
The Impact of Metacognitive Listening Instruction on the Performance of Engineering Undergraduate Students in IELTS

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Abstract

Listening is the most used but least taught communication skill. While students receive instruction in reading, writing and speaking during their education, listening is left to the learners' practice. Listening comprehension tests only their ability to finding the correct answers but they hardly focus on developing their ability to listen. This paper studies the impact of instructing metacognitive listening strategies for improving listening skills of engineering undergraduate students whose English proficiency was around A2 level on CEFR scale. One hundred students volunteered in the experiment and they were randomly assigned into controlled (n=50) and experimental (n=50) groups. The experimental group was trained in metacognitive listening strategy proposed by Vandergrift and Goh (2012) for a period of 6 weeks. The study finds a significant improvement in the listening comprehension of the experimental group their scores in the pre-test and the post-test were compared.

Keywords: *Self-regulated listening, metacognitive awareness, listening, smartphones for listening, second language listening,*

Introduction

Listening is a vital skill providing input for the learners Rost (1994, pp. 141-142). In the communication process, 45% of time is spent on listening, while 30% on speaking, 15% on reading and 10% on writing. However, listening, often the weakest skill for many language learners, receives the least structured support in the L2 classrooms. (Vandergrift, 2012, p 13)

English is one of the official languages of India and it is the language of communication among people from different states. As a second language, and as a medium of instruction, English occupies an important place in India. It is considered the language of education, employment and career development and many opportunities in life.

Though English has been the medium of instruction since their schooling, many engineering undergraduate students coming from small towns and villages find it challenging to speak English well. It is evident from the efforts of the Government of Andhra Pradesh, a sunrise state in India, that it has signed an MoU with British Council for improving English Communication and Employability skills for one hundred thousand engineering students. In this context, the present study gains importance for improving the teaching a vital language skill.

2. Literature Review

Traditionally listening was seen as a passive process by which the listener receives information sent by a speaker Nation and Newton (2009, pp39-40). More recent models view listening as a much more active and interpretive process and it has attracted greater interest in recent years than it did in the past. Now many

entrance examinations and employability tests have included listening component in the second language proficiency (Richards. 2016).

Listening is a complex process. Unlike the other input skill reading, there is no second chance in listening as the input is continuous and there is no time gap. While they struggle over one part they may miss what follows. Listeners may have problems with recognising word forms in the connected speech and keep up with what is coming in (Goh 2012). He envisages that the problems can occur at the levels of perception, parsing and utilization of time.

Although teaching listening has been neglected, it has gained the attention of the research in the field for the last 60 years. Teaching listening can broadly be divided into three types: text-oriented, communication-oriented and learner-oriented instruction.

2.1 Listening Instruction: A brief overview

2.1.1. Text-Oriented Instruction

Listening instruction was heavily influenced by reading and writing pedagogy in the 1950s and 60s (Brown, 1987). The focus was much on decoding skills from sounds to words and from words to sentences and to a complete text. The emphasis was on answering the comprehension questions correctly. Thus, learners were tested in their learning comprehension there was no focus on how to listen accurately. Often listening texts were traditionally written passages read aloud (Vandergrift, 2012). The language produced when we speak is seldom identical to language produced in the written word (Halliday, 1985).

2.1.2. Communication-Oriented Instruction

When the Council of Europe set out a model of the communicative needs of the archetypal adult foreign language learner, listening skill gained importance and was considered as a complex set of skills and micro-skills which must be learned by learners like the other language skills. Listening as considered as an active process and there was a clear shift from using long written passages in favour of authentic materials such as songs, movies and recorded conversations for listening.

2.1.3. Learner-Oriented Instruction

Several learner-oriented developments in the field of language teaching and learning have influenced listening instruction. The question of what makes a good language learner has led to research in the development of certain learner strategies. New evidence-based approaches to teaching listening have been suggested, particularly in the area of listening strategies. (Macaro, Graham, & Vanderplank, 2007, and Vandergrift, 2007) have called for a strategy based approach to listening instruction.

2.1.4 Listening Strategies

Buck (2001:104) identifies two kinds of strategies in listening: Cognitive and metacognitive.

Cognitive strategies are mental activities related to comprehending and storing input in working memory or long-term memory for later retrieval.

Metacognitive strategies are those conscious or unconscious activities that perform an executive function in the management of cognitive strategies.

2.2 Metacognitive Awareness of Listening

Metacognition is our ability to think about our own thinking or “cognition” and by extension, to think about how we process information for a range of purposes and manage the way we do it (Vandergrift, 2012). Metacognitive learning activities aim to deepen learner understanding of themselves as L2 listeners, raise greater awareness of the demands and processes of L2 listening, and teach learners how to manage their comprehension and learning.

In the figure 1 it is shown how metacognitive knowledge, metacognitive experience and strategy use form the framework for listening instruction. Metacognitive processes make learners active and involve their conscious attention to their thoughts. They also act on their thoughts and regulate their actions to for understanding better. The main characteristics of this phenomenon are:

-) Conscious attention to one's knowledge, experience and strategic behaviours
-) Reflection on thoughts and actions and recording for sharing, analysis, and feedback;
-) Planning for future learning, based on reflections;
-) Follow-up actions may be immediate or delayed;
-) Changes occur in thinking and action in response to changes in the task environment;
-) Plans and follow-up action may involve two or more individuals; and
-) Knowledge or experience is not exclusive to an individual: it can be jointly constructed by two or more individuals

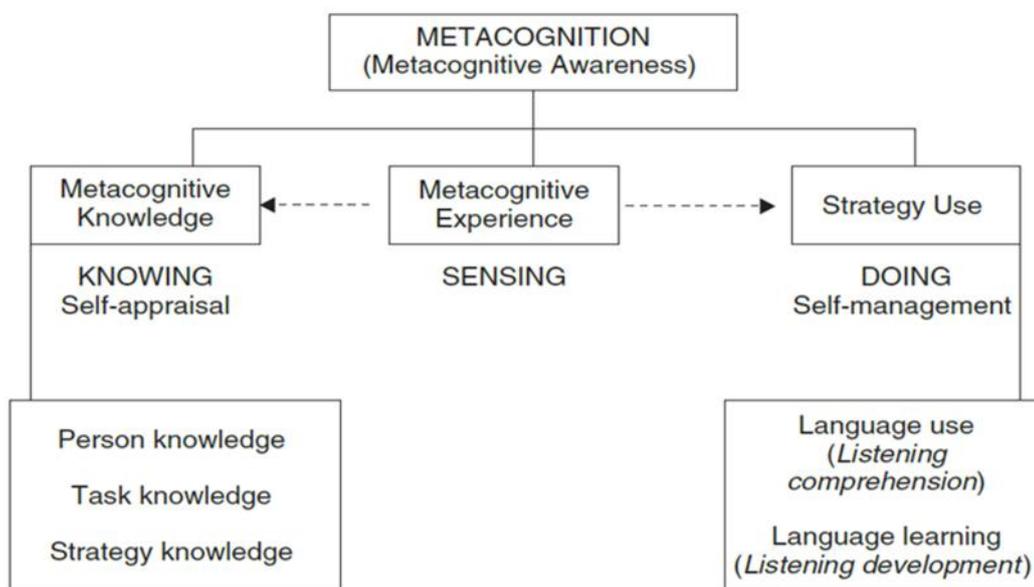


Figure 1 Metacognitive Framework for Listening Instruction

Learners store three kinds of knowledge about cognition: person, task and strategy (Flavell, 1979). Person knowledge is about how a particular individual learns and how the various factors influence his learning. It throws light on the learner's self-concept and self-efficacy about listening. The task knowledge relates to the purpose, demands and the nature of listening tasks. It throws light on knowing how to approach and complete a real life listening task. It also includes knowing about the features of different types of spoken texts, their structure and grammatical patterns and etc. Finally, strategy knowledge is about knowing which strategies can be used to accomplish a specific listening goal.

Research Question

RQ1: What is the impact of metacognitive awareness of listening on engineering undergraduate students' listening competence?

3. Methodology

3.1 Research design

An empirical study is undertaken to examine the effect of metacognitive awareness and the instruction of the strategy on improving the listening competence of engineering undergraduate students. Quantitative methods of research were applied in studying the effect of metacognitive listening instruction. Both the controlled and the experimental groups took the pre-test (Test 1) and post-test (Test 2) with an intervention programme for

the experimental group. The difference in their scores was taken to evaluate the effect of instructing metacognitive listening strategy on the listening performance of the participants.

The progress of participants in developing metacognitive awareness is evaluated qualitatively with personal interviews and Metacognitive Awareness of Listening Questionnaire (MALQ)

3.2 Participants

One hundred and twenty students showed interest in participating in the experimental study. After screening the students through listening component of IELTS test, one hundred students whose language levels varied from A2 to B2 on the CEFR scales were selected. They were randomly assigned to experimental (n=50) and controlled (n=50) groups. All the participants come from small towns and villages where they had their schooling in English medium. They are first year students of engineering undergraduate course studying in Sasi Institute of Engineering and Technology affiliated to JNTUK in the state of Andhra Pradesh, India.

3.3 Instruments

Three instruments have been used for the study. They are: 1) Cambridge practice tests for IELTS were used for both Test 1 and 2. 2) Metacognitive Awareness of Listening Questionnaire (MALQ) and 3) IELTS listening apps and other listening apps 4) Android smartphones (BYOD)

3.4 Procedure

After screening the one hundred and fifty students who showed interest in the study, 100 students were selected and they were assigned to control and experimental group in a random fashion. A pre-test (Test 1) in IELTS listening module was administered for both the groups and the experimental group (n=50) was given instruction for six weeks with three periods per a week in metacognitive listening strategy. They were given Metacognitive Awareness of Listening Questionnaire (MALQ) for three times in the first, third and sixth week of the instruction period. The controlled group was given traditional way of listening with practice tests. At the end of the six weeks, a post-test (Test 2) in IELTS listening module was conducted for both the groups.

4. Results and data analysis

Table 1 shows the mean values and Standard Deviation values of the experimental group both in the Test 1 and 2, whereas Table 2 shows the mean values and SD values of the controlled group.

Table 1. The descriptive statistics of Experimental group

Experimental group	N	Mean	SD
Test 1	50	18.33	3.53
Test 2	50	22.22	3.92

Table 2. The descriptive statistics of Controlled group

Controlled Group	N	Mean	SD
Test 1	50	18.28	3.33
Test 2	50	18.44	3.05

As the data shows, there is a significant difference between the performance of experimental group from Test 1 and Test 2. It is significant to note that the value of standard deviation has gone up from 3.53 to 3.92 indicating a clear difference in the performance of the participants from Test 1 and Test 2.

5. Discussion and Conclusion

The aim of the study was investigating the effect of instructing metacognitive listening strategies on the performance of engineering undergraduate students in IELTS listening module. The group which received

instruction in metacognitive listening strategies showed significant improvement as the comparison of Test 1 and Test 2 results indicate.

In addition to the improvement in their listening skills, there has been a significant improvement in their ability to understand and analyse the concept they are listening. It has resulted in a significant impact on their overall performance in academics.

The finding corroborates previous research findings that instructing learners in metacognitive listening strategy will have a positive impact on the learner performance in listening comprehension. In addition it has also been found in the personal interviews that observation that it has a positive impact on learner motivation as they attended the classes regularly and actively participated throughout the instruction period.

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Annexure

Metacognitive Awareness Listening Questionnaire (MALQ)

The statements below describe some strategies for listening comprehension and how you feel about listening in the language you are learning. Do you agree with them? This is not a test, so there are no “right” or “wrong” answers. By responding to these statements, you can help yourself and your teacher understand your progress in learning to listen. Please indicate your opinion after each statement. Circle the number which best shows your level of agreement with the statement. For example:

	Strongly disagree	Disagree	Slightly disagree	Partly agree	Agree	Strongly agree
I like II I like learning another language	1	2	3	4	5	6
1. Before I start to listen, I have a plan in my head for how I am going to listen.	1	2	3	4	5	6
2. I focus harder on the text when I have trouble understanding.	1	2	3	4	5	6
3. I find that listening is more difficult than reading, speaking, or writing in English.	1	2	3	4	5	6
4. I translate in my head as I listen.	1	2	3	4	5	6
5. I use the words I understand to guess the meaning of the words I don't understand.	1	2	3	4	5	6
6. When my mind wanders, I recover my concentration right away.	1	2	3	4	5	6
7. As I listen, I compare what I understand with what I know about the topic.	1	2	3	4	5	6
8. I feel that listening comprehension in English is a challenge for me.	1	2	3	4	5	6
9. I use my experience and knowledge to help me understand.	1	2	3	4	5	6
10. Before listening, I think of similar texts that I may have listened to.	1	2	3	4	5	6
11. I translate key words as I listen.	1	2	3	4	5	6
12. I try to get back on track when I lose concentration.	1	2	3	4	5	6
13. As I listen, I quickly adjust my interpretation if I realize that it is not correct.	1	2	3	4	5	6
14. After listening, I think back to how I listened, and about what I might do differently next time.	1	2	3	4	5	6
15. I don't feel nervous when I listen to English.	1	2	3	4	5	6
16. When I have difficulty understanding what I hear, I give up and stop listening.	1	2	3	4	5	6
17. I use the general idea of the text to help me guess the meaning of the words that I don't understand.	1	2	3	4	5	6
18. I translate word by word, as I listen.	1	2	3	4	5	6
19. When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense.	1	2	3	4	5	6
20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension.	1	2	3	4	5	6
21. I have a goal in mind as I listen.	1	2	3	4	5	6