ABSTRACT

The aim of the present study was to investigate the performance scores on a standardized proficiency exam after two months of explicit training on listening comprehension strategies. Two groups of adult learners of English as a foreign language (24 students in total) took part in this study. In the first part of the experiment the 24 participants of this study were subjected to a mock test to obtain their scores. In the second part of the experiment the experimental group (14 individuals in total) received two months (15 classes) of explicit training on listening comprehension strategies. The control group (10 individuals in total) did not have any explicit training on listening comprehension strategies. As expected, participants in the experimental group obtained different scores in the listening comprehension tasks of the proficiency exam after two months of explicit training. The study shows that explicit instructions and additional hours of specific training in the classroom can have a direct influence on students’ performance. The results corroborate the beliefs of Hedge (2007), Vandergrift (2004), Ur (1996) and Mendelsohn (1995), who believe that explicit training in listening strategies can be the key for beginning L2 students’ success in listening comprehension tasks.

Keywords: Listening comprehension; L2; Explicit training.

Listening Comprehension: Explicit Training on Listening Strategies in Beginning L2 Learners

Aline Fay Azevedo¹, Augusto Buchweitz¹

¹ Faculdade de Letras, Pontifícia Universidade Católica do Rio Grande do Sul – FALE/PUCRS.
INTRODUCTION

Listening comprehension plays an important role in everyday human communication. It is a fundamental skill for second language learning: it helps to create real-life situations for language interaction between learners. In the first language (L1), it is almost taken for granted how easily people can understand and use auditory information for learning situations. In this sense, listening comprehension is an automatic ability for native speakers.

The classical criteria for establishing that a behavior is automatic are that the stimuli associated with the behavior almost always elicit the behavior (i.e. humans lack volitional control); and that the process can be successfully executed while a secondary task is being performed (Schneider & Schiffrin, 1977). The question then becomes how to help learners achieve more automatic listening comprehension skills in their second language (L2). In terms of formal instruction, teaching listening strategies may provide learners with the necessary tools. Second language learners at advanced, intermediate and lower levels of language proficiency rely on listening strategies that aid comprehension of auditory information.

The goal of the present study was to investigate whether the standardized test scores improve after two months of explicit training of listening strategies. The explicit instruction given in the present study focused on top-down and bottom-up strategies. Both types of strategies are required for the exam used in the study. In short, top-down strategies rely on the use of context and prior knowledge (topic, genre, culture, and other types of schemata) to build a conceptual framework for comprehension (Hedge, 2007). Bottom-up strategies rely on the decoding of smaller units of auditory information. Listeners draw clues to infer meaning in order to overcome their limitations in the ability to process information while listening and completing comprehension tasks (Hedge, 2007). The use of effective listening comprehension strategies may help offset some of the limitations that stem from individual differences.

LISTENING STRATEGIES AND STRATEGY-BASED TEACHING

Listening strategies involve techniques and activities that help enhance comprehension and the recall of information presented auditorily. The strategies can be categorized according to the listening comprehension processes involved (bottom-up or top-down), which will be discussed next.

Top-down strategies draw on the listener’s previous knowledge to promote understanding; top-down based activities activate students’ previous knowledge, which give students the opportunity to apply background knowledge in order to understand what they are listening to. Bottom-up strategies, in turn, are associated with lower-level processes, such as “decoding,” identifying words, stress and intonation. Listening activities that involve discriminating between minimal pairs and identifying word or sentence stress are bottom-up based activities.

Mendelsohn stated that strategy-based approaches aim to teach learners how to tackle more difficult listening tasks. These approaches make use of guided learning strategies, which give students a “road map” to better
comprehension. The main goal is to teach students better ways to listen for crucial information: “A strategy-based approach teaches learners how to listen by instructing them in the use of strategies” (Mendelsohn, 1995, p. 52). According to the author, productive listening course activities should have two main aims: first, to help learners develop strategies to recognize and use the signals that are provided in the spoken target language; second, to teach students how to use these signals to make predictions, guesses and inferences.

**Bottom-up and top-down strategies**

Bottom-up strategies are text/speech based. Listeners rely on the combination of sounds, words, and grammar that creates meaning. According to Hedge (2007), listeners use whatever clues they have available to infer meaning from the developing speech, such as the placement of stress on meaningful words, lexical knowledge to assign meaning to words, knowledge of syntactic structure, etc. Bottom-up strategies include: listening for specific details; recognizing cognates; recognizing word-order patterns; recognizing noun phrase as agent or object; recognizing verb phrase as action. Based on the use of these strategies, Hedge (2007) claims that memory plays an important role during the process of identifying and imposing structures, recognizing sounds, inferring meaning and sometimes even anticipating idioms and phrasal verbs that may come next.

Top-down strategies are listener-based. The listener is guided towards ways of tapping into background knowledge of the topic, the situation or context, the type of text, and the language. According to Hedge (2007), this background knowledge activates a set of expectations that help the listener interpret what is heard and anticipate the information that comes next. Top-down strategies include: listening for the main idea or gist; predicting; inferring; summarizing. Such suggestions of bottom-up and top-down strategies clearly mark the focus on smaller units of information versus the focus on higher-level comprehension processes that engage listener’s world knowledge.

Hedge (2007) states that top-down listening is the act of inferring meaning from contextual clues\(^1\) and also from making connections between the spoken message and listeners’ prior knowledge\(^2\). This type of prior knowledge is called schematic knowledge (Beaugrande & Dressler, 1981; Carrel & Eisterhold, 1983, cited in Hedge, 2007) and it is the mental framework learners establish based on their memories, knowledge and opinions.

**An example top-down activity: making predictions**

Celce-Murcia and Olshtain (2000) claim that when teachers ask students to make a prediction or give an opinion, they are helping activate students’

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\(^1\) Contextual clues are hints that the author gives to help define a difficult or unusual word, this clue may appear within the same sentence as the word to which it refers, or may be in a preceding or subsequent sentence (Hedge, 2007).

\(^2\) Prior knowledge is a combination of the learner’s preexisting attitudes, experiences, and knowledge (Hedge, 2007).
schematic and contextual knowledge. Teachers elicit predictions and opinions in order to enable students to improve understanding of a listening activity. Hedge (2007) claims that depending on the type of activity, students may even profit from the use of previously taught vocabulary. If the listening activity is based on idioms, collocations, clichés and proverbs, non-native speakers may become frustrated since they lack the vocabulary to make predictions or generate inferences. In the case of classrooms of students who lack vocabulary, teaching the idioms, collocations and clichés can be a helpful tool to improve listening comprehension of the listening activities that follow. Mendelsohn (1995) suggests some of the following top-down activities.

- **Setting** – The use of extralinguistic signals. Teachers set the scene for students by eliciting physical surroundings, clothes people are wearing, background noise and when things took place; it usually lowers students’ anxiety and as a result they improve their listening abilities.

- **Topic** – The use of topics elicits students to find ways of predicting, such as setting, interpersonal relations and mood. At this stage lexical signals are most helpful. Students have to listen to some of the words mentioned by their teacher so that they recognize the topic, activate their previous knowledge about it and finally feel at ease.

In sum, the aim of these activities is to make the experience of listening to text more engaging and enjoyable for the learners, by making relations to their own world.

**An example bottom-up activity: focus on smaller units of information**

Ur (1996) presents a number of activities that focus on word-level and sentence-level processing. These activities are aimed at helping students to develop bottom-up processing aspects. Word-level activities focus on different sounds and sound combinations which occur within single words. Ur addresses a variety of techniques aimed at sound perception, such as repeating words after the teacher or a recording, discriminating between minimal pairs (two words that differ in only one sound, such as hit and hid) and identifying how often a word is uttered.

Sentence level activities attempt to remedy problems that occur when words are put together to make utterances: the distortion of sounds within common collocations, unclear word-division, and intonation. This type of activity includes: repeating full utterances; counting the number of words; identifying word stress and intonation patterns; dictation.

Listening provides the auditory input that serves as the basis for language acquisition and enables learners to interact in spoken communication. Effective language teaching should aim at showing students how they can adjust their listening behavior to deal with a variety of situations, types of input, and listening purposes. As a result, students develop a set of listening strategies and match these strategies to each listening situation they may come across.
METHODS

Design

The experiment was divided into 4 parts. First, in the listening comprehension pre-test, 24 adult students of English as a foreign language (10 students – control group and 14 students – experimental group) performed a complete Mock test of the Cambridge Exam KET\(^3\). Next, the experimental group (14 students in total) received two months of explicit training on strategies to be used in the listening comprehension tasks of the Cambridge Exam KET. The explicit training and the tasks used for all the experiment are fully described in Fay (2012)\(^4\).

After the explicit training period, the 24 participants performed a complete Mock test of the Cambridge Exam KET (listening comprehension post-test). Finally, all data collected in the pre-test and post-test was coded and analyzed.

Participants

Twenty-four adult students of English as a foreign language (18 females and 6 males), mean age 32 (SD = 10.44; range 20-52 years), were recruited for the study. All students were Brazilian, native speakers of Portuguese and studying English in an English Language Course in Porto Alegre, Brazil. Participants were L2 low proficiency learners (students who apply to study in this English course have to take a Placement Test\(^5\) which consists of three parts: Grammar and Vocabulary, Writing and Speaking. Participants were placed in the same level: Elementary) and belonged to a level in which students are prepared to take the standardized test (Cambridge Exam KET). The level of schooling of participants showed that 17 participants had a university-level degree and 7 participants were undergraduate students. Each participant gave signed informed consent approved by the Pontifícia Universidade Católica do Rio Grande do Sul research ethics committee (process number CAAE: 05829112.3.0000.5336).

Materials

The pre- and post-tests included two different complete listening tasks from the Cambridge proficiency exam KET. For the explicit training of listening strategies we provided 15 exam-oriented listening activities (75 questions in total) from the KET Exam Practice 3 (2003).

Procedures: Listening comprehension pre-test

First we evaluated the control group (10 students in total) and then the experimental group (14 students in total). Classroom seats were arranged

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\(^3\) KET – Key English Test. It is a basic level qualification that shows you can use English to communicate in simple situations. Common European Framework – A2.

\(^4\) Fay, Aline 2012. Listening Comprehension and Working Memory Capacity in beginning L2 learners: An Exploratory Study (Dissertação de Mestrado – PUCRS).

\(^5\) The Placement Test is fully described in Fay, Aline, 2012.
in rows (the seating arrangement is usually a horseshoe). We explained that students would be taking a mock test for the KET listening test; the mock test is part of the school’s regular procedures. It was also explained to the students that the results of the test would be used in a study on the relationship between listening comprehension and explicit training on listening strategies. At this point, the participants were given the informed consent form and were allowed some time to read and ask questions concerning the study and the form.

All data were collected individually. Each subject received a booklet with 5 tasks (25 questions in total) to answer. The instructions were read by the teacher for the 5 parts of the listening test; when students were ready, the audio was played. The test ended in 30 minutes and the booklets were collected. Data was coded in a spread sheet in which participants received a letter and a number of identification according to the group they belonged to, either control (C) or experimental (E), for instance, Mary – C1 and John – E7.

**Classroom procedures for explicit training of listening strategies**

The experimental group (14 participants) received 2 months (15 lessons) of explicit training of listening strategies. We taught top-down and bottom-up strategies in the explicit training. Top-down strategies draw on the listener’s previous knowledge to promote understanding, whereas bottom-up strategies are associated with lower-level processes, such as “decoding”, identifying words, stress and intonation. The lessons are fully described in Fay (2012). Procedures for the post-test were carried out in the same manner of the pre-test described above.

**Data analysis**

Data from all the tasks (Listening Comprehension pre and post-test – KET) were entered in a spread sheet and submitted to statistical treatment. First, a descriptive analysis of the data was conducted; it provided an overview of the groups’ performance in the tasks mentioned above. The minimum, maximum, the average scores and the standard deviation for each group were provided by the descriptive analysis.

**Data analysis of Listening comprehension pre-test and post-test**

“The Wilcoxon Rank-Sum test for independent samples” was used to analyze whether the experimental group had increased their scores in the KET listening test after two months (15 lessons) of explicit training. The Wilcoxon Rank-Sum test for independent samples is a nonparametric test that uses data samples from two independent populations. It is used to test the null hypothesis that two independent samples come from populations with equal median. Therefore, if the final result shows a different number for each population the hypothesis is confirmed.
RESULTS AND DISCUSSION

Results showed an improvement in KET tasks scores after two months of explicit training of listening strategies \((z=-1.96;\) The Wilcoxon Rank-Sum test for independent samples). The scores of the experimental group increased 14\% after two months of explicit training on listening strategies, whereas the scores of the control group decreased 3\%. Table 1 shows the results found in Listening Pre-test.

Table 1: Pre-test and post-test scores for the control and experimental groups

<table>
<thead>
<tr>
<th></th>
<th>Pre-test (SD)</th>
<th>Post-test (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>56 (17.8)</td>
<td>54 (15.5)</td>
</tr>
<tr>
<td>Experimental</td>
<td>66 (17.2)</td>
<td>75 (12.6)*</td>
</tr>
</tbody>
</table>

* Statistically significant difference \((z=-1.96;\) Wilcoxon Rank-Sum test for independent samples).

The results show that the use of top-down and bottom-up strategies may have aided the experimental group’s improvement in test scores. The use of effective listening comprehension strategies during the explicit training on listening strategies helped participants overcome listening comprehension difficulties while performing tasks in proficiency exams. The improvement was identified in several individuals. Some scores remained the same, and only one student showed a decrease in standardized score. Figure 1 shows the comparison between participants’ scores in the listening pre-test and post-test for the experimental group.

![Figure 1: Individual scores: experimental group pre-test and post-test](image)

Participants E1, E2, E3, E4, E5, E6, E10, E11, E13 and E14 showed an increase in their scores. After two months of explicit instructions on listening strategies, the participants showed a variation of 10, 5263 (E1), 1,1905 (E2), 2,5000 (E3), 3,2609 (E4), 25,0000 (E5), 35,9375 (E6), 66,6667(E10), 25,000(E11) 50,000(E13), 25,0000 (E14). Only one participant (E8) showed a decrease in
the score (88% to 87%), the other 3 participants (E7, E9 and E12) remained with the same scores, 80%, 60% and 64%, respectively.

For the control group, participants C4, C5 and C8 were the only participants whose scores increased after two months, showing a variation of 3, 5714 (C4), 22, 2222 (C5) and 7, 1429 (C8). Based on these results, it can be inferred that simply practicing the listening tasks from exam practice books may not be enough to increase students’ scores. The results showed that only 3 out of 10 participants increased their previous scores. Figure 2 shows a comparison between control participants’ individual scores.

![Figure 2: Individual scores: control group pre-test and post-test](image)

One of the listening strategies used with the Experimental group was “prediction.” When making predictions students had to observe, make inferences and finally deduce/predict something from the listening task. Celce-Murcia and Olshtain (2000) argue that when teachers ask students to make predictions or give an opinion they are helping activate students’ schematic and contextual knowledge. Teachers elicit predictions and opinions in order to enable students to improve understanding of a listening activity. Mendelsohn (1995) suggested that making predictions goes beyond showing pictures and paying attention to background knowledge. He argues that teachers should make use of setting, interpersonal relations, mood and topic before students actually listen to a conversation.

### The Wilcoxon Rank-Sum Test for Independent Samples

According to Triola (1999), the objective of The Wilcoxon Rank-Sum test is to test the null hypothesis that two independent samples come from populations with equal median by showing a different result for each population. Our hypothesis was that the Experimental group would increase their scores after 2 months (15 lessons) of explicit training on listening strategies. The final result (Control Group 79.00, Experimental Group 217.00 and z=-1.96) showed a different number for each population, therefore our hypothesis
was confirmed. Table 5 shows the results for the Wilcoxon Rank-Sum Test for Independent Samples.

**Table 2:** Results for the Wilcoxon Rank-Sum Test for Independent Samples

<table>
<thead>
<tr>
<th>Participants</th>
<th>Listening pre test</th>
<th>Listening post test</th>
<th>Variation</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>C9</td>
<td>72</td>
<td>56</td>
<td>0,7778</td>
<td>1,00</td>
</tr>
<tr>
<td>C3</td>
<td>48</td>
<td>45</td>
<td>0,9375</td>
<td>2,50</td>
</tr>
<tr>
<td>C7</td>
<td>32</td>
<td>30</td>
<td>0,9375</td>
<td>2,50</td>
</tr>
<tr>
<td>C10</td>
<td>68</td>
<td>64</td>
<td>0,9412</td>
<td>4,00</td>
</tr>
<tr>
<td>C6</td>
<td>84</td>
<td>80</td>
<td>0,9524</td>
<td>5,00</td>
</tr>
<tr>
<td>C1</td>
<td>72</td>
<td>70</td>
<td>0,9722</td>
<td>6,00</td>
</tr>
<tr>
<td>E8</td>
<td>88</td>
<td>87</td>
<td>0,9886</td>
<td>9,00</td>
</tr>
<tr>
<td>C2</td>
<td>36</td>
<td>36</td>
<td>1,0000</td>
<td>9,00</td>
</tr>
<tr>
<td>E7</td>
<td>80</td>
<td>80</td>
<td>1,0000</td>
<td>9,00</td>
</tr>
<tr>
<td>E9</td>
<td>60</td>
<td>60</td>
<td>1,0000</td>
<td>9,00</td>
</tr>
<tr>
<td>E12</td>
<td>64</td>
<td>64</td>
<td>1,0000</td>
<td>9,00</td>
</tr>
<tr>
<td>E2</td>
<td>84</td>
<td>85</td>
<td>1,0119</td>
<td>12,00</td>
</tr>
<tr>
<td>E3</td>
<td>80</td>
<td>82</td>
<td>1,0250</td>
<td>13,00</td>
</tr>
<tr>
<td>E4</td>
<td>92</td>
<td>95</td>
<td>1,0326</td>
<td>14,00</td>
</tr>
<tr>
<td>C4</td>
<td>56</td>
<td>58</td>
<td>1,0357</td>
<td>15,00</td>
</tr>
<tr>
<td>C8</td>
<td>56</td>
<td>60</td>
<td>1,0714</td>
<td>16,00</td>
</tr>
<tr>
<td>E1</td>
<td>76</td>
<td>84</td>
<td>1,1053</td>
<td>17,00</td>
</tr>
<tr>
<td>C5</td>
<td>36</td>
<td>44</td>
<td>1,2222</td>
<td>18,00</td>
</tr>
<tr>
<td>E5</td>
<td>52</td>
<td>65</td>
<td>1,2500</td>
<td>19,00</td>
</tr>
<tr>
<td>E11</td>
<td>48</td>
<td>60</td>
<td>1,2500</td>
<td>19,00</td>
</tr>
<tr>
<td>E14</td>
<td>48</td>
<td>60</td>
<td>1,2500</td>
<td>18,00</td>
</tr>
<tr>
<td>E6</td>
<td>64</td>
<td>87</td>
<td>1,3594</td>
<td>22,00</td>
</tr>
<tr>
<td>E13</td>
<td>40</td>
<td>60</td>
<td>1,5000</td>
<td>23,00</td>
</tr>
<tr>
<td>E10</td>
<td>48</td>
<td>80</td>
<td>1,6667</td>
<td>24,00</td>
</tr>
</tbody>
</table>

Average Score 61,83333333 66,33333333 Rank Sum 79.00 217,00

Standard Deviation 17,84880136 17,1176661

**CONCLUSION**

The objective of the present study was to investigate whether learners improve their KET scores after two months of explicit training of listening strategies. Listening comprehension involves the processing of language and critically analyzing auditory information. Listening strategies are techniques or activities that help enhance comprehension and recall of listening input. Thornbury (2006) also advocates that these strategies exist across languages. In theory, learners would be able to transfer the skills from L1 to L2. Thornbury states there are reasons why transfer may not happen smoothly, speakers of different languages process speech signals differently depending on the phonological features of their first, or most frequently used, language. Another reason is the lack of second language knowledge, vocabulary and grammar, which posed a problem to our participants, since they were all beginning L2 learners. According to Vandergrift (2004) listeners with more language knowledge have more room in working memory to retain more information and make necessary revisions or inferences as they listen.
Our hypothesis was that participants would improve their scores in the standardized test after two months of explicit training on listening strategies. The hypothesis is well-grounded on the literature on listening comprehension, and therefore, was confirmed. Of course, one of the shortcomings of the present result is that the control group did not have a “foil” or control extra activity. The extra practice alone may have sufficed to improve the participants’ performance.

The results suggest that raising language teachers’ awareness of exerting a positive influence on their students’ perception and understanding of listening strategies helps improve listening comprehension performance. Students should be aware of the strategies required to be a successful “listener” and overcome difficulties in proficiency exams, regardless of low proficiency in English. According to Ortega (2009) people usually differ in how fast, how well and by what means they learn an L2. The variability in rates, outcomes and processes can be enormous, particularly for the ones who begin learning an L2 later in life. Further research should investigate whether listening comprehension strategies would help more the adult learners or children to overcome difficulties associated with individual differences in listening skills.

REFERENCES


AUTHORS

Aline Fay <alinefay@gmail.com>
É doutoranda em Linguística, Mestre em Linguística e possui Licenciatura em Letras Português/Inglês e suas respectivas Literaturas pela Pontifícia Universidade Católica do Rio Grande do Sul – PUCRS. Atualmente atua como professora do curso de Letras na Pontifícia Universidade Católica do Rio Grande do Sul PUCRS. É mentora acadêmica e professora de inglês na escola de idiomas Cultura Inglesa, onde é responsável pelo treinamento de professores e assuntos acadêmicos, tendo ministrado diversos treinamentos para professores, assim como seminários de Teacher Development; e IWB (Interactive whiteboard ou quadro interativo). No colégio Farroupilha atua como professora de Inglês e examinadora oral da Universidade de Cambridge. Atuou em 2011/2012 como professora do curso de Especialização em Ensino da Língua Inglesa: teoria e aplicação, na FAPA – Faculdade Porto-Alegrense. Possui o certificado de CPE (Certificate of Proficiency in English) e o diploma DELTA (Diploma in English Language Teaching to Adults). Atualmente faz parte do projeto ACERTA no Instituto do Cérebro da PUCRS, onde pesquisa bilíngues e monolíngues disléxicos e as bases neurais da dislexia com o uso de IMRI.

Augusto Buchweitz <abuchweitz@gmail.com>