The Relationship between Metacognitive Strategies Awareness

and Listening Comprehension Performance

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Abstract

The present study addressed the impact of teaching metacognitive strategies on listening comprehension of PIE level three. The quasi-experimental pretest-posttest design included two groups of students – treatment and comparison. All students took a pretest to measure their level of listening comprehension and then filled out the Metacognitive Awareness Listening Questionnaire (MALQ) (Vandergrift et al., 2006) for the first time. After that, the treatment group received treatment on metacognitive strategies using the pedagogical stages of listening instruction (Vandergrift, 2004) and the comparison group followed regular listening instruction for one month. When the treatment was finished, both groups took a similar test to the pretest and filled out the MALQ again. The statistical analysis showed that no difference in students’ metacognitive awareness although students’ listening comprehension increased. Further research can be held to see if metacognitive strategy use is more helpful at higher or lower PIE levels.

Keywords: academic listening comprehension, metacognitive strategies, ESL, MALQ
The Relationship between Metacognitive Strategies Awareness and Listening Comprehension Performance

**Background**

Listening strategies can be utilized to make L2 listening easier (Flowerdew & Miller, 2005; Goh, 1997; O’Malley & Chamot, 1990). Metacognitive strategies help students to evaluate, monitor, organize, and are considered to be effective. Persuasive evidence (Goh, 2002; Vandergrift, 2003) showed metacognitive strategies to be highly beneficial for L2 listening improvement. The recent empirical studies (Bidabadi & Yamat, 2011; Goh & Hu, 2014) also showed that teaching metacognitive strategies is beneficial. In Plonsky (2011) it was noted that strategy instruction is more effective at intermediate and advanced levels while in other studies (Goh and Taib, 2006; Bozorgian, 2012; Vandergrift & Tafaghodtari, 2010) the results highlighted that less skilled learners benefit more from metacognitive strategies.

**Research Questions**

1. Does explicit instruction increase strategy use of low-intermediate learners?
2. Does explicit strategy instruction improve listening comprehension of low-intermediate learners?

**Methods**

**Participants**

The target population of the study is considered to be low-intermediate level students learning English for academic purposes. The study was held at an Intensive English Program (IEP) which has six proficiency levels. This IEP’s Level 3 could be placed at intermediate level according to CEFR (Common European Framework of Reference for Languages) (Council of Europe, 2001). Two sample groups were from Level 3 (N=18), which is the first step in learning
English for academic purposes. The teachers were randomly assigned to these groups; one of the teachers was the researcher. The researchers’ group was the treatment (n=9) and the other group the comparison (n=8). Both groups of students consisted of mostly male Chinese and Arabic speakers; the age of participants varied from 18 to 21.

**Measures**

Two instruments were used in the current study, one for measuring listening comprehension and the other one for measuring metacognitive strategy use, and eliciting demographic information. The instrument for measuring listening comprehension consists of the pretest and posttest, developed by the researcher for the purpose of the study. Each test has three listening passages with eight questions. The test for each passage consists of two main idea, three detail, and three inference items totaling 24 questions. Each question on the test gives a chance of getting one point so that the range of possible scores can vary from zero to 24. The agreement coefficient of the pre-test equals 0.64 and of the post-test 0.69 which is acceptable for teacher-made listening tests.

The second measure was Metacognitive Awareness Listening Questionnaire (MALQ) (Vandergrift et al., 2006). The questionnaire has 21 questions on a six-point Likert scale so that the possible score can range from 21 to 126. MALQ addressed the use of metacognitive strategies for listening in four areas: planning and monitoring, problem-solving, directed attention, mental translation, and person knowledge strategies. The statements on MALQ were translated into the Arabic and Chinese languages to be fully comprehended by the students; back-translation was used to ensure the correct translation. MALQ was tested by Vandergrift et al., (2006) and showed the internal reliability ranges from .68 to .78. The reliability of the pre-
MALQ was 0.85 and of the post-MALQ was 0.88. To describe the sample, several questions were added to the end of the questionnaire eliciting gender, age, and first language.

**Procedures**

Although the treatment and comparison groups were taught by different people, the same syllabus was used, and the students were exposed to the same listening materials. The researcher taught metacognitive strategies to the treatment group following the pedagogical stages for teaching listening (Vandergrift, 2004), the control group had the regular instruction during the period of eight weeks (48 hours of instruction); the regular syllabus does not have any explicit teaching of metacognitive strategies. The pedagogical stages used with the treatment group included pre-listening, first listen, second listen, third listen and the reflection stage. Each stage addressed several metacognitive strategies which can be used at it. Within this period of time, students in the treatment group were instructed on using metacognitive strategies using 12 academic listening passages from the syllabus; the comparison group was exposed to the same 12 listening passages but without any explicit instruction on metacognitive strategies.

**Results**

The current study examined the effect of teaching metacognitive strategies on students’ listening comprehension performance and strategy use. This section reports and interprets the results of the data analysis.

To answer the first research question: “Does explicit instruction increase strategy use of low-intermediate learners?” students’ pretest and posttest scores on MALQ were computed.
Table 1

*Statistical Analysis of MALQ*

<table>
<thead>
<tr>
<th></th>
<th>Treatment Group</th>
<th>Comparison Group</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Pre-MALQ</td>
<td>77.00</td>
<td>22.55</td>
</tr>
<tr>
<td>Post-MALQ</td>
<td>89.20</td>
<td>12.58</td>
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</tbody>
</table>

Before running the statistical analysis, data were screened for normality and homogeneity of variance; the data did not meet the assumptions. Also, taking into account the small convenient sample, it was decided to use the non-parametric Independent Samples Mann Whitney U test. First, the pre-MALQ results of both groups were compared to see if the groups are comparable. The test did not show any significant difference $z = 0.53$, $p = .645$. After that, the results of both groups on the post-MALQ were compared. The test did not show any significant difference $z = 1.77$, $p = .093$.

To answer the second research question: “Does explicit strategy instruction improve listening comprehension of low-intermediate learners?” students’ pretest and posttest scores on the listening tests were computed.

Table 2

*Statistical Analysis of Listening Comprehension*

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<tr>
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<th>Treatment Group</th>
<th>Comparison Group</th>
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<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Pre-Listening</td>
<td>16.40</td>
<td>2.19</td>
</tr>
<tr>
<td>Post-Listening</td>
<td>18.20</td>
<td>1.79</td>
</tr>
</tbody>
</table>
Before running the statistical analysis, data were screened for normality and homogeneity of variance; the data did not meet the assumptions. Also, taking into account the small convenient sample, it was decided to use the non-parametric Independent Samples Mann Whitney U test. First, the pre-listening results of both groups were compared to see if the groups are comparable. The test did not show any significant difference $z = -0.95, p = .382$. After that, the results of both groups on the post-listening were compared. The test did show significant difference $z = 2.51, p = .015$. The strength of association showed a large effect ($\eta^2 = 0.57$).

According to statistical tests there was no significant difference between comparison and treatment groups on the MALQ post-questionnaire; however, the treatment group outperformed the comparison group on the post-listening comprehension test.

**Relevance to PIE and Second language Learning**

The purpose of this study was to address the impact of teaching metacognitive strategies on listening comprehension of PIE students in level three. The research question asked was how teaching metacognitive strategies affect academic listening comprehension and metacognitive awareness of students. Based on previous studies, it was expected that the group exposed to metacognitive strategy instruction would show better results on the posttest and post-questionnaire. However, the test results did not show any difference in students’ metacognitive awareness although students’ listening comprehension increased. Further research can be held to see if metacognitive strategy use is more helpful at higher or lower PIE levels.
References


Vandergrift, L. (2003a). Orchestrating strategy use: Towards a model of the skilled L2