The Effect of Meta-cognitive Strategies Instruction on Listening Comprehension of Iranian Pre-intermediate Female EFL Learners

By

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Abstract

The purpose of this study is to investigate whether the instruction of Meta-cognitive strategies has any significant effect on listening comprehension of Iranian pre-intermediate female EFL learners. Thirty pre-intermediate female university students, taking general English courses in a university in Bojnourd were the participants of this study. This study included both experimental and control groups. The participants of the experimental and control groups were 30 and 30 female students respectively at Payame Noor university of Bojnourd. The participants were second-year university students majoring in Accounting. During one semester, they took the listening part of a multiple choice TOEFL test, as a pretest to select the homogeneous samples. After selecting the samples, and eight treatment sessions of the experimental group, another standard (TOEFL) listening test administered to the sample groups to measure the participants’ listening comprehension achievement. Based on the findings of a one-way between-group analysis of covariance, the effectiveness of the treatment was confirmed by the quantitative data. The results showed the positive effect of metacognitive strategy on listening comprehension of the experimental group who received treatment.

Keywords: Meta-cognitive Strategy, Listening Comprehension, Pre-intermediate Female Learners, EFL.

1. Introduction

Listening is one of the most important macro skills that making communication will be incomplete without it. "we can expect to listen twice as much as we speak, four times more than we read, and five times more than we write." (Morley, 1991, p. 82). Listening comprehension is not just listening to what is read, but it is the art of decoding meaningful parts of speech in order to understanding them.

As Rost (2002) mentioned, the first goal of listening is comprehension. Many scholars like Yang (2009), talked about the challenging nature of listening comprehension for EFL learners and ratiocinate the complexity of this process. As some solutions are devised for other macro and micro skills which the foreign language learners have some difficulties with them, there are some solutions for listening comprehension, too. It is also known that listeners use a variety of mental processes to give some meaning to the information they listen to. These mental processes that listeners use to understand spoken English can be broadly described as listening comprehension strategies (Coskun, 2010, p.35).

Many scholars as SeyedBeheshhtiNasab, Araghi, and NematTabrizi (2013) noted that using effective listening strategies are useful for both understanding spoken communication and language acquisition. According to Laviosia (1991), the efficacy or inefficacy of the employed strategies depends on the individual perceptions of the learners about the problems and their ability to use different strategies and making harmony between them.

The issue of metacognition in language teaching areas, at first was discussed by Flavell (1979). He believed that cognitive enterprise occur through four processes: metacognitive knowledge, metacognitive experience, goals, and strategies. He explained that "metacognitive knowledge consists primarily of knowledge or beliefs about what factors or variables act and interact in what ways to affect the course and
outcome of cognitive enterprises” (1979, p. 907). He made a distinction between the metacognitive knowledge and the metacognitive experiences in their content and function and defined that "Metacognitive experiences are any conscious cognitive or affective experiences that accompany and pertain to any intellectual enterprise" (P. 906).

Kuhn (2000) defined metacognition as, "Enhancing (a) metacognitive awareness of what one believes and how one knows and (b) metastrategic control in application of the strategies that process new information" (p. 178). Metacognitive strategies are mainly thinking about how we think or thinking about the way we learn and our learning behavior.

Metacognition refers to learners' automatic awareness of their own knowledge and their ability to understand, control, and manipulate their own cognitive processes. Wenden (1998) claimed that the learners who use metacognitive strategies, have some distinct features in comparison to whom do not use these strategies. Among them, the most important ones are related to their rate of progress in learning and their confidence in learning and that they are more strategic learners. Chamot (2005, p.116) states that “it is confirmed that the good language learners are skilled at matching strategies that the task they were working on whereas less successful language learners apparently do not have the Meta-cognitive knowledge about task requirements needed to select appropriate strategies”.

Goh (2008) states some of the benefits of metacognitive strategies related to listening comprehension as increasing the learners' confidence and decreasing their anxiety, and speaks about its positive influence on listening comprehension of the weak listeners.

Veenman et al. (2006) talked about some principles for successful metacognitive instruction. These three key principles are:
1. "Embedding metacognitive instruction in the subject matter to ensure connectivity.
2. Informing learners about the usefulness of metacognitive activities to make them exert the initial extra effort.
3. Prolonged training to guarantee the smooth and guaranteed maintenance of the metacognitive activity" (p. 9).

Regarding the importance of meta-cognitive strategies in most of the studies those learners who use them to comprehend better are called “proficient “listeners and those who do not use them “less proficient” listener. Malik, et al (2013) stated that there are only few studies that investigated the role of metacognitive strategies on listening comprehension of EFL learners. But most of these studies reached to the constructive effects of this strategy on listening comprehension of the learners. Among them, Eftekhary and Gharib (2013) speak about the vast positive impact of using metacognitive strategies for struggling and beginner learners, as it increase their confidence and motivation. Goh and Yusnita (2006) specifically define the effective impact of these strategies on the L2 listening learning. And Luo-xiang (2005) emphasized on the necessity of using metacognitive strategies in listening.

**Research question and Hypothesis**
As mentioned previously, this study aims to shed light on the effect of metacognitive strategy instruction by addressing the following major question:

Does meta-cognitive strategy instruction have any effect on listening comprehension of pre-intermediate female EFL learners?

To come up with a reasonable result on the basis of the aforementioned research problem, the following null hypothesis was developed:

H0. Metacognitive strategy instruction has no effect on listening comprehension of pre-intermediate female EFL learners.
2. Method

Participants
A group of 30 EFL students were selected from pre-intermediate learners of Payame Noor university of Bojnourd, Iran. These participants were just among female learners and they aged between 18-25. All of the participants were Farsi speaking students learning English as a foreign language.

Instrumentation
In order to collect the required data for this study, the following instruments were used:
Pre-test: In this part, just the listening section of a TOEFL test was used to measure the learners' listening performance and to select the homogenous samples and to divide them to both control and experimental groups. The scores of this test also used as a pre-test to compare them with their posttest scores. The listening part of this test included three sections (A, B, C), that in section A, the listeners listen to a dialogue and at the end of the conversation, they are asked to answer to a question about the conversation. In the sections B and C, the listeners listen to a conversation and they are asked to explain the main idea of the listening part in two minutes and finally a third person ask several questions related to the information mentioned in the listening part. The questions of these three sections were 50 questions.
Posttest: A listening test in the same level with the pre-test was taken from both experimental and control groups in order to observe any difference in their listening comprehension.

Procedures
To ensure the homogeneity of the subjects, a TOEFL test was taken from all the considered samples and among them 30 were selected for the experimental group and 30 for the control group. Their scores were recorded in order to be compared with their posttest scores, too. After that, only the experimental group undertook the treatment and the control group did not receive any treatment about metacognitive strategy. The treatment lasted for eight sessions, two sessions per week and each session was two hours. The metacognitive strategy training was mainly based on the CALLA model explained in Robbins (2000) lesson plan that includes preparation, presentation, practice, evaluation and expansion for each listening task. In order to make sure that the items of metacognitive strategy were used in this study, a performance checklist (A teaching learning strategy checklist) was prepared to be used both by the participants and the teachers. After the treatment, a listening posttest was taken from both the experimental and control group in order to find any significant difference with their pre-test scores.

3. Results and Discussions

Having collected the required data based on the above mentioned data collection instruments and procedures, the researcher conducted the analysis of data and tested the hypothesis formulated for the present study mainly by means of SPSS software version 16.00.

As we mentioned earlier, the listening part of a TOEFL test was taken to the participants of both experimental and control groups in order to check the homogeneity of their listening proficiency. Table 1. below, illustrates the descriptive statistics of two groups' scores in listening pretest.

Table 1. Descriptive Statistics and Independent t-test for the Comparison of Pre-test Results of Two Groups

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>pretest</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>30</td>
<td>26.6333</td>
<td>14.25986</td>
<td>2.60348</td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>30</td>
<td>20.3333</td>
<td>14.55153</td>
<td>2.65673</td>
<td></td>
</tr>
</tbody>
</table>
As the results of Table 1 show, the mean scores of two groups are very close to each other (26.63, and 20.33) and as the p-value (0.9) is bigger than the standard error (0.05), so the groups can be called homogeneous and there is no meaningful difference between the groups. After ensuring the homogeneity of the groups, their pretest and posttest scores are analyzed using independent t-test. Table 2. shows the pretest and posttest analyze of the experimental group:

Table 2. Independent t-test of Experimental Group's Pre-test and Posttest

<table>
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<tr>
<th>Group Statistics</th>
<th>experimental</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>30</td>
<td>26.6333</td>
<td>14.25986</td>
<td>2.60348</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>30</td>
<td>37.3667</td>
<td>10.61711</td>
<td>1.93841</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
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<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal variances assumed</td>
<td>t df Sig. (2-tailed) Mean Difference Std. Error Difference</td>
<td>Lower Upper</td>
</tr>
<tr>
<td>F</td>
<td>5.017</td>
<td>0.029</td>
</tr>
<tr>
<td>df</td>
<td>58</td>
<td>58</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>3.280</td>
<td>0.029</td>
</tr>
</tbody>
</table>
The results showed that the \( p \) value of posttest and pretest is 0.02 that it is smaller than the standard error (0.05) and indicating that the means were not equal and there was a significant difference between the performance of the experimental group in their pretest and posttest and the participants' listening comprehension progressed after receiving treatment.

Now in order to confirm the results of progress in the posttest of the experimental group, we must consider the results of control groups' test too. To achieve this aim, another independent t-test for pretest and posttest of control group was run.

**Table 3. Independent t-test of Control Group's Pre-test and Posttest**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>30</td>
<td>20.3333</td>
<td>14.55153</td>
<td>2.65673</td>
</tr>
<tr>
<td>posttest</td>
<td>30</td>
<td>20.5333</td>
<td>13.84578</td>
<td>2.52788</td>
</tr>
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</table>

**Independent Samples Test**

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>prepostcont Equal variances assumed</td>
<td>.104</td>
<td>.748</td>
<td>-.055</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>-.055</td>
<td>57.857</td>
<td>.957</td>
</tr>
</tbody>
</table>

The results of this analyze indicated that the \( p \) value (0.7) is more bigger than the standard error (0.05), and it indicated that there is not a significant difference between the control group's performance in the posttest and the pretest.

**4. Conclusions and Implications**

As the data illustrated, the experimental group who used metacognitive strategy benefited from the study treatment than the control group who did not receive treatment. In other words, after eight weeks of treatment, the participants in the experimental group showed significant improvement in their listening comprehension.

Among the different strategies, Meta-cognitive strategies are considered as the most essential ones in developing skill. In spite of this importance there is not any clear Meta-cognitive instruction among the intermediate FEL Iranian students. Because of the lack of comprehensive study regarding these strategies, the necessity of this study is clear and according to the perceived results of this study, it can be concluded that using meta-cognitive strategies can be a practical approach for teaching metacognitive strategies to Iranian pre-intermediate female EFL learners in order to improve their listening comprehension.
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