An Investigation and Analysis of Non-English Specialized Undergraduates' Listening Strategy Use

Li Jing
Foreign Language School
Nanchang Institute of Technology
No.901 Hero Road,
Economic-Technical Development Zone
Nanchang City, Jiangxi Province, P.R.China.

Abstract

Through a listening strategy questionnaire and a listening test, it is investigated and analyzed what the condition of 180 non-English specialized undergraduates' listening strategy use is. The findings in this study indicate that non-English specialized undergraduates employ listening strategies at a medium frequency level(Mean=3.10); that the listeners most frequently use cognitive strategies, followed by the meta-cognitive strategies and the social/affective strategies; that the means of listening strategy use by high proficiency subjects are all higher than those of the low proficiency ones; that females use the total listening strategies at a higher frequency level than males; and that listening strategy use condition has positive correlation with their listening proficiency.

Key words: Non-English specialized ； listening strategy ； listening proficiency ；

1. Introduction

1.1 Background of the study

In the past several decades, with the long-term influence of traditional ways of teacher-oriented classroom performance, English learning was steered by students' scores of CET-4 and CET-6 after school. Reading has always been considering as a prominent position in the second language teaching and learning, especially as a major part of College English teaching and learning. As a result, the training of students competence in listening and speaking were somewhat neglected. There are issues on how to improve undergraduates' listening proficiency. So far rare studies focused on links between Chinese non-English specialized undergraduates' listening strategy use and listening proficiency. Continual research along this line is still needed in our effort to search for more effective ways to help learners master a foreign language. Hence, the present study of the listening strategy use by Chinese non-English specialized undergraduates is of its own significance.

1.2 Literature review

Research on language learning strategy use in second language acquisition has aroused much attention in language education ever since the 1970s. Of all the studies on language learning strategies, research on listening comprehension strategy use has been given an increasing concern by many researchers. Some of the existing studies do offer an understanding to the general application of listening comprehension strategies (e.g. Bacon, 1992a, b, c; Goh, 2002; Murphy, 1985, 1987; O'Malley, Chamot, & Kupper, 1989; Rost & Ross, 1991; Teng, 1998; Thompson & Rubin, 1996; Vandergrift, 1992, 1996, 2003; Wu, 2003). Previous studies mainly focus on the following four aspects.

1.2.1 Empirical research on listening strategy use between high proficiency students and low proficiency students

In the 1980s, the research by Murphy (1985, 1987) explored the types of strategies used by various types of students and made a contrast of strategy usage by students of different proficiency levels. Murphy (1985) investigated college students by analyzing their oral and written responses to listening selections. Seventeen specific strategies were identified and categorized. The results show that both more and less proficient listeners could be distinguished by the frequency of the strategies they used. For instance, more proficient listeners used the strategies of elaborating, inferencing, anticipating, conclusion drawing, self-description, etc., more frequently than less-proficient learners.

Murphy (1985) also explored the sequential patterns of the strategies that both more proficient listeners and less proficient listeners followed. For example, more proficient listeners tended to apply "wide distribution" strategies (i.e., in relation to an open and flexible use of strategies) while less proficient listeners were found to use "text heavy" strategies (i.e., in relation to reliance on the text and paraphrasing). However, Murphy did not correctly make a classification of the strategies he had observed, nor did he make any distinction between meta-cognitive strategies and cognitive strategies.

Vandergrift (1996) looked at the strategies used by French learners of different grades in a selection of schools in Canada. He found that more- and less- proficient listeners employed different patterns of strategy use. While both more- and less-proficient listeners depended heavily on cognitive strategies, the main differences between the two groups lay in the much greater use of meta-cognitive strategies by more-proficient listeners, especially comprehension monitoring and problem identification. In addition, more-proficient listeners used their world knowledge more productively, experienced less shifting between frameworks of interpretation and were better able to suppress irrelevant information. Less-proficient listeners got bogged down because they squandered time and attention on ineffective surface-processing strategies such as translation.

Moreira (1996) found that the same strategies were reported by learners at low, middle, and high levels of listening proficiency. However, those with high levels of listening proficiency used strategies more frequently than learners at middle or low levels of listening proficiency. The high-proficiency listeners also seemed to be more aware of their strategy use in a more flexible way. In addition, high-proficiency listeners reported that they were able to distinguish between important information and details on both recall tasks. Overall, according to Moreira, it appeared that high-proficiency listeners had a clearer picture of their strategy use than did low-proficiency listeners.

Chao (1997) extended Moreira's result. He found that more-proficient listeners used strategies significantly more frequently than less-proficient listeners. In addition, more-proficient listeners were better able than less-proficient listeners to focus their attention, keep up with the speed of aural input, make inferences, summarize, and elaborate upon new information. And more-proficient listeners grasped the overall meaning of a listening text significantly more frequently than less-proficient listeners.

Chinese researcher Zhou Qijia (2000) investigated the listening strategy use of 16 third years of English major, with a questionnaire designed according to Wen Qiufang s (1996) model of strategy classification. The researcher compared the listening strategies applied by eight more effective listeners and eight less effective listeners. The findings indicated that the students with better listening ability are better at self-supervising, training related language abilities and using listening techniques.

1.2. 2 Empirical research on listening strategy use between male and female students

Although only a few studies have been conducted on effects of gender on actual foreign language listening performance, most of the studies in this area have demonstrated that females tend to use LLS more often than males. This has been repeatedly found in recent studies of LLS use around the world (Politzer, 1983; Green, 1991; Green & Oxford, 1993; Oxford, 1993; Oxford & Nyiko, 1989; Oxford, Ehrman & Nyikos, 1988; Oxford, Park-Oh, Ito & Sumrall, 1993).

Bacon (1992a, 1992b, 1992c) conducted a series of experiments in foreign language listening. The comprehension processes of learners were examined across different factors. The results show that there are significant differences between male and female listeners in strategies, confidence, and affective response. In her research, she found that females used meta-cognitive strategies with a significantly higher proportion, and they will adjust the use of meta-cognitive strategies when different difficulties in text are presented, while males preferred cognitive strategies.

Vandergrift (1996) also found that   females reported using a greater variety of meta-cognitive strategies than their male counterparts at each course level, and   other than at the French 10 level, females reported using a greater variety of cognitive strategies than males.(Vandergrift, 1996, 212) .Vandergrift reported some differences in listening strategies used by core French students between the two genders, similar to Bacon's result. Females report greater use of meta-cognitive strategies, a finding also supported by Ehrman and Oxford (1989). This may be related to motivation (desire to be successful) or to greater reflection by females.(Vandergrift, 1996, 215) .

1.2.3 Empirical researches on relationship between listening strategy use and listening proficiency

The researchers attempted to explore the relationships between reported strategy use and language learning outcomes so as to identify the range and nature of learning strategies employed by effective language learners and evolve unsuccessful listeners into successful listeners (Cohen, 1987; Murphy, 1985; Henner Stanchina, 1987; Chamot and Kupper, 1989; Bacon, 1992; Vandergrift, 1996; Chao, 1997; Ching-ning Chien, 1998; Goh, 2002).

One of the first studies in this line was conducted by Murphy (1985). By using a think-aloud procedure, he found that effective listeners were more concerned with rhetorical organization and they could point out main ideas and supporting details while less-proficient listeners were more concerned with the definition and pronunciation of unknown words. Murphy determined that effective listeners used a wider variety of strategies and interacted more actively with the text.

The domestic relevant studies began in the early 1990s. In the research conducted in China, Zhou Qijia (2000) got a positive result in his research. He found that the employment of listening strategies has obvious influence on listening performance. So far rare studies focused on links between Chinese non-English specialized undergraduates' listening strategy use and listening proficiency. Continual research along this line is still needed in our effort to search for more effective ways to help learners master a foreign language. Hence, the present study of the listening strategy use by Chinese non-English specialized undergraduates is of its own significance.

1.3. Research Questions of the Present Study

In view of the research findings above, it is imperative to conduct further research on the Listening Strategies employed by Chinese college non-English specialized students. The investigation will be directed by the following research questions:
1. What is the general tendency in listening strategy use by non-English specialized undergraduates?
2. Are there any differences in listening strategy use between high proficiency level students and low proficiency level students, and between males and females?
3. What is the relationship between students' use of listening strategies and their listening proficiency level?

2. Design and implementation

2.1 Subjects

180 freshmen with approximately equal proportions of men 90(50%) and women 90(50%) from non-English specialized departments of Nanchang Institute of Technology were asked to participate in the study. The participants average age was 19, with six years of previous English study in middle schools. All subjects were first asked to take a listening test of CET Band 4 , and then, according to their scores of the listening test, they were sampled as more proficient listeners and less proficient listeners.

2.2 Instruments

Two instruments were used in the study to collect relevant data. One was a listening strategy questionnaire, and the other was a listening comprehension test.

2.2.1 Listening strategy questionnaire

A questionnaire used in this study was produced by Gu (2004) (see Appendix I). It consists of two sections: personal profile and question section. In section one, the subjects need to answer some general questions concerning themselves, including name, age, gender, major, and school number. In section two, the subjects are requested to fill in the listening strategy questionnaire, which includes 46 statements. The 46 items are divided into three major sub-categories as the following: meta-cognitive strategies (knowing about learning and controlling learning through planning, monitoring, and evaluating the learning activity), cognitive strategies (actual performance of language learning, such as inferencing, prediction, contextualization, using resources and perceptual processing), and affective strategies (the regulation of feelings and attitudes such as anxiety reduction, self-encouragement, and cooperation). The three major categories are further divided into 15 subcategories of learning strategies. The questionnaire was translated into Chinese to minimize the possibility of misinterpreting the strategy items. The subjects were asked to report their listening strategy use on a five-point scale by ticking the number: never true of me=1, rarely true of me=2, sometimes true of me=3, often true of me=4, and always true of me=5. The higher number indicated a more frequent use of the strategy concerned.

2.2.2 Listening comprehension test

The students' listening test scores in the listening comprehension part of college English Test Band 4 (CET Band 4) were chosen to represent their English listening proficiency. The listening section assesses students' abilities of understanding oral conversations or passages based on standard American English or standard British English. (Syllabus for College English Test, 2006, p. 3).

The speed of the conversation is approximately 130 words per minute (wpm) for the CET Band 4. (For the content, see Table 1).

2.3 Data collection and analysis

I collected data during regular class hour with the cooperation of the subjects' English teachers who were in charge of the classes. Before the students filled in the questionnaire, I explained the nature of the study to them. I also reminded them that there were not right or wrong answers on the questionnaire, those responses would not affect their course grades, and that they should answer them honestly and forthrightly. Statistical Package for the Social Sciences (SPSS, Version 11.0) was used to run all the statistical analysis of the data. Descriptive statistics (including mean, standard deviation) was calculated, concerning the minimum and maximum scores, which helped me summarize the general tendency in the use of listening strategies by non-English specialized students in this study. The Paired Sample T test of SPSS(Version 11.0) was conducted to analyze whether there were any significant differences between the high proficiency level group and the low proficiency level group, and between male and female students in the use of listening strategies. An analysis of variance (ANOVA) was conducted to determine whether there were any significant differences between students' use of listening strategies and their listening proficiency level.

3. Results and Analysis

3.1 Overall pattern in the use of listening strategies by non-English specialized students

The data presented in Table 2 show that the mean of the students   use of listening strategies is 3.10, indicating that Chinese non-English specialized s employ listening strategies at a medium frequency level(see Table 3). The Table 2 also provides us with an overview of the mean and standard deviation of the three categories of listening strategy use by non-English specialized students. It is obvious that the listeners most frequently use cognitive strategies, followed by the meta-cognitive strategies and the social/affective strategies. Such a result may be explained from the nature of these three types of listening strategies. According to O   Malley and Chamot (1990), meta-cognitive strategies and the social/affective strategies are not directly connected with the listening process, and only cognitive strategy are directly used in the process of listening comprehension. Therefore, students will pay much more attention to those strategies that can be directly employed and help them improve their listening proficiency. However, as meta-cognitive and social/affective strategies are only indirectly related to listening comprehension, these strategies are more liable to be neglected or underestimated by subjects in their listening activities.

3.1.1 Meta-cognitive strategies used by the subjects

To further understand the overall pattern in their use of strategy categories, table 4 presented the means and standard deviations of the overall use of meta-cognitive strategies used by all the participants. Table 4 presented under Meta-cognitive Strategies, monitoring (mean=3.53, S.D =1.01) is the most frequently used one and next to it is evaluation (mean =3.26, S.D=.84), followed by the self-management (mean=2.96, S.D=.87). The least used one is planning (mean=2.83, S.D=1.15).

Monitoring was defined as a mental activity of checking, verifying, or correcting comprehension or performance in the course of a listening task (Vandergrift, 1996). It seemed that the subjects could usually present logical understanding in the context, and that he could subconsciously connect the information they just heard with one they were listening to. The finding indicates that the listeners know to what extent the understanding is acceptable. However, we learn, from the table, that planning and self-management are only used sometimes by the subjects. They usually failed to self-control and were unable to make a good arrangement for their listening study. They are lacking an overall control in the ability of planning their learning processes and seldom plan their learning in advance.

Without a good plan to follow in their study, students can't establish a reasonable and detailed plan to guide their listening study, and this may prohibit them from moving forward. Therefore they have no clear idea of what to listen, when to listen and how to listen.

3.1.2 Cognitive strategies used by the subjects

With regard to cognitive Strategies, the listeners used inferencing most frequently, followed by using resources, perceptual, elaboration, translation, prediction, and the least frequently used one is imagery.(See Table 5).

Firstly, the data of this survey indicates that the subjects are likely to guess or infer the meaning from known materials. Because of the word-based conception, and the relatively small vocabulary, it is very likely for the Chinese college students to meet unfamiliar language items.

In order to guess the meaning of unfamiliar items or to fill in the missing information, the listeners have to make use of acoustic, vocal or lexical information within the text to help them. We can conclude that they tend to approach texts globally by inferring meaning from context and they are more flexible to deal with non-language information such as background sounds or the tone used by the speakers. While listening, they are able to use the tone of voice as a clue and use the tones to infer the feelings of speakers. And they often make use of what they have learnt, including knowledge and techniques, to facilitate their listening study.

Secondly, non-English specialized undergraduates use resources(looking for the unfamiliar words or information from reference books, such as dictionaries, encyclopedias, videos, exhibitions, performances, computer programs and databases, the Internet, and so forth)often to understand listening materials. For EFL students who have trouble with English vocabulary, this is a way for them to know unfamiliar words.

Thirdly, the subjects in this study are not good at using the key word to predict what the next part of the text is going to or to anticipate details in the next part while listening. They are easily thrown off when they encounter anything unknown, and tend to segment what they heard on a word-by-word basis. They don t know how to predict.

Lastly, students tend not to use imagery at a satisfying frequency level. Using this kind of strategy requires listeners to place a topic or key word in a familiar context as soon as it is heard before attempting to process the rest of the message; to relate what is heard with something from an earlier part of the message; to put difficult words or concepts in a familiar context to derive some general sense of the meaning. All these are difficult for a majority of students to practice.

3.1.3 Social/affective strategies used by the subjects

Table 6 shows that subjects in this survey frequently use strategies of anxiety reduction, followed by self-encouragement, but only sometimes use the strategies of cooperation and questioning for clarification. It is good to find that the subjects in this study frequently used affective strategies on lowering one s anxiety, and encouraging oneself. These strategies were helpful because they helped to create a non-threatening environment where students are not afraid to make mistakes. This finding supports Krashen s(1983) study, which claims that a second language is acquired best when affective filter is lowered. Krashen believes that when learners find themselves in a low stress environment, they are not afraid to make mistake. Worries and anxiety are filters which prohibit learners from comprehending new input. Affective strategies help learners to control over their emotions, attitudes and motivation through anxiety reduction, self-encouragement and self-rewarded.

From the table above, we also know that the subjects in this study seldom used cooperation strategy and questioning for clarification. In the circumstance of teacher-centered teaching mode, students are considered as passive receiver of knowledge, and they seldom use cooperation and questioning for clarification. Due to the traditional Chinese culture, Chinese students prefer to learn by their own, rather than base on the cooperation with others and questioning for clarification.

3.2 Differences of the use of listening strategies between high proficiency level students and low proficiency level students

In order to find the differences in the use of the three major listening strategies by high proficiency level students and low proficiency level students, the independent-samples t-test is used and the results are presented in table 7.

The table shows that the two groups are contrastive ones and the analysis is valid because the Mean and the Std. Deviation of both groups are contrastive. Table 7 reveals that there is significant difference between high proficiency group and low proficiency one in the use of total listening strategies. The means of the use of listening strategies by high proficiency subjects are all higher than those of the low proficiency subjects (mean=3.58> 2.68).

In addition, we can see, from the table, that the two groups do have differences in the use of the three strategy use. Of the three major strategies, the main difference between the two groups lay in the much greater use of meta-cognitive strategies by high proficiency level students. This result is consistent with Vandergrift s discovery (1997), in which he concluded that the major difference between successful and less successful listeners is students reported use of meta-cognitive strategies. When engaged in the act of listening, high proficiency level students appear to gain more control of the listening process through the use of more meta-cognitive strategies. It appears that high proficiency level students are more able to verify continually and correct (if deemed necessary) their comprehension as they are listening. The effective listeners are more aware of the processes underlying their own learning and seek to use appropriate learning strategies to control their own learning.

This has been reported by a few researchers such as Nunan (1996). What comes second is cognitive strategies with p-value of .009(p<.05). The high proficiency listeners were more active, open and flexible and that they used more strategies and had ability to know when to use which strategy. On the contrary, the low proficiency listeners paid too much attention to the text or on their own world knowledge, or they did not make a correspondent elaboration on the text information during the listening process. It appears that high proficiency listeners adopt more of an approach of questioning and applying world knowledge to brainstorm logical possibilities before finally deciding on a conceptual framework that confirms predictions and remains congruent with further incoming data. Although the mean of social/affective strategies used by more proficient listeners is a little higher than that of the less proficient ones, the independent-samples t-test shows that no statistically significant difference exists in the use of these strategies. We can, therefore, reach a conclusion that there is no difference in the use of socio/affective strategies between them. The reason for this can be various. One interpretation is that there are some unavoidable factors that influenced the validity of the investigation. It is also possible that the subjects have not filled in the questionnaire seriously.

3.3 Differences in the use of listening strategies between male students and female students

Obviously, table 8 shows us that females use the total listening strategies at a higher frequency level than males. For the three main strategies category, the means of the females are all higher than male subjects. However, the differences in the use of meta-cognitive and cognitive strategies are not statistically significant. One possible reason is that both male and female subjects in this investigation are much the same in their cognition development, as they are about the same age and have similar language learning experience. It is not surprising that they employ more or less the same cognitive strategies and meta-cognitive strategies when performing the same language tasks. Of the three strategy categories, only the differences in the use of social/affective strategies are significant (p < .05), with females mean being 3.26, and males mean being 2.62. Females report greater use of social/affective strategies, a finding that is also supported by Ehrman and Oxford(1989). This may be related to motivation (desire to be successful) or to greater reflection by females.

3.4 Relationship between students' use of listening strategies and their listening proficiency level

The statistical findings in Table 9 indicate that the three main strategies have positive correlation with listening proficiency. Among the three, meta-cognitive strategies are the most correlated(all the four subcategories are positively correlated with listening proficiency, especially planning strategy and self-management strategy), and then followed social/affective strategies(self-encouragement and lowing anxiety are highly correlated with listening proficiency), with the last one being cognitive strategies(perceptual processing, inferencing, prediction, and contextualization).

First of all, the study shows that the more proficient listeners employed meta-cognitive strategies more frequently than did the less proficient listeners, and the variations in this type of strategy use had a significant relation across the listening ability. This is to say, teaching less proficient listeners to use meta-cognitive strategies would enhance their listening performance.

Then, in order to facilitate effective comprehension of a spoken text, more proficient listeners use more flexible strategic processes combining linguistic knowledge and prior experience, and are in control of their emotions. This may be mainly because listeners could make full use of background knowledge and contextual knowledge to elicit the necessary information for listening. Listeners like to use inferencing to infer the word meaning from the background and contextual information (as we know that inferencing is used at a very high frequency level).

Similarly, the research findings by Goh (2002) reveal that a more proficient listener uses both cognitive and meta-cognitive strategies to achieve a meaningful interpretation of a text and demonstrates the ability to use prior knowledge, linguistic cues, and contextual information.

On the other hand, a less proficient listener is often distracted by unfamiliar lexis or expressions, and has a limited range of strategies.Next, the more effective listeners seem to be more in control of their own emotions and tend to be better at using strategies to clarify meaning while conversing with a native speaker of the language. It helps learners become more confident. On the contrary, less effective listeners tend to have a considerable level of anxiety when faced with the difficulty of unfamiliar lexis. This could be supported by Vandergrift (1997), who claimed that effective listeners use both top-down and bottom-up strategies more than ineffective listeners do. However, the less correlated strategy is cooperation. For students, cooperation is regarded as a helpful way in learning, but as college students, most of them are reluctant to do it. It may be because college students are often told to cultivate a kind of self-taught and independent learning method.

4. Conclusion

4.1 Findings

Through the listening strategy questionnaire and a listening test, it is investigated and analyzed what the condition of 180 non-English specialized undergraduates' listening strategy use is. The findings in this study indicate that non-English specialized undergraduates employ listening strategies at a medium frequency level(Mean=3.10); that the listeners most frequently use cognitive strategies, followed by the meta-cognitive strategies and the social/affective strategies; that the means of listening strategy use by high proficiency subjects are all higher than those of the low proficiency ones; that females use the total listening strategies at a higher frequency level than males; and that listening strategy use condition has positive correlation with their listening proficiency.

4.2 Pedagogical implication

The findings in this research show that the non-English specialized undergraduates have common and discrepancy in using listening strategies. Therefore, we should teach students in accordance with their aptitude and strengthen guidance and training of their listening strategy use. Firstly, it is necessary to cultivate students awareness of using listening strategies in English listening comprehension and inform them what listening strategies are. Meanwhile, teachers should concrete the process as far as possible for it is a psychological process to learn strategies. Ellis claimed that learning strategies were conscious and intentional activities(Rao, 2007). Secondly, the results of this study prove that meta-cognitive strategy use is of crucial importance for improving students listening ability. Teachers should, therefore, help language learners acquire and consciously focus on using the meta-cognitive strategies, especially planning and self-management. Thirdly, this research reveals that cognitive strategies are more directly related to a learning task and involve direct manipulation or transformation of the learning materials. Therefore, teachers should attach great importance to the training of cognitive strategy use, esp. inferencing. Finally, teachers should help students to remove their anxiety, gain self-confidence and encourage cooperative learning in listening activities. At length, I hope this study will provide certain pedagogic enlightenment for teachers and researchers.

References

Bacon, S. (1992). The relationship between gender, comprehension, processing strategies, and cognitive and affective response in second-language listening [J]. *The Modern Language Journal*, 76, 160-178.

Chao, J. Y. (1997). The influence of strategy use on comprehension and recall of authentic listening texts by Chinese EFL students in Taiwan [J]. *Dissertation Abstracts International*, 57, 3366A.

Ehrman, M. & Oxford R. L. (1989). Effects of gender differences, career choice, and psychological type on adult language learning strategies [J]. *Modern Language Journal*, 73, 1-13

Goh, C. C. M. (2002). Exploring listening comprehension tactics and their interaction patterns. System, 30, 185-206.

Gu, Y. （2004）. Gender, academic major, and vocabulary learning strategies of Chinese EFL learners. *RELC Journal*, 33/1, 35-54.

Krashen, S. (1983). Second language acquisition and second language learning. *Oxford*: Pergamon.

Moreira, M. L. (1996). On listening comprehension: linguistic strategies used by second language learners in non-collaborative discourse [D]. *Dissertation Abstracts International*, 56, 3562A.

Murphy, J. M. (1985). Investigation into the listening strategies of ESL college students [J]. *TESOL*, 87-95.

Murphy, J. M. (1987). The Listening Strategies of English as a Second Language College Students. *Research and Teaching in Developmental Education*, 4: 27-46.

Nunan,D. (1996). The effect of strategy training on student motivation, strategy knowledge, perceived utility and deployment. Unpublished manuscript, University of Hong Kong. [M]. *Hertford Shire: Prentice Hinternational (UK) Ltd*, 89-95

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know* [M]. Boston: Heinle & Heinle, 117-153.

O Malley, J. and A. Chamot. (1990). *Learning strategies in second language acquisition* [M]. Cambridge: Cambridge University Press, 66.

Vandergrift, L. (1996). The listening comprehension strategies of core French high schools Canadian modern language review [J], 52, (2), 200-223.

Vandergrift, L. (1997). The strategies of second language (French) listeners: a descriptive study [J]. *Foreign Language Annals*, 3, 30.

胡咏梅.(2002)教育统计学与SPSS软件应用 [M]. 北京:北京师范大学出版社.

秦晓晴.(2003)外语教学研究中的定量数据分析 [M]. 武汉:华中科技大学出版社.

饶振辉.(2007)英语学习策略中的个体差异与文化因素[M].上海:上海外语教育出版社.

文秋芳.(1996)英语成功者与不成功者在学习方法上的差异[J].外语教学与研究（3）.

周启加.(2000)英语听力学习策略对听力的影响 [J]. 解放军外国语学院学报（3）.

Table 1: Listening comprehension test (CET Band 4)

Sections	Contents	Integrated Tasks	Percent
Section A	8 short conversations	Multiple choice	15%
	2 long conversations	Multiple choice	
Section B	3 short passages	Multiple choice	10%
Section C	1 passage	Compound dictation	10%

Table 2: Mean and standard deviation of the overall strategy categories

Category of strategies	Number	Min	Max	Mean	S.D
Meta-cognitive strategies	180	1	5	3.01	.86
Cognitive strategies	180	1	5	3.31	.40
Social/affective strategies	180	1	5	2.67	.64
Total	180	1	5	3.10	.63

Note: Minimum= minimum score; Maximum= maximum score;
Mean= mean score; S. D=standard deviation

Table 3: Frequency Scales (Oxford 1990)

Mean score	Evaluation	Frequency scale
4.5-5.0	always or almost always true	high
3.5-4.4	usually true	
2.5-3.4	sometimes true	medium
1.5-2.4	generally not true	low
1.0-1.4	never or almost never true	

Table 4: Mean and standard deviation of the use of meta-cognitive strategies

Category of strategies	Number	Min	Max	Mean	S.D
Planning	180	1	5	2.83	1.15
Self- management	180	1	5	2.96	.87
Monitoring	180	1	5	3.53	1.01
Evaluating	180	1	5	3.26	.84

Note: *Number= the number of the subjects, Min= minimum score,*
Max= maximum score, Mean= mean score, S.D = standard deviation

Table 5: Mean and standard deviation of the use of cognitive strategies

Category of strategies	Number	Min	Max	Mean	S.D
Using resources	180	1	5	3.52	.43
Inferencing	180	1	5	3.88	.29
Elaboration	180	1	5	3.07	.53
Perceptual	180	1	5	3.46	.62
Translation	180	1	5	2.97	1.12
Imagery	180	1	5	2.71	.91
Prediction	180	1	5	2.87	.65

Note: *Number= the number of the subjects, Min= minimum score,*
Max= maximum score, Mean= mean score, S.D = standard deviation

Table 6: Mean and standard deviation of the use of social/affective strategies

Category of strategies	Number	Min	Max	Mean	S.D
Anxiety reduction	180	1	5	3.61	.78
Self-encouragement	180	1	5	2.73	1.04
Cooperation	180	1	5	2.26	.70
Questioning for clarification	180	1	5	2.15	.71

Note: *Number= the number of the subjects, Min= minimum score,*
Max= maximum score, Mean= mean score, S.D = standard deviation

Table 7: T-test of the use of three major listening strategies by high proficiency students and low proficiency students

Category of strategies	High proficiency listeners		low proficiency listeners		T-value	Sig.
	Mean	S.D	Mean	S.D		
Total strategies	3.58	1.140	2.68	1.038	4.436	.001***
Meta-cognitive strategies	3.92	1.192	2.27	1.093	5.399	.000***
Cognitive strategies	3.88	.977	3.11	.928	5.044	.009*
Social/affective strategies	3.01	1.230	2.79	1.086	2.601	.013

Note: *≤.05, ***≤.001

Table 8: T-test of the use of three major listening strategies by males and females

Category of strategies	Males		Females		T-value	Sig
	M	S.D	M	S.D		
Total Strategies	3.08	1.150	3.33	1.043	1.936	.502
Meta-cognitive Strategies	3.06	1.323	3.17	1.228	1.118	.061
Cognitive Strategies	3.27	1.202	3.37	1.051	1.381	.094
Social/Affective Strategies	2.62	.935	3.26	.858	2.316	.013*

*≤.05

Table 9: the correlation between listening strategies and listening proficiency

	Listening proficiency	
	Pearson correlation	Sig. (2-tailed)
Meta-cognitive strategies	.342**	.000***
Self-management	.313**	.000***
Planning	.258**	.000***
Monitoring	.221**	.005**
Evaluating	.213**	.002**
Cognitive strategies	.210**	.003**
Perceptual processing	.101*	.021*
Inferencing	.172**	.006**
Prediction	.216**	.001***
Contextualization	.204**	.001***
Using resources	.121	.082
Social/affective strategies	.215**	.002**
Lowing anxiety	.166	.003**
Cooperation	.172*	.013*
Self-encouragement	.196**	.005**

*Note: *≤.05, **≤.01,***≤.001*

Appendix □

Lıstenıng Strategıes Qusetıonnaıre

1. When I don't understand something, I use my knowledge about the English language to guess.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
2. When I'm listening to something and I do not understand, I know it.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
3. When I have a problem in listening, I ask my family members for help.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
4. Before I listen to something important, I ask myself what I already know about the topic.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
5. When I don   t understand something, I use what I have already heard to guess.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
6.   When I think about what the rest of the text is about, I have more than one guess in mind.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
7.   I compare what I am hearing with what I have already heard to make sure I understand correctly.
     Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
8. When I listen, I use my knowledge about text structure to think about what I will hear next. Never= 1   Rarely= 2   Sometimes= 3
    Often= 4   Always= 5
9. Before I listen to something, I think about the main idea of what I am going to hear. Never= 1   Rarely= 2   Sometimes= 3   Often=
    4   Always= 5
10. When I listen, I repeat the words or phrases I can understand.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
11. During or after listening, I ask myself whether the information is the same as what I already know.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
12. To improve my listening in English, I listen to the English radio programs.
     Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
13. When I have a problem in listening, I ask my friends for help.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
14. To improve my listening in English, I watch English TV programs.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
15. I look for opportunities to listen in English.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
16. When I listen, I use what I have already heard to think about what I will hear next.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
17. I try to find out how to improve my listening in English.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5

18. Before I listen to something, I ask myself whether it is important to me.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
19. I try not to worry when I have a problem in listening.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
20. I try to find problems with what the speaker has said so that I can avoid the same mistakes.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
21. When I listen, I try to think about what the speaker is going to say next.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
22. When I don t understand something, I make several guesses.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
23. When I m free, I find interesting things to listen to in English (for example, TV, radio, etc).
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
24. When I listen, I try to remember useful words and phrases so that I can use them.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
25. I try to see connections between what I heard and my own experiences.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
26. When I have a problem in listening, I decide whether I should pay more attention to it.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
27. After I finish listening, I summarize what I heard in my mind.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
28. When I listen, I try to form pictures in my mind in order to understand better.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
29. When I don t understand something in listening, I won t tell anybody about it.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
30. Before I start listening, I decide if I need to pay attention to details or to the main idea.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
31. If I can t understand a word or phrase, I repeat it to myself.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
32. I tell myself to enjoy listening in English.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
33. When I don t understand something, I use my general knowledge to make a guess.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
34. When I listen, I use my knowledge about the English language to think about what I will hear next.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
35. When I listen, I use my knowledge about the topic to think about what I will hear next.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
36. When I have a problem in listening, I ask my teachers for help.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
37. After I finish listening, I use my own words to retell what I heard in my mind.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
38. When I don t understand something, I use my knowledge about text structure to help me understand.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
39. When I listen, I translate English into my mother tongue in order to understand better.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
40. If I have a problem in understanding, I quickly decide whether I should continue or listen again.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
41. When I don t understand something, I use my knowledge about the topic to guess.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
42. When I listen, I repeat the pronunciation of the words I have heard.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
43. When I meet a difficult word in listening, I try to look it up in the dictionary.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
44. During or after listening, I check how much I have understood.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
45. When I listen, I pay attention to every word that is said.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5
46. I tell myself not to worry when I listen in English.
    Never= 1   Rarely= 2   Sometimes= 3   Often= 4   Always= 5