An Investigation of Metacognitive English Listening Strategies Used by Chinese College Students at Yunnan Normal University Business School, China

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Abstract. *The purpose of this study was to investigate the differences in metacognitive listening strategies (learners' knowledge of their understanding of listening demands, cognitive goals and their perceptions about themselves) used by second year Chinese college learners; and to discover the in-depth information of the extent that Chinese learners employ metacognitive listening strategies while completing a English listening comprehension test. Mixed methods were used in this research, which employed a questionnaire and semi-structured interview. The questionnaire as the instrument of the quantitative study was distributed to 101 Chinese participants who were second year English majors at Yunnan Normal University Business School. In all, 9 participants were interviewed.*

The findings of the study revealed that there were statically significant differences in the use of the "planning and evaluation" strategy between high and intermediate level learners, as well as high and low level learners. Whereas, there was no significant difference in the use of other sub-strategies among high, intermediate and low level learners. Moreover, "person knowledge" and "problem solving" strategies tended to be employed by nine participants, but "planning and evaluation" "mental translation" and "directed attention" strategies played different roles among high, intermediate and low level learners. The findings suggested that teachers should encourage low level learners to use more metacognitive strategies, which were frequently used by high and intermediate level learners.

Key Words: English Listening, Metacognitive Listening Strategies, Chinese College Students

Introduction

Listening is now well recognized as a critical dimension in language learning; however, it still remains one of the least understood processes and least studied compared to other communication skills (Anderson, 2002; Buck, 2001; Vandergrift, 2007). According to Feyten (1991), listening provides more than 45% of our total communication ability, followed by speaking (30%), reading (16%), and writing (9%). In order to improve listening competence, listening strategies, especially metacognitive listening strategies will account for the crucial part in listening comprehension.

Cohen (2000) stated that many researchers in the fields of second and foreign language (SL/FL) listening agree on the idea that listeners often do not handle listening tasks in an

effective way by utilizing listening strategies. Many studies try to explore the causes of the difficulties in learners' listening ability. One of the causes is that students lack learning strategies or that they cannot use learning strategies (Liu, 2007).

Like other parts of the world, listening comprehension lessons in China, especially for Chinese English majors, focus too often on the product, such as listening scores, rather than on trying to improve the effectiveness of the process. English majors in China are acquired to take a Test for English Major 4 (TEM-4) in their second year, which is organized and administrated nationally by the Higher Education Department of China's Ministry of Education. Chinese English teachers mainly concentrate on getting the correct answers rather than on how learning is achieved. Therefore, even though students try to find the right way to improve their listening comprehension, they are not aware of the benefits and ways of using metacognitive strategies, as are the teachers.

Metacognitive strategies play an essential role in successful language learning, which makes it worthwhile to conduct a research study focusing on the following research questions:

1. Are there any differences in metacognitive listening strategies among high, intermediate and low level learners?

2. To what extent do Chinese learners at Yunnan Normal University Business School employ metacognitive listening strategies while completing a listening comprehension test?

Literature Review

The Historical Overview of Changes of Listening Comprehension

Until recently, listening comprehension attracted little attention in terms of both theory and practice. The fact that listening has been neglected or poorly taught may have stemmed from the belief that it is a passive skill and that merely exposing students to the spoken language provides adequate instruction in listening comprehension (Call, 1985).

In the mid-1960s, the arguments for listening comprehension had begun and attained far greater importance by Morley (2001) and Rivers (1966).

In 1969, Morley (2001) stated, listening comprehension was recognized as a fundamental skill, and real language used for real communication as a viable classroom model.

Slowly and steadily, more attention has been given to listening comprehension. In the 1970s, the status of listening began to change from being incidental and peripheral to a status of central importance. Instructional programs expanded their focus on pragmatic skills to include listening as well as reading, writing, and speaking. During the 1980s, as researchers became increasingly interested in exploring the intricacies of this complex skill, more research was done on theory building, and curriculum development on listening comprehension. Throughout the 1990s, attention to listening in language teaching increased dramatically. Aural comprehension in second or foreign language acquisition became an important area of study (Osada, 2004).

Listening is now considered as an active skill that involves many processes. Byrnes (1984) characterized listening comprehension as a "highly complex problem-solving activity" that can be broken down into a set of distinct sub-skills (p. 318). As Richards (1985) pointed out, "current understanding of the nature of listening comprehension draws on research in psycholinguistics, semantics, pragmatics, discourse analysis, and cognitive science" (p.189).

Classifications of Language Learning Strategies

Oxford (1990, p.8) described learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations." Oxford's (1990) taxonomy divided LLS into direct and indirect strategies. Direct strategies involve the target language directly, which are divided into memory, cognitive and compensation strategies. Indirect strategies include metacognitive, affective and social strategies. Indirect strategies provide indirect support for language learning by employing different strategies such as focusing, arranging, evaluating, seeking opportunities, and lowering anxiety.

Classifications of Metacognitive Strategies

Various definitions of metacognitive strategies are provided by many researchers, however, the one proposed by Oxford (1990), Vandergrift (1997) and Vandergrift *et al.* (2006) is most widely used and influential in the field of SL (Second language)/FL (Foreign language) learning and acquisition. While in this research study, the metacognitive strategies is mainly based on Vandergrift *et al.* (2006) classification. According to Vandergrift *et al*.'s (2006) classification, metacognitive strategies are classified into five sub-strategies: problem-solving (represents the strategies used by listeners to guess at what they do not understand and monitor these inferences); planning and evaluation (represents the strategies listeners use to prepare themselves for listening, and to evaluate the results of their listening efforts); mental translation (represents strategies that listeners must learn to avoid if they are to become skilled listeners); person knowledge (represents listeners' perceptions concerning the difficulty presented by L2 listening and their self-efficacy in L2 listening), and directed attention (represents strategies that listeners use to concentrate and to stay on task).

Research Methodology

Research Design

In this study, the mixed method research approach with sequential explanatory design was employed; quantitative and qualitative data were collected and analyzed in sequence (Creswell, Plano, Gutmann, & Hanson, 2003). The quantitative data was collected first by surveying a population of 101 Chinese English majors, using the Metacognitive Awareness Listening Questionnaire (MALQ). The MALQ is a 21-item, six point Likert scale questionnaire that is significantly related to L2 listening comprehension success. The qualitative data was collected by using a semi-structured interview with nine students. The semi-structured interview aimed to elaborate on the results of the previous quantitative data to investigate the extent that the participants used metacognitive listening strategies while completing a listening comprehension test.

In this research study, the weight in this design was placed on quantitative data because the quantitative data collection represented the major aspect of this mixed methods data collection process. The qualitative data served as a detailed explanation for the quantitative results.

Validity and Reliability

Since the English version of the MALQ was adapted to use in this research study, the validity was already validated. The author has also asked the experts to validate the validity of the questionnaire by using the IOC (the index of objective and content congruency) approach.

After the validity check, the questionnaire was pilot tested with thirty Chinese second-year college students at another university in Yunnan province. The reliability check from the pilot test result was 0.8, which was higher than 0.70. Therefore, the questionnaire of the research study was reliable.

Data Collection

1. Metacognitive Awareness Listening Questionnaire (MALQ)

This research study was conducted on 1st September, 2014. The MALQ questionnaire was the first instrument used to collect data in this research study. The population of 101 students was chosen at Yunnan Normal University Business School. There were 8% male students and 92% female students. First, they were given a Test for English Major 4 (TEM-4 test), which was organized and administrated nationally by the Higher Education Department of China of the Ministry of Education in order to get the students' listening comprehension test scores.

The students' test scores were gathered, divided into three levels without telling the students according to their TEM-4 listening comprehension test scores. The criteria to divide the participants were as follows: 80% (high), 60-79% (intermediate), and below 60% (low). These criteria were based on Liu (2007). The result of TEM-4 test was: three students reached to high level, 35 students reached to intermediate level and 63 students reached to low level. Then the MALQ questionnaire was distributed to the participants by the researcher. The researcher emphasized that this questionnaire would not be a test with "right" or "wrong" answers and their responses to the questionnaire would not affect their scores on the final exam. The participants were asked to complete the questionnaire with honest responses, and their confidentiality would be respected.

They were required to circle a number on the six Likert-type scales (6 indicating "strongly agree", 5 indicating "agree", 4 indicating " partly agree", 3 indicating " slightly disagree", 2 indicating "disagree" and 1 indicating "strongly disagree") that best showed their level of agreement with the statements. It took the participants approximately 15 minutes to complete it. After that, 94 MALQ questionnaires were sent back to the researcher. And the result of six Likert-type scales from 6 to 1 were used to show the different use of metacognitive listening strategies for different level groups.

2. Semi-structured interview

A semi-structured interview was the second instrument employed to elicit the extent that Chinese college learners employ metacognitive listening strategies while completing a listening comprehension test. Nine participants were selected purposefully from the three different listening comprehension levels (high, intermediate and low level) of students. Each level consisted of three participants. The interviewees were contacted by mobile phone to arrange a date and time in a teacher's office at school after answering the questionnaire. At the beginning of the interview, the interview participants were given a consent form to sign, indicating explanations of the research and interview objectives as well. It also explained that the interview was voluntary and their personal information would be kept confidential. Each interview lasted approximately 15 minutes. The participants had a chance to choose the language for interview: English, Chinese, or both. All nine participants chose to be interviewed in Chinese.

Data Analysis

The quantitative data were analyzed by using SPSS. First, the descriptive statistics of the mean and standard deviation (SD) as well as the totals were used to find the average levels

and different uses of metacognitive listening strategies employed by each level of students. Second, the inferential statistics of the one-way ANOVA were employed to prove whether there is a statistically significant difference among the high, intermediate and low level students in using metacognitive listening strategies.

The data from the interviews were analyzed qualitatively. First, the interviews were recorded. Then the recorded interviews were transcribed by the researcher. In the process of coding, the researcher coded all the signs, utterances (meaningful), times (usually, seldom, barely, often), strategies, opinions, different levels, and feelings. Third, the data were organized into categories. Last, the conclusion and interpretation were given.

Findings

1. Findings of the Questionnaire

The MALQ was administered in the quantitative phase in order to answer the first research question: *Are there any differences in metacognitive listening strategies among high, intermediate and low level learners?"*

For convenience, Planning and Evaluation (PE), Person Knowledge (PS), Mental Translation (MT), Person Knowledge (PK), and Directed Attention (DA) were used in Table 1, Table 2 and Table 3.

Table 1. Comparison of the Use of Metacognitive Listening Strategies among High, Intermediate, and Low Levels

		High	Inter	Low	Total
PE	N	3	17	74	94
	$\overline{X}$	5.27	3.96	3.56	3.69
	SD	.64	.89	.96	.99
PS	N	3	17	74	94
	$\overline{X}$	5.00	4.15	3.94	4.01
	SD	.93	.64	1.1	1.01
MT	N	3	17	74	94
	$\overline{X}$	3.22	3.37	3.63	3.57
	SD	.38	.71	1.01	.95
PK	N	3	17	74	94
	$\overline{X}$	3.11	3.96	4.03	3.99
	SD	1.07	.98	.89	.92
DA	N	3	17	74	94
	$\overline{X}$	3.92	3.91	3.83	3.85
	SD	.52	.85	.77	.77

According to the result from Table 1, it showed that the different level groups employed different metacognitive listening strategies. High level learners employed metacognitive listening strategies ranging from high to low mean scores as: planning and evaluation ($\overline{X}$= 5.27) → problem-solving ($\overline{X}$= 5.00) → directed attention ($\overline{X}$= 3.92) → mental translation ($\overline{X}$= 3.22) → person knowledge ($\overline{X}$= 3.11). As to the intermediate level learners, ranging from high to low mean scores as: problem-solving ($\overline{X}$= 4.15) → planning and evaluation ($\overline{X}$=

3.96), person knowledge ($\overline{X}$= 3.96) → directed attention ($\overline{X}$= 3.91) → mental translation ($\overline{X}$= 3.37). Low level learners employ metacognitive listening strategies ranging from high to low mean scores as: person knowledge ($\overline{X}$= 4.03) → problem-solving ($\overline{X}$= 3.94) →directed attention ($\overline{X}$= 3.83) → mental translation ($\overline{X}$= 3.63) → planning and evaluation ($\overline{X}$= 3.56).

Table 2 The Results of One-Way ANOVA among High, Intermediate, and Low level groups

Metacognitive Listening Strategies		Sum of Squares	df	Mean Square	F	Sig.
PE	Between Groups	10.052	2	5.026	5.645	.005
	Within Groups	81.027	91	.890		
	Total	91.079	93			
PS	Between Groups	3.631	2	1.815	1.778	.175
	Within Groups	92.914	91	1.021		
	Total	96.545	93			
MT	Between Groups	1.258	2	.629	.692	.503
	Within Groups	82.704	91	.909		
	Total	83.962	93			
PK	Between Groups	2.459	2	1.230	1.462	.237
	Within Groups	76.530	91	.841		
	Total	78.989	93			
DA	Between Groups	.096	2	.048	.079	.924
	Within Groups	54.944	91	.604		
	Total	55.040	93			

As the results show in Table 1, analysis of the one-way ANOVA indicates that there is a statistically significant difference in the “planning and evaluation” strategy, but the other metacognitive listening strategies are not significantly different among high, intermediate and low level learners. It means that three different level groups use the same sub-strategies except for “planning and evaluation” strategy while completing a listening comprehension test.

Multiple comparisons were made in order to find out which groups differ in the use of the planning and evaluation strategy.

Table 3. The Results of Multiple Comparisons for the Significant Difference among Five Metacognitive Listening Strategies

Dependent Variable		(I) LEVEL	(J) LEVEL	Mean Difference (I-J)	Sig.
PE	LSD	High	Inter	1.30196*	.030
			Low	1.70991*	.003
		Inter	High	-1.30196*	.030
			Low	.40795	.111
		Low	High	-1.70991*	.003
			Inter	-.40795	.111
PS	LSD	High	Inter	.85294	.181
			Low	1.06081	.078
		Inter	High	-.85294	.181
			Low	.20787	.446
		Low	High	-1.06081	.078
			Inter	-.20787	.446
MT	LSD	High	Inter	-.15033	.802
			Low	-.40390	.474
		Inter	High	.15033	.802
			Low	-.25358	.325
		Low	High	.40390	.474
			Inter	.25358	.325

Table 2 (Continued)

Dependent Variable		(I) LEVEL	(J) LEVEL	Mean Difference (I-J)	Sig.
PK	LSD	High	Inter	-.84967	.142
			Low	-.92042	.092
		Inter	High	.84967	.142
			Low	-.07075	.775
		Low	High	.92042	.092
			Inter	.07075	.775
DA	LSD	High	Inter	.00490	.992
			Low	.08221	.858
		Inter	High	-.00490	.992
			Low	.07731	.712
		Low	High	-.08221	.858
			Inter	-.07731	.712

The LSD test was used to conduct a post-hoc test on a one-way ANOVA. As shown in Table 2, in terms of using the planning and evaluation strategy, there is a significant difference between the high level and intermediate level learners (p = 0.030), as well

as between the high level and low level learners (p = 0.003), which is higher than 0.05. However, there is no significant difference between the intermediate level and low levels (p = 0.111).

As for the other strategies, there was no significant difference at all.

Findings of the Qualitative Interviews

Overall, three high level learners used "person knowledge", "directed attention", "planning and evaluation", and "problem-solving" strategies while completing a listening comprehension test, one out of three high level learner used the evaluation strategy more frequently than the other two high level learners. But the intermediate level learners employed "person knowledge", "directed attention", "planning and evaluation", and "problem-solving" strategies. Compared to the evaluation strategy used by one of the high level learners, the intermediate level learners employed this strategy less than one of the participants in the high level.

As for low level learners, only one participant used the "planning" strategy, and two participants employed the "directed attention" strategy, and all of them rarely used the "evaluation" strategy while completing a comprehension test. They employed "person knowledge" and "problem-solving" strategies to help them complete the test. All three low level learners usually employed the "mental translation" strategy which is the strategy that proficient listeners have to avoid. It means the mental translation strategy makes a difference between proficient and less proficient listeners.

Discussion and Recommendations

Discussion

By reviewing all the statistical results in MALQ, it shows that high level learners tended to use metacognitive listening strategies more frequently than intermediate and low level learners. This is consistent with previous research findings that high level listeners employ metacognitive listening strategies more frequently than intermediate and low level listeners (Ratebi, 2013; Vandergrift, 1997). In addition, this result is also accordance with Yu, Wang and Li's (2003) results that students with high scores in the test have a better sense of using metacognitive strategies and they utilize metacognitive strategies more frequently than students with low scores. Moreover, regarding the results from the interviews, low level learners viewed themselves as using significantly more mental translation strategy than high and intermediate level learners. This result is also coherent with previous findings that this strategy represents an inefficient approach to listening comprehension that beginning-level listeners often feel compelled to use (Eastman, 1991). This issue is also discussed in Li's (2013) research that if learners always translate the information into their mother tongue, the speed of processing information will be very slow. Consequently, they will miss a lot of information and fail to fully understand the listening material. Apparently, low level learners still rely heavily on their mother-tongue, Therefore, it is clear that mental translation indicates that low level learners in the current study are not at a high level of automaticity in L2 listening and still use an ineffective listening strategy, which should be overcome in their English learning. But for the high and intermediate level learners who do not employ mental translation strategy, this means that they do not rely heavily on their mother tongue and at a higher level of automaticity in L2 listening than low level learners.

Recommendations

Since the current study only included interviewing learners, thus, much future research is necessary to interview teachers as well in order to obtain more detailed information on the perspective of teachers.

Teachers should be well equipped with the essential part of how to teach metacognitively and instruct the knowledge and benefits of metacognitive strategies in listening classes, and especially pay more attention on introducing the use of planning and evaluation strategy. Teachers should encourage low level learners to use more metacognitive strategies, and stimulate them on using the metacognitive strategies which are useful and frequently used by high and intermediate level learners in order to improve their listening competence. It is necessary for learners to actively adjust their learning strategies and be willing to acquire metacognitive strategies in order to equip themselves to have more options in strategies to achieve success.

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