Chinese-Speaking University Students' Use of Metacognitive Strategies in English Listening

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Abstract
Listening plays an essential role in enhancing oral communication. The goal of training learners' English listening skills is to help them to engage in effective communication in their everyday life or workplace. Educational researchers in the field of cognitive psychology have documented that metacognition may enhance learning. This project held the assumption that students trained in metacognitive strategies can learn subjects more effectively. The project intended to investigate what kinds of metacognitive strategies Chinese-speaking university students in Taiwan use when listening to authentic texts in English. The Metacognitive Awareness Listening Questionnaire (MALQ) developed by Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) was used as the tool to collect the data. A pilot study was administered before the formal data collection for the project. One class of 30 participants studying in a university in Taiwan joined the pilot study. They took an English listening course as an elective course. After receiving four weeks of listening comprehension instruction, the participants filled out the MALQ. This paper reports the adjustments concluded from the participants' opinions elicited in the pilot study. In general, this report provides helpful suggestions to adjust the data collection procedure and the procedure of listening instruction integrated with metacognitive strategies.

Key words: Chinese-Speaking university students, English listening instruction, metacognitive strategies

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Introduction

Listening plays an essential role in enhancing communication. Listening has long been known to be one of the essential skills in language learning because it provides input for the learners. The university students who participated in this study were planning to do internships with international businesses and industries in which they would be exposed to English communicative situations. This study was conducted to help these Chinese-speaking university students to improve their English listening ability and have effective communication in school or the workplace.

Listening is, no doubt, the most important skill, but perhaps the most difficult skill to learn. EFL learners may confront difficulties when listening to natural spoken English (Goh, 2000; Hasan, 2000). Unlike reading, writing or speaking, during which learners can pause to think over the text, consult or apply any explicit knowledge they know, in normal communication settings listeners have no time to do so; they are forced to process information at the same speed at which it is produced by the speakers (Hulstijin, 2003). Field (2008) assumed that listening can be more difficult than other skills because it involves physiological and cognitive processes at different levels.

The Internet provides sufficient learning resources which provide visual and audio support (i.e., videos) for listening comprehension. Most information on the Internet is in English, so the Internet is perhaps one of the best places for EFL learners to learn English. Some educators dedicated to developing advanced computer-aided devices to assist English learning (Chen, 2011a; Chen, 2011b; Hung & Young, 2015; Leveridge & Yang, 2013). The video-based materials adopted from the Internet were used as teaching materials in this study.

The reviewed literature indicates that metacognition strategies may improve students' learning. For a comprehensive listening comprehension, the learners not only draw on bottom-up process of word recognition, the interpretations of syntactic structures, but also grasp main ideas in the text and know what they have learned. To address such learning goal, the learners may learn metacognitive strategies to activate their top-down process to catch main ideas of the text and also monitor their learning process. Cross (2009) indicated that the implementation of listening strategy instruction may be a key component in helping learners to extract meaning of videotexts from the top-down process. The purpose of this study was to teach university students metacognitive strategies.

Literature Review

The Role of Listening

From the aspect of second language (L2) acquisition, Krashen (1996) indicated that listening comprehension has a great impact on language acquisition and the development of other language skills. Without understanding input at the right and proper level, no other meaningful learning can occur. Language input may be the most essential factor influencing L2 acquisition (Kuo & Wills, 1999; Petress, 2000; Rost, 2002). In addition, listening also plays an important role in interpersonal communication through the means of the learner's first language. Almost seventy years ago, Wilt (1950) conducted a study which found that people spent 45 percent of their communication time listening, 30 percent speaking, 16 percent reading, and 9 percent writing. In the 1980s, other researchers verified Wilt's (1950) research results and further confirmed that people undertake listening activities more frequently than reading, writing or speaking in daily life (Martin, 1987; Strother, 1987). Synthesizing the viewpoints from the two research areas, listening can not only be regarded as a skill used to perform different interpersonal communication activities, but is also an essential skill for acquiring a language. Given the importance of the listening skills, there is a tendency for language professionals to emphasize the listening objectives in the context of English as a foreign language. Rost (2002) emphasized that listening plays an important role in L2 instruction. When the instructor intends to improve the learners' listening ability, listening practice should be geared to develop their effective listening strategies. Listening strategies can be considered as part of the overall learning strategies. Learning strategies are first reviewed in the next section followed by listening strategies.

Studies on Learning Strategies before the Year 2000

Learning strategies have been widely investigated for the past four decades. Some researchers started to construct different categories of learning strategies (O'Malley, Chamot, Stewner-Manzanares, Russo, & Kupper, 1985; O'Malley & Chamot, 1990; Oxford, 1990). O'Malley, Chamot, Stewner-Manzanares, Russo and Kupper (1985) proposed three types of strategies : (1) Metacognitive strategies: planning for learning, thinking about the learning process, and monitoring one's comprehension and evaluating the learning process; (2) Cognitive strategies: direct manipulation of the learning materials; and (3) Socioaffective strategies: social-mediating activities and interacting with others (cited from Brown, 2007, p.134). Oxford (1990) classified strategies into two main categories (direct and indirect strategies) and further divided each into three sub-categories. Oxford's direct strategies include memory, cognitive, and compensation strategies, while the indirect strategies include metacognitive, affective, and social strategies.

With regard to metacognitive strategies, Oxford (1990) referred to the strategies centering on the learner's learning, arranging learning, and evaluating learning.

Studies on Learning Strategies after the Year 2000

Macaro (2001) classified language learning strategies as a sequential phenomenon; one part is cognitive strategies while the other involves metacognitive/ social/ affective strategies. Macaro (2006) further classified learning strategies as either cognitive or metacognitive, proposing that metacognitive strategies should be involved in the socio-affective domains.

Differing from Macaro's taxonomy (2006), Dornyei (2006) defined four types of strategies as follows:

1. Cognitive strategies: the manipulation or transformation of the learning materials/input (e.g., repetition, summarizing, using images).
2. Metacognitive strategies: higher-level strategies mainly used in planning, monitoring, organizing, analyzing, and evaluating ones' learning process.
3. Social strategies: interpersonal actions which tend to increase the learner's practices and the amount of L2 communication (e.g., cooperating with peers or setting up interaction with native speakers).
4. Affective strategies: the emotional management and experiences that construct one's subjective involvement in learning (p. 169).

Listening Strategies

Vandergrift's (1997) taxonomy of listening strategies has been widely used in the field of L2 listening comprehension. In his study, Vandergrift's (1997) taxonomy was used to investigate Chinese-speaking university students' application of metacognitive strategies. Vandergrift (1996) proposed a basic framework of listening strategies, and his taxonomy developed in 1997 primarily drew on the versions designed by O'Malley and Chamot (1990, pp. 137-139) and Oxford (1990, p. 21). Vandergrift (1997) adapted the abovementioned lists of strategies, and further proposed three types of strategies, metacognitive, cognitive, and socio-affective. The interpretations and examples are cited from Vandergrift's (1997) study and presented as follows:

Metacognitive strategies: represent mental activities for directing language learning, involving the planning, monitoring, and evaluation stages. Examples include: The planning section involves the strategies for recognizing things that need to be done so as to complete a listening task, making appropriate plans or taking appropriate actions to overcome any interference that may hinder task achievements, while monitoring encompasses the strategies of verifying, checking, or correcting one's understanding or performance during a listening evaluation.

Cognitive strategies: mental behaviors that manipulate the language to finish a task which comprises inferencing, elaboration, summarization, and other strategies. Examples include: In the inferencing part, listeners need to use conversational context or information within the text to guess the unfamiliar item's meanings and then predict the outcomes.

Socio-affective strategies: These strategies are activities involving interaction or affective control in language learning. Examples include: Using the cooperation strategy to solve a problem with someone else, or adopting the lowering anxiety strategy by using mental methods which make one feel more confident to carry out a listening task.

Instructional practices ought to focus on the learners' metacognitive knowledge about listening in addition to constructing and communicating meaning (Goh, 2008). Regarding the listening metacognitive strategies, Vandergrift's classification is presented in Figure 1.

1.	**Planning**
1.1	Advance organization
1.2	Directed attention
1.3	Selective attention
1.4	Self-management
2.	**Monitoring**
2.1	Comprehension monitoring
2.2	Auditory monitoring
2.3	Double-check monitoring
3.	**Evaluation**
3.1	Performance evaluation
3.2	Strategy evaluation
3.3	Problem identification

Figure 1. Categories of metacognitive listening strategies (Vandergrift, 1997, pp. 392)

The present study adopted the metacognitive listening strategies developed by Vandergrift, Goh, Mareschal, and Tafaghodtari (2006). They designed a questionnaire called the Metacognitive Awareness Listening Questionnaire (MALQ). To the best of the researcher's knowledge, this questionnaire has never been previously administered with Chinese-speaking students. The pilot study was administered to adjust the instructional procedure for the experimental and control groups, and to trial the questions included in the questionnaire. This paper briefly reports the data collection process and the adjustments made based upon the findings of the pilot study. In general, this report can provide helpful suggestions to adjust the data-collection procedure and the procedure of listening instruction integrated with metacognitive strategies and the Chinese version of MALQ.

Research Method

Research Procedure and Design

There were two sections in this study. The pilot study was first conducted, followed by the formal study. The formal study used a pre-test/post-test research design. The formal study included two groups: the experimental group and the control group. A pilot study was carried out with a class of

30 students prior to the formal study. The pilot study was administered to adjust the instructional procedure for the experimental and control groups, and to trial the questions included in the questionnaire.

Participants in the Pilot Study

In total, 30 students joined the pilot study in a university in Taiwan. They took an English listening course as an elective course. There were 18 males and 12 females. In terms of their academic background, 36.67% of the students majored in the Department of Shipping and Transportation Management, 30% in Systems Engineering and Naval Architecture, 23.33% in Food Science, and 10% in Merchant Marine. All the participants' first language is Mandarin.

Instruments

The Metacognitive Awareness Listening Questionnaire (MALQ) developed by Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) was used as the tool to collect the data. The questionnaire consists of a total of five dimensions and 21 items as follows: problem-solving (6 items), planning and evaluation (5 items), directed attention (4 items), personal knowledge (3 items), and mental translation (3 items). Vandergrift et al. (2006) used rigorous statistical processes to validate the items.

Data Collection

In 2015, a class of 30 students was invited to join the pilot study. They had been trained in metacognitive strategies for four weeks. The administration procedures were similar to those described in the study by Vandergrift, Goh, Mareschal, and Tafaghodtari (2006). At the end of the pilot study, the students filled out the MALQ. A total of 21 questionnaires were successfully completed and collected as two students dropped out of the course and five students were absent when the questionnaire was administered. In addition, two questionnaire responses were deleted because the students filled out the questionnaire with consistent responses on the same scale of "Unknown".

The collected questionnaire data were first screened by the researcher. Afterwards, the researcher had individual interviews with those students who missed some items in the questionnaire. Since the MALQ instrument had already been verified, the students were not asked to express their comments on the items of this instrument. They offered their opinions only on the procedure and why they did not fill out the whole questionnaire.

Results

Synthesizing the collected questionnaire responses and the interviewees' opinions, the researcher presented three adjustments. Among the 21 questionnaire responses in the pilot study, some participants did not fill out each item. They expressed that they could not understand what the item

truly meant. For example, one student was confused about the two statements, “I translate word by word as I listen” and “I translate key words as I listen.” He thought the two were similar in meaning. He did not respond to the former; instead, he provided his response to the latter.

Adjustment 1: In the formal study, the researcher will lead the participants to complete filling out the instrument. The procedure is that the participants in the formal study will read the English version and the researcher will offer the Chinese translation of each item. The MALQ instrument will be translated for Chinese-speaking participants. The translation will be done by the researcher and further verified by a professional translator.

Another two students mentioned that they did not periodically ask themselves if they were satisfied with their level of comprehension. As a result, they skipped this item. They expressed that they had never experienced the evaluation process, and that the listening process was too swift to check whether they could understand the content or not.

Adjustment 2: In the formal study, the researcher will design an activity to lead the participants to practice the procedure of planning and evaluation by periodically asking themselves if they are satisfied with their level of comprehension.

One student stated that he did not have a goal in mind as he listened to the article, and he questioned what kind of goal he needed to establish as he listened.

Adjustment 3: In the formal study, the researcher plans to exemplify the establishment of the goal during the process of listening for the participants. The researcher will apply cooperative learning activities to help the students practice using metacognitive strategies, especially those related to the dimension of planning and evaluation.

Conclusion

Conducting studies on L2 listening, Goh (2008) emphasized that more research is needed to investigate the role of metacognitive instruction in listening performance in different contexts. Researchers focused on investigating metacognitive strategy usage have identified an important difference between skilled and unskilled L2 learners (O’Malley & Chamot, 1990). The results of these studies show that skilled learners use more metacognitive strategies than unskilled learners do. L2 learners’ listening comprehension ability can be fostered by means of training in the use of metacognitive strategies. The purpose of this study was to provide a practical English listening course to train university students in the capacity of using metacognition strategies to evaluate their learning, and hence improve their listening ability. The earlier reviewed literature has confirmed the positive influence of metacognitive strategies on facilitating listening. University students are expected to learn more strategies to improve their English listening and to enhance effective

communication. Therefore, incorporating metacognitive strategies in the EFL listening curriculum at the university level is an urgent need. Language professionals should allocate specific sections of listening class to introduce the concept of metacognitive strategies. To sum up, the educational objective of the English listening curriculum is to meet the students' needs in class or out of the classroom, and further to achieve the ultimate goal of English education – learning in a concrete and meaningful context, with confidence, and for comprehension.

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