THE IMPACT OF NOTE-TAKING WHILE LISTENING ON LISTENING COMPREHENSION IN A HIGHER EDUCATION CONTEXT

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ABSTRACT

Currently, lecturing dominates higher education as the most frequently used method due to certain conditions in this context. Various methods and techniques have been developed and some research studies have been carried out to help learners avoid being passive listeners in a context where lecturing is frequently used. This study aims to research how listening to different lecture types (informative, narrative and philosophical) by note-taking affects listening comprehension. The study, carried out in the Department of Turkish Language Teaching at the Faculty of Education, Cumhuriyet University, adopts an experimental design with a pretest and posttest. To analyze the data, t-test was carried out using SPSS 18. According to the results of the study, there were higher levels of comprehension for all three lecture types in favour of the participants who took notes while listening to the lectures. It is recommended that learners be trained to acquire active learning, active listening and note-taking skills.

Key words: Listening, active listening, university students, note-taking

1. INTRODUCTION

Humans recognize, comprehend and evaluate the world and other members of the human race through language skills that have developed within the context of understanding and explaining. As a comprehension skill, listening provides people with the largest input during the process of language acquisition and knowledge improvement (Hunsaker, 1990), and it also forms the basis of other language skills (Ozbay, 2005:9). In brief, listening, which is defined as the process of making meaning out of the perceived audio input via various operations, is actively done for different purposes and motives all through the life beginning with the foetus period (Gunes, 2007: 73). People listen to audio language to acquire knowledge and interpret, criticise or enjoy the material (Akyol, 2012, p. 5-9).

Listening activities carried out by learners at school are intended for gaining knowledge; such activities are based on the principle that involves storing information by using mental listening comprehension mechanisms and recalling the stored information later. In listening activities carried out at school to understand and gain knowledge, it is possible to mention both passive and active listening techniques. In the literature, as there are techniques applying certain directions developed by people and institutions (e.g., the Cornell technique), learners mostly develop their own note-taking techniques. To prevent forgetting nearly 80% of the content of a listening material, it is recommended that learners take notes while listening (Ozbay, 2005, p. 85). In the overall sense, it is seen that note-taking helps learners not only in learning, but also in developing writing skills (Boch and Piolat, 2005).

When the available time and the number of students are considered, it is commonly known that the most frequently used method is lecturing (Gage and Berliner, 1984, p. 454). Therefore, for students to develop “academic listening skills” is highly significant to be successful in higher education. Academic listening skills are considered as the most significant element of communicative competence used in a higher education context (Flowerdew, 1994, p. 7). Quite a few researchers (Buck, 2001; Dunkel, 1995; Dunkel and Davis, 1994; Flowerdew, 1994; Chaudron, Loschky, and Cook, 1995; Mendelsohn and Rubin, 1995; Richards, 1983; and Rost, 1990) contributed to the literature on academic listening skills. In these studies, the differences between conversational and academic listening were also addressed. In short, it is possible to define conversational listening as an activity that is mutually carried out, while academic listening is a one-way activity that is done to understand a subject or the contents of a course. In daily communication, listeners also assume the role that of a speaker. On the other hand, students rarely take their turn to speak in academic listening; this only occurs when a question is directed to them. In later parts of his study, Flowerdew mentions five steps of note-taking: decoding the message given, understanding, identifying the main points, deciding on when to record these points and speed writing. An individual takes down notes in line with this process and he/she reviews them and uses the meaning that is driven out of these notes in connection with the information that is still in the working memory to remember information in the long run. In this regard, notes function as either the second or an external memory.
In the literature, the studies addressing various benefits of note-taking during listening are mostly seen in higher education contexts. When the learners do not take down notes, their attention span is 10 to 15 minutes, but thanks to note-taking, extending this period and increasing the interest and motivation level of the listeners might help them understand better. Therefore, learners should be encouraged to acquire note-taking skills (Howe, 2001). In a study by Carrell, Dunkel, Mollaun (2002) on note-taking, the participants believed that they felt comfortable and relieved when they were allowed to take notes during lessons; they also noted that it was useful to answer the questions related to the course content and it was easier for them to remember what they learned. Similarly, various researchers stressed that note-taking improves learning and facilitates recalling (Kneale, 1998; Laidlaw, Skok, & McLaughlin, 1993; Ayer & Milson, 1993; Davis & Hult, 1997; Kiewra, 2002; Boyle, & Weishaar, 2001; Titsworth & Kiewra, 2004; Brent, 2004; Bonner & Holliday, 2006; Tok, 2008).

If one thinks that note-taking is the act of writing down the material by shortening it in certain ways unique to the listener, it means that this activity is oversimplified (Piolat, et al., 2004: 306). In fact, note-taking is a process that necessitates cognitive processing; it is composed of several steps; that is, listening, comprehension, analysis, selection and writing in the form of notes (Ozbay, 2005: 88). As it is clear from these lines, note-taking while listening renders listeners more active by involving them in higher-order cognitive skills such as evaluation, interpretation, decision-making and summarizing.

**Significance of the Study**
Due to crowded classes, comprehensive course contents, time restrictions and limited opportunities, in terms of the objectives of higher education, it is necessary to develop learners' note-taking skills as one of the predictors of success for commonly used lecturing method. Because this study investigates the effect of listening with and without note-taking on comprehension in lectures on three different topics, no such comparative studies on the basis of lecture types have been carried out so far. The present study is significant in terms of both identifying university students' listening comprehension skills in different lectures and pointing out the significance of note-taking.

**Purpose of the Study**
The purpose of the present study is to investigate the effect of note-taking while listening on comprehension skills. It tries to find out the effect of note-taking while listening on the comprehension and recall of informative, philosophical and narrative lectures that the learners listen to. In line with this purpose, the present study seeks answers to the following research questions:

1) How does note-taking while listening affect listening comprehension?
2) How does note-taking while listening affect listening comprehension in different lectures (narrative, informative and philosophical)?

2. METHOD
The participants to the present study were 122 3rd and 4th year students studying at the Faculty of Education, Cumhuriyet University. 61 of these students were assigned to the experimental group, and 61 of them were assigned to the control group. It was made sure that both of these groups consisted of an equal number of junior and senior students.

An experimental design with a pretest and posttest was used in the study. First, the texts to be listened were selected. The selected philosophical, narrative and informative texts, each of which consisted of approximately 1500 words, last 20 minutes when read at a normal speech rate. Next, the texts were read by the researchers, and they were recorded. The recorded texts were checked and compared with the original ones to see if there were any mistakes or missing points. A 25-item gap filling test was prepared for each lecture to test listening comprehension. Each correct answer was given 5 points. If all questions are answered correctly, the total score to get is 100 points.

The tests prepared were administered to students as the pretest in 40 minutes on 10th and 11th of October, 2012. To reduce the effect of recall of the test items, the posttest was given on 19th and 20th of December. The experimental group received a four-hour practical training on note-taking techniques, and the participants in this group were asked to use these techniques during the listening activities. They were asked to decide what technique might be more effective. They were also informed that they could use any technique that they had learned or develop their own techniques (Boch, 2001). The control group, on the other hand, directly listened to the lectures and the members of this group were given listening comprehension questions after the lectures. The data collected were analyzed by using SPSS 18. The test scores of the groups were compared using t-test.

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group: 61 participants</td>
<td>Questions about the audio to be listened</td>
<td>Listening to lectures without note-taking</td>
<td>Listening comprehension test</td>
</tr>
<tr>
<td>Treatment group: 61 participants</td>
<td>Questions about the audio to be listened</td>
<td>Note-taking while listening to lectures</td>
<td>Listening comprehension test</td>
</tr>
</tbody>
</table>
3. FINDINGS AND DISCUSSIONS

Table 2 presents the results of the pretest and the posttest, which was administered to explore the effect of note-taking while listening on the participants’ listening comprehension levels for narrative lectures.

Table 2. T-test Results of the Scores of the Control and Treatment groups in the Pretest and the Posttest for Narrative Texts

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Group</th>
<th>N</th>
<th>x̄</th>
<th>SS</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Control Group</td>
<td>61</td>
<td>14.62</td>
<td>7.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Control Group</td>
<td>61</td>
<td>81.26</td>
<td>9.62</td>
<td>60</td>
<td>14.77</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Treatment Group</td>
<td>61</td>
<td>96.85</td>
<td>3.17</td>
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</tbody>
</table>

Table 2 shows that there is a statistically significant difference (p<.05) between the listening comprehension scores of the treatment and control group in the posttest for narrative texts in favour the former.

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Statistical analysis of the test data indicates that note-taking while listening to narratives positively affects the learners’ listening comprehension levels. A highly significant difference between the mean scores of the groups (96.85-14.62=82.23) in the posttest can be attributed to the fact that the activities carried out to teach the components of the narratives and the questions directed to the participants to help them understand these narratives depend on mental activities at the level of "perception and recall."

Table 3 presents the findings of the pretest and the posttest, which was administered to explore the effect of note-taking while listening on the participants’ listening comprehension levels for informative lectures.

Table 3. T-test Results of the Scores of the Control and Treatment Groups in the Pretest and Posttest for Informative Texts

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Group</th>
<th>N</th>
<th>x̄</th>
<th>SS</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Control Group</td>
<td>61</td>
<td>33.70</td>
<td>18.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>Control Group</td>
<td>61</td>
<td>64.65</td>
<td>12.00</td>
<td>60</td>
<td>14.41</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Treatment Group</td>
<td>61</td>
<td>84.36</td>
<td>9.60</td>
<td></td>
<td></td>
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</tbody>
</table>

Table 3 indicates that there is a statistically significant difference (p<.05) between the groups’ listening comprehension scores in the posttest for informative texts in favour of the treatment group.

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Statistical analysis of the test data indicates that note-taking while listening to informative texts positively affects the learners’ listening comprehension levels as well. A highly significant difference between the mean scores of the groups (84.36-33.70=50.66) in the posttest can be attributed to effective instruction and the fact that the questions directed to the participants to help them understand these informative texts focus on mental activities at the level of not only "perception and recall," but also "analysis, synthesis and anticipation."

Table 4 presents the results of the pretest and the posttest, which was administered to explore the effect of note-taking while listening on the participants’ listening comprehension levels for philosophical lectures.

Table 4. T-test Results of the Scores of the Control and Treatment Groups in the Pretest and Posttest for Philosophical Texts

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Group</th>
<th>N</th>
<th>x̄</th>
<th>SS</th>
<th>Sd</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Control Group</td>
<td>61</td>
<td>6.49</td>
<td>4.11</td>
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</tr>
<tr>
<td>Posttest</td>
<td>Control Group</td>
<td>61</td>
<td>31.67</td>
<td>11.27</td>
<td>60</td>
<td>17.04</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Treatment Group</td>
<td>61</td>
<td>57.83</td>
<td>14.22</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

When Table 4 is examined, it is seen that there is a statistically significant difference (p<.05) between the groups’ listening comprehension scores in the posttest for informative texts in favour of the treatment group.

Table 4 shows that there is a statistically significant difference (p<.05) between the groups’ listening comprehension scores in the posttest for informative texts in favour of the treatment group.

Statistical analysis of the test data indicates that note-taking while listening to informative texts positively affects the learners’ listening comprehension levels as well. A highly significant difference between the mean scores of the groups (57.83-6.49=51.34) in the posttest can be attributed to both effective instruction and the fact that the questions directed to the participants to help them understand these philosophical texts depend on "perception, recall, analysis, synthesis and anticipation" besides those that incorporate "evaluation, decision-making, inference, summarising and finding the main idea."

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4. RESULTS AND DISCUSSIONS

This study aims to research how note-taking while listening affects comprehension across different lecture types. Note-taking while listening positively affected listening comprehension in all three instructional conditions in our study; that is, informative, narrative, and philosophical lectures. It should be noted that the participants might have used their short-term memory when answering the questions directed to them since the posttests were administered just after the lectures. Therefore, one of the limitations of this study is that no late posttest was administered to understand the rate of recall.

Durukan and Maden (2010) found that note-taking by using concept mapping positively affected comprehension. In a study on teacher trainees in Turkish language teaching department, Sahin et al., (2011) noted that note-taking by using the Cornell technique while listening positively affected their listening comprehension. By the same token, Cetingoz and Acikgoz (2009) found that note-taking had a positive impact on both achievement and recall in history education. The results of all the studies mentioned above are in concord with those of the present study. However, the present study differs from other studies in terms of its findings since note-taking while listening across several lecture types boosts listening comprehension in comparison with listening without note-taking.

5. RECOMMENDATIONS

- Language classes focus on self-expression and skills. Language skills develop in a process. The ultimate purpose of language skills development is to develop listening, speaking, reading, and writing skills. Therefore, as one of the four language skills, listening should not be viewed as a completely passive activity. Linguists and educational scientists should know not only specialized methods, techniques, and strategies, but they should also put them in practice. Based on the findings of the present study, the following recommendations can be made:
- Listening is one of the receptive language skills that an infant acquires and begins to use in the first several months of the life. Therefore, educationalists and researchers should attach importance to this issue.
- Two thirds of a skill is formed by knowledge (knowledge about what to do and practical knowledge), and one third of it is formed by skill development (practice). From this point of view, to develop listening skills, first, the information about effective listening should be given and how to put this information into practice should be taught. Then, how individuals put listening skills into effect should carefully be monitored.
- Listening is an active process that entails hearing, understanding, synthesizing the new and old information and responding whenever necessary. Therefore, it is essential that learners should be encouraged to think over what they listen to and activate their mental power.
- They should also be informed about listening types. Moreover, how to use listening techniques should be demonstrated in public practices.
- In addition to being the most effective method to transfer knowledge into writing, note-taking has a significant place among the tools that facilitate learning. Furthermore, it is also significant since entails making a distinction between important and unimportant knowledge. However, it is not an easy task because studies have shown that it is possible to utter 150 words a minute, but only 27 words can be taken down as notes at most. Therefore, learners should be instructed on note-taking techniques.

REFERENCES


