learned how to take notes in high school (N= 18) before coming to university. For the item no. 3, it is clear that this training process gave them an opportunity to learn Cornell method (N= 17) while taking notes. Two of the participants in the study did not mark this item.

For Part 2, students were asked to rate for each item. Part 2 includes three topics. These are: note-taking done in this class, general part (where students express their opinions on note-taking) and Cornell method. For the items 4-14 in the questionnaire, students were asked to rate a 5 point scale: 1= strongly disagree, 2= somewhat disagree, 3= neutral, 4= somewhat agree, 5= strongly agree. Table 5 provides both frequency and mean values for each response.

Table 5. Questionnaire: Note-Taking Done In This Class

Items related to Note-taking done in this class	Sd.	M
4. I improved my note-taking skills in this class.	0.75	3.85
5. The note-taking I did in this class was difficult.	0.72	3.25
6. I became more comfortable with note-taking after practicing in this class.	0.98	3.70
7. The speed of listening passages sometimes made it difficult to take notes.	0.85	3.90
Items related to General knowledge on note-taking		
8. I think that taking notes makes me concentrate more on listening.	0.93	4.15
9. I think that note-taking is an important academic skill.	0.66	4.70
10. In this class, I would have preferred to look at the comprehension questions in the textbook while I listened rather than take notes.	1.10	3.50
Items related to Cornell Method		
11. At first, the Cornell Method was difficult to use.	1.21	4.00
12. I think that the Cornell Method is useful.	1.26	3.70
13. The Cornell Method made it easier for me to organize my notes.	3.45	3.45
14. I got better at using the Cornell Method in this class as I practiced more.	3.15	3.15

Mean value for item no. 4 (M=3.85) proves that most of the students agreed that they improved their note-taking skills in this class. However, item no. 7 presents that many of the students had difficulty while listening because of the speed of the passages (M=3.90). Item no. 8 exhibits that taking notes made students concentrate more on listening (M=4.15). Here the striking item is no. 9 that most of the students strongly agreed that note-taking is an important skill (M=4.70). Also item no. 10 exhibits that students need comprehension questions about the lecture while listening instead of taking notes on their own (M=3.50). It is clear that students found Cornell Method difficult while taking notes (M=4.00). Moreover, although participants mentioned that they found Cornell method an easy way to organize their notes (M=3.45), by looking at their notes, it can be said that none of the participants used Cornell method while taking notes.

Part 3 has two dimensions. The items from 15-21 were asked to students for both frequency and helpfulness. For the first dimension, the participants were asked to respond to the items emphasizing how frequent they used the note-taking techniques. They were asked to rate the items from 1= very infrequently to 5=very frequently.

Table 6. Questionnaire: How Often Did You Use The Techniques In This Class?

Items related to Note-taking Techniques	Sd.	M
15. Using abbreviations for some words (information → info, etc.)	1.24	3.89
16. Using shorter or easier words than the lecturer used (excellent → good, etc.)	1.31	3.55
17. Using special symbols for some words (number → #, etc.)	1.42	3.35
18. Using diagrams or pictures	1.45	2.10

19. Writing down 'content words' (nouns, verbs, etc.) and not writing down 'function words' (of, to, the, a, etc.)	1.27	3.85
20. Using arrows	1.57	3.65
21. Using ways to highlight particularly important information (circles, underlining, etc.)	1.14	4.15

The analysis prove that the participants used the techniques note-taking while listening very frequently (using abbreviations M= 3.89, writing down shorter, easier words M= 3.55, writing down content words M= 3.85, using arrows M= 3.65 and using highlights M= 4.15).

The second dimension of Part 3 is related to the helpfulness. The items 15-21 were again asked to the participants to express their opinions related to the helpfulness of the techniques they learned in the classroom during the training. However, to make the items and the results clear here, additional numbers were given to the items and they were listed as 22-28. The participants were asked to rate the items from 1= very unhelpful to 5= very helpful.

Table 7. Questionnaire: How Helpful Were The Techniques?

Items related to Note-taking Techniques	Sd	M
22. Using abbreviations for some words (information → info, etc.)	0.83	4.37
23. Using shorter or easier words than the lecturer used (excellent → good, etc.)	0.88	4.35
24. Using special symbols for some words (number → #, etc.)	1.11	4.20
25. Using diagrams or pictures	1.54	2.95
26. Writing down 'content words' (nouns, verbs, etc.) and not writing down 'function words' (of, to, the, a, etc.)	1.04	4.15
27. Using arrows	1.29	4.10
28. Using ways to highlight particularly important information (circles, underlining, etc.)	0.99	4.35

The results in Table 6 point out that the participants of the study marked "very helpful" column almost for all the items, except the item related to using diagrams or pictures. Students found using abbreviations for some words very helpful (item no. 22) (M=4.37). The item no. 23 (M=4.35) using shorter and easier words than the lecturer said was found to be very helpful. As the results suggest, using special symbols for some words (item no. 24) (M=4.20) and using ways to highlight particularly important information (item no. 28) (M=4.35) were found to be very helpful techniques while taking notes. On the other hand, the results show that the students did not prefer to use diagrams or pictures while taking notes and they did not find them very helpful (M=2.95).

In Part 4, participants were asked to include any additional comment related to the note-taking in this class or note-taking in general. Only one student shared his thoughts related to the training. In his own words he wrote:

"I think that experiment made my note-taking better, but the lecturer sometimes was talking so quietly that I could not understand some parts of the lecture".

5. CONCLUSION, DISCUSSION AND SUGGESTION

This current study aimed to investigate the effects of note-taking strategies of compulsory English prep class students while listening to a lecture. The first research question of this study sought an answer whether the note-taking while listening training had a positive effect on experimental group when compared to control group. As Skewness and Kurtosis normality tests presented, both groups were at the same level of English in the beginning. After the training, which lasted for eight weeks where experimental group had an opportunity to come across with some strategies on note-taking while listening, the post-test results pointed out that there is a significant difference between the experimental and control groups in terms of total notations, total content words, using abbreviations, arrows and highlights while taking notes. The results of this current study are in line with the results of the researchers *Gür, et al (2013)*, Haswell and Lee (2013).

As the second research question, this study aimed to find out the perceptions of the participants regarding the note-taking while listening training and their previous experience. The results of the questionnaire, which was given to the participants following the training, also indicated that the participants of the study benefited from the note-taking while listening strategies training. The students in the experimental group emphasized that they had not had any note-taking while listening experience (N= 17). Since note-taking,

listening, speaking and writing skills are not assessed in the central test to study at a department on language at university as mentioned earlier, the teachers at high schools who prepare students for university entrance exam generally ignore these skills.

The participants in the experimental group emphasized that they improved their and note-taking while listening skills which could be considered as the prominent outcome of this experimental study. The participants were also of the opinion that listening is an academic skill and should not be ignored while learning a foreign language.

Although the central foreign language test ignores these skills, teachers should find a way to improve the students' note-taking while listening skills in high school. Otherwise, the students have to focus both improving these neglected skills and the courses at university. Boch and Piolat (2005) also suggest that teachers should include note-taking materials to their instruction and students should learn about and focus more on note-taking. The training based on this study at least provided an opportunity for students to focus on different topics and lectures and learn many note-taking strategies to use in their university lives and further career stages.

REFERENCES

- Ahour, T. and Bargool, S. (2015). A Comparative Study on the Effects of While Listening Note-taking and Post Listening Summary Writing on Iranian EFL Learners' Listening Comprehension, *Theory and Practice in Language Studies*, 5(11), 2327-2332.
- Badian, N.A. (1999). Persistent arithmetic, reading, or arithmetic and reading disability. *Annals of Dyslexia*, 49(1), 45-70.
- Bergman, O. (1999). Wait for me! Reader control of narration rate in talking books. Newark, DE: International Reading Association.
- Berninger, V. W. (2000). Development of language by hand and its connections to language by ear, mouth and eye. *Topics in Language Disorders*, 20(4), 65-84.
- Boch, F. & Piolat, A. (2005). Note-taking and learning: A summary of research. *The WAC Journal*, 16, 101-113.
- Crawford, M. J. (2015). A study on note-taking in EFL listening instruction. In P. Clements, A. Krause, & H. Brown (Eds.), *JALT2014 Conference Proceedings*. Tokyo: JALT.
- Creswell, John W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches*, (4th ed.). Thousand Oaks, CA: Sage
- Gage, N.L. & Berliner, D.C. (1984). *Educational psychology* (3rd ed.) Boston: Houghton Mifflin.
- Gilbert, J. B. (1989). *Clear speech*. Cambridge: Cambridge University Press.
- Gorbani, M. R. (2011). The impact of phonetic instruction on Iranian students' listening ability enhancement. *Asian EFL Journal. Professional Teaching Articles*, 52(2), 24-34.
- Gur, T., Dilci, T., Coşkun, I. & Delican, B. (2013). The impact of note-taking while listening comprehension in a higher education context. *International Journal of Academic Research*, 5(1), 93-97. Retrieved from: <https://docplayer.net/44519605-The-impact-of-note-taking-while-listening-on-listening-comprehension-in-a-higher-education-context.html>
- Farhady, H., Jafarpoor, A., & Birjandi, P. (1994). *Testing language skills: From theory to practice*. Tehran: SAMT Publications.
- İpek, H. (2018) Perceptions of ELT students on their listening and note-taking skills. *International Online Journal of Education and Teaching (IOJET)*, 5(1), 206-217. Retrieved from: <http://iojet.org/index.php/IOJET/article/view/281/226>
- Haswell, C.G. & Lee, R.A. (2013) A Comparative Study of Listening Comprehension and Organization of Lecture Notes in Intermediate English Classes, *Polyglossia Volume 24*. Retrieved from: <https://core.ac.uk/download/pdf/60540845.pdf>



- Hayati, A.M. & Jalilifar, A. (2009). The Impact of Note-taking Strategies on Listening Comprehension on EFL Learners, *English Language Teaching*, 2 (1), 101-111.
- Hunsaker, R. (1990). Understanding and developing the skills of communication: Speaking and Listening. Colorado: Morton Publishing Company.
- Morley, J. (2001). Aural comprehension instruction. Celce-Murcia, M. (Ed.), Principles and practices in teaching English as a second or foreign language. Boston: Heinle and Heinle
- Morris, T. & Leavey, G. (2006). Promoting phonological awareness in nursery-aged children through a sure start early listening programme. *International Journal of Early Year Education*, 14(2), 155-168.
- Nunan, D. (1999). Second language teaching and learning. Massachusettes: Heinle & Heinle Publishers.
- Oxford, R. L. (1990). Language learning strategies: what every teacher should know. Boston, MA: Heinle & Heinle.
- Örsdemir, E. & Yilmazer, M.Ö. (2016). Note-taking in the EFL listening classroom: an action research, *International Journal of Language Academy*, 4(2), 208-216.
- Pazzaglia, A. M., Stafford, E. T., & Rodriguez, S. M. (2016). Survey methods for educators: Selecting samples and administering surveys (part 2 of 3) (REL 2016–160). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northeast & Islands. Retrieved from: <https://files.eric.ed.gov/fulltext/ED567752.pdf>
- Rost, M. (2001). Listening. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 7-13). Cambridge: Cambridge University Press.
- Rost, M. (2011). *Teaching and researching listening* (2nd ed.). UK: Pearson Education Limited.
- Vandergrift, L. (2004). Learning to listen or listening to learn? *Annual Review of Applied Linguistics*, 24, 3–25.
- White, G. (2006). Teaching listening: Time for a change in methodology. Usó-Juan, E. ve MartínezFlor, A. (Ed). *Studies on second language acquisition: current trends in the development and teaching of the four language skills* (111-135). Berlin: Walter de Gruyter Mouton.