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**| RESEARCH ARTICLE**

## **A Study on the Relationship between the Indirect Strategies and Listening Anxiety**

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**| ABSTRACT**

Since listening anxiety has been proved by some studies as a debilitating factor in listening comprehension, this research tends to find whether indirect strategies are effective in abating anxiety. Based on Kim's and other researchers' anxiety questionnaires, Vandergrift et al.'s (2006), and Zhou's (2003) strategies questionnaires, the researchers designed two new versions to test the subjects' level of anxiety and indirect strategies use. As for the relationship between the level of strategy use and the level of listening anxiety, there is a negative correlation between them, which means if the indirect listening strategies use level goes up, the listening anxiety degree will decrease, and vice versa. As a result of a One-Way ANOVA analysis, the high-level indirect listening strategies use group's anxiety is significantly lower than the other groups, and the low-level Indirect Listening Strategies use group's anxiety is higher than the other two groups, although it is slightly higher than the intermediate level group.

**| KEYWORDS**

Listening anxiety, English proficiency, indirect listening strategies

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### **1. Introduction**

Anxiety, as an effect that people tend to experience in life and learning, may exert a great influence on one's psychology, cognition, and behavior. Language anxiety is fear or worries expected to happen in a second language or foreign language learning (Gardner and MacIntyre, 1993). It has been regarded as one of the most debilitating types of potential anxiety experienced when taking listening comprehension tasks (Vogely, 1999). Many researchers proved that listening anxiety hinders listening comprehension (Bacon, 1989; Gardner, Lalonde, Moorcroft, & Evers, 1987; Hussein Elkhafaifi, 2005; Lund, 1991). It is "a negative kind of anxiety which harms the language learners' performance in many ways, both indirectly through worry and self-doubt and directly by reducing participation and creating overt avoidance of the language. 'Harmful anxiety can be related to plummeting motivation, negative attitudes and beliefs, and language performance difficulties" (Oxford, 1999). Rubin (1994) points out, in the listener's characteristics part, that the role of affect in listening appears to be related to attention and the functioning of memory. Therefore, affect plays a very important role in listening comprehension because attention and memory are the keys to successful listening. Anxiety, as an affective factor in this process, should not be overlooked because the anticipation of foreign/second language use in receiving information can provoke anxiety. The learner's own characteristics, such as learning strategies by the learner and the affective state of the learner, are paid more attention to than ever before. Research on the differences between effective and less effective learners is conducted, such as Vandergrift's research on successful and unsuccessful listeners in French in 1998. Therefore, studying the strategies used by the learners and allaying their anxiety in learning can help them to be more effective and successful in learning. It is also true for foreign language listening comprehension. Through the study of the difference in indirect listening strategies use and their anxiety degree between effective listeners and less effective ones, it will be easier for the researcher to

explore the relationship between listening anxiety and indirect listening strategies, the effectiveness of the indirect strategies when they are frequently used in listening and learning and whether they help alleviate the listening anxiety.

Therefore, if there is a negative correlation between listening proficiency and listening anxiety, whether there is a correlation between the strategies use and anxiety levels, and what effective strategies they will use to relieve anxiety will be meaningful to language learning and teaching.

## 2. Literature Review

This research uses the definitions of language learning strategies provided by Oxford (1990) and classifies the listening strategies into two types: direct listening strategies and indirect listening strategies. Indirect listening strategies refer to the metacognitive strategies, and social-affective strategies. Metacognitive listening strategies include three sets: Controlling Attention, Arranging & Planning Your Listening, and Evaluating Your Listening. Social listening strategies include three sets of strategies: Asking Questions, Empathizing with Others, and Cooperating with Others. Affective listening strategies are classified into three sets: Lowering Your Anxiety, Encouraging Yourself, and Taking Your Emotional Temperature (135-137).

As a specific division, listening strategies have attracted a lot of attention. The research on listening strategies mainly covers two aspects: research on listening comprehension strategy, which is theoretical, and research on listening comprehension strategy training, which is more practical (Huang, 1998). O' Malley et al. (1989) list the listening strategies as follows: selective and self-monitoring in perceptual processing; grouping (listening for large chunks) and inferencing from the context in parsing; and elaboration from world knowledge, personal experiences, or self-questioning in utilization. They find that the task requirements and the strategies used vary depending on the stage of the listening process. Henner-Stanchina (1982) teaches techniques for listening comprehension to university-level ESL students (Cited from Oxford et al., 1989). Berne (2004) reviews the research of listening comprehension as follows: types of cues used by listeners, the sequence of listening; the difference between more- and less-proficient listeners; strategies versus tactics; identifying listening problems; listening strategy instruction. Wen and Wang (2004) discuss a lot of empirical research on the learning strategies in China over the past 20 years. There are 7 pieces of research on listening strategies listed in this study (Wang & Qi, 1992; Jiang, 1994; Zhou, 2000; Liu, 1996; Lu, 2001; Wang, 2002; and Su, 2003). Wen and Wang (2004) point out that research on listening strategies is richer than other aspects of learning strategies. The result confirms that listening is central to foreign language learning. Most researchers in China (Yi, 2001; Yang, 2003; Lv, 2001; Su, 2003) focus on the training of listening strategies and the effectiveness of strategies, whereas researchers abroad, such as O' Malley et al. (1989), Laviosa (1991), Rost and Ross, (1991), DeFillipis (1980), Vandergrift (1992) and Bacon (1992) have done a lot on the theoretical construction and the practice of listening strategies.

Learning strategies, according to Weinstein and Mayer (1986), "have learning facilitation as a goal and are intentional on the part of the learner." The goal of strategy use is to "affect the learner's motivational or affective state, or the way in which the learner selects acquires, organizes, or integrates new knowledge" (Weinstein & Mayer, 1986: 315). "Thus, strategies may have an affective or conceptual basis and may influence the learning of simple tasks, such as learning vocabulary or items in a list, or complex tasks, such as language comprehension or language production" (O'Melly& Chamot, 2001).

However, there is no specific study on the relationship between strategies use and listening anxiety nor on the relationship between strategies use and language learning anxiety in the western literature according to the researcher's investigation, although some research does touch on the problem as a part of the focus.

Vogely, in her study in 1997 and 1999, regards "lack of listening strategies as one source of anxiety". She points out that "we [instructors] may help them approach LC [listening comprehension] texts with less anxiety if we teach students to be strategic listeners" (p.115). Kim (2000) reports, "as process-related sources of anxiety, the misuse of listening strategies was another pervasive argument among the participants (in his study)" (p.132). Although they have given some explanations and examples, the two researchers have failed to explore the relationship between them in depth. Zhou (2003) is the only researcher in 2007 who has researched the relationship between them in the past few years in China. Zhou believes listening anxiety has negative effects on listening performance, while, to some extent, using affective strategies can decrease anxiety. Yet in Zhou's study, the classification of listening anxiety is dubious because the researchers have not agreed that listening anxiety is an integration of state and trait anxiety, and most of the researchers tend to regard listening anxiety as a kind of situation-specific anxiety, like MacIntyre (1999). Also, the role of metacognitive strategies use is not mentioned. Metacognitive strategies can be used to control attention, make learning and listening plans, and evaluate performance to guide the learner to be more sensitive to learning and listening. According to Rost (2005), attention and short-term memory have a limited capacity which necessitates the use of selective attention, and attention can usually be controlled; "attention can be directed either externally or internally. Attention is thus the beginning of involvement, which is the essential differentiation between simply hearing and listening" (p.12). Since the

concentration span is limited, it is easily affected by anxiety, and hence the absence of attention will increase listening anxiety; therefore, if he can direct and select and manage his attention, a listener may suffer less anxiety than those who cannot, and he may perform better in listening.

Zhou (2003) is the only researcher who has done research on the relationship between listening anxiety and listening strategies in the past few years in China. Zhou believes listening anxiety impairs listening performance, and the negative effects of listening anxiety can be controlled to some degree by using affective strategies. Zhou classifies listening anxiety into state anxiety and trait anxiety which correspond separately to affective strategies controlling state anxiety and affective strategies controlling trait anxiety. The result of Zhou's study suggests that listening anxiety has negative effects on listening, and there is a correlation between listening anxiety and affective strategies. Yet in Zhou's study, the classification of listening anxiety is dubious because the researchers have not agreed that listening anxiety is an integration of state and trait anxiety, and most of the researchers tend to regard listening anxiety as a kind of situation-specific anxiety, like MacIntyre (1999). Also, Zhou does not mention the role of metacognitive strategies use in listening anxiety. Metacognitive strategies can be used to control attention, make learning and listening plans, and evaluate performance to guide the learner to be more sensitive to learning and listening. According to Rost (2005), attention and short-term memory have a limited capacity which necessitates the use of selective attention, and attention can usually be controlled; "attention can be directed either externally or internally. Attention is thus the beginning of involvement, which is the essential differentiation between simply hearing and listening" (p.12). Since the concentration span is limited, it is easily affected by anxiety, and hence the absence of attention will increase listening anxiety; therefore, if he can direct and select and manage his attention, a listener may suffer less anxiety than those who cannot, and he may perform better in listening.

Vandergrift et al. (2006) point out that "there is a general consensus among researchers in the fields of education and L2 learning about the important role that metacognition plays in enhancing thinking and comprehension (Byrnes, 1996; Costa, 2001; Garner, 1987; Marzano et al., 1998; Sternberg, 1998; Weinstein, Goetz, & Alexander, 1998; Wenden, 1998)." "Learners with high degrees of metacognitive awareness are better at processing and storing information, finding the best ways to practice and reinforce what they have learned." (Vandergrift et al., 2006).

### **3. Methodology**

#### **3.1 Participants**

The participants of this study are freshmen at Datong University (DU) majoring in English during the spring semester. The total is 188, of which 8 didn't follow the instructions, so their data are not valid, and the valid sample is 180. The participants and the gender ratio are about 1:9. Before entering university, they have learned English for 6 years or even more. Since they have taken the College Entrance examination with listening tests and will take TEM-4 in the second year and TEM-8 in the third and fourth year (a formal English proficiency test for English Majors in China), they are assumed they have experienced listening anxiety.

#### **3.2 Research Questions**

In this study, the use of metacognitive strategies and the use of social-affective strategies are both adopted as factors that may have some effects on the foreign language listening anxiety of a learner. Listening anxiety is a dependent variable, and Indirect strategy (metacognitive strategy and social-affective strategy) use is an independent variable. Listening anxiety and listening proficiency are two variables that can be affected by each other. This will be testified by the empirical evidence of the research. The hypotheses are as follows.

First, do the participants usually or always use indirect listening strategies to help their listening? Second, is there a positive correlation between listening proficiency and indirect listening strategies? Third, is there a negative correlation between the use of indirect listening strategies and the levels of listening anxiety? Fourth, is there a significant difference in listening anxiety degree between the three groups of indirect listening strategies use levels: the high, the intermediate, and the low?

#### **3.3 Instruments**

The instruments are FLLAS (the Foreign Language Listening Anxiety Scale), IFLLSS (the Indirect Foreign Language Listening Strategies Scale), and the CET-4 (the listening proficiency test), the questionnaire for personal background information. The FLLAS is a gauge for their listening anxiety, while the IFLLSS is for the use frequency of their indirect listening strategies. Two CET-4 listening tests are the methods to test English listening proficiency because it is one of China's authoritative English proficiency tests. It is usually used for non-English majors. Since the first-year students have not developed their English proficiency to a certain level, the researchers choose tests that are a little higher than their proficiency levels but not too high for them. TEM-4 and TEM-8 are other authoritative English proficiency tests in China, but they are supposed to take in the second year and the third or fourth year, respectively. Therefore, they are a much bigger challenge to first-year English majors. That is why the researchers did not use TEM-4 and TEM-8 in this study. The total score for each CET-4 listening test is 20 points, and the mean of the two tests is used as an indicator of the listening proficiency of the subject.

FLLAS (Foreign Language Listening Anxiety Scale) uses the main part of Kim's (2000) English version of FLLAS, adapted from FLCAS by Horwitz et al. in 1986. There are several versions of foreign language listening strategies scales. Su (2003) designs his strategies scale, including before, during, and after listening comprehension strategies, which focuses on listening strategies training. Vandergrift et al. (2006) developed the Metacognitive Awareness Listening Questionnaire, which is designed to "assess second language listener's metacognitive awareness and perceived use of strategies while listening to oral texts." Zhou (2003) came up with her social and affective listening strategies scale by adapting Oxford's (1990) Strategy Inventory for Language Learning (SILL) which is "the most powerful strategies scale" used in the research of language learning strategies and strategies training. According to Oxford (1990), indirect language learning strategies include metacognitive strategies and social-affective strategies (p.135). However, Oxford does not design a specific scale for listening strategies. For the sake of the research purpose, the Indirect Foreign Language Listening Strategies Scale, which includes metacognitive strategies and social-affective strategies, is a combination of Vandergrift et al.'s (2006) and Zhou's (2003). The final version includes 44 items. The maximum range for the IFLSS is 42 to 210, with lower scores indicating a lower frequency of strategies use and higher scores indicating a higher frequency of strategies use.

**Table3.1: The Categories and Items of IFLSS**

Categories	Metacognitive Strategies	Social-Affective Strategies
Items of Strategies	Arranging and Planning Strategies 1, 2, 3, 4, 7, 8, 22, 27, 28, 40, and 42	Lowering Your Anxiety Strategies 6, 9, 10, 11, and 13
	Attention Controlling Strategies 12,15, 23, 24, 25, 26, 29, 30, 33, 34, 35, 36, 37, and 38	Encouraging Yourself Strategies 14, 5, 16 and 20
	Evaluation Strategies 21, 31and 32	Taking Your Emotional Temperature Strategies 17, 18, and 19 Social Strategies 39, and 41

### 3.4 Data Collection

After two pilot studies, the questionnaire was revised, and some items were deleted. After the revision, Cronbach's alpha of this questionnaire is .805. The final data were collected at the end of the spring semester in 2007 at DU. The total number of them is 188, but 8 copies were deleted because the participant did not follow the instructions.

### 3.5 Data Analysis Procedure

FLLAS is based on a Likert-type scale, in which each statement has choices from 1 (Strongly Disagree) to 5 (Strongly Agree). A five-points answer indicates the highest level of anxiety while a one-point answer indicates the lowest level of anxiety. IFLSS is a five-point scale in which the number 1 to 5 each stands for the level of frequency: 1 for the lowest frequency or lack of use and 5 for the highest frequency of use. SPSS13.0 is used to analyze data. For the negatively worded items, they are recorded. Based on the sum of IFLSS scores, three groups are divided: the high, the intermediate, and the low. According to Qin (2003), to divide the samples into the high score and low score groups, one-quarter of the high scores should be selected as the high score group and one-quarter of the low scores as the low score group. The participants are 180, and the range of strategies use scores is 111 to 172; the score of the low-level group is below 130, while the score of the high level is over 151. The rest is the intermediate group. One-way ANOVA is adopted to test whether there is no significant difference between the three groups of different strategies users with three levels of listening anxiety.

## 4. Results and Discussion

The data are analyzed with SPSS 13.0. It aims at answering the following questions:

1. Do the participants usually or always use indirect listening strategies to help their listening?
2. Is there a positive correlation between listening proficiency and indirect listening strategies?
3. Is there a negative correlation between the use of indirect listening strategies and the levels of listening anxiety?
4. Is there a significant difference in listening anxiety degree between the three groups of indirect listening strategies use levels: the high, the intermediate, and the low?

#### **4.1 Preliminary Analysis of the Indirect Foreign Language Listening Strategies Scale**

##### **4.1.1 Scale Analysis of IFLSS**

The IFLSS is comprised of 42 items scored on a five-point scale with a theoretical range of 42 to 210. After the relatively few negatively worded items are recoded, a higher score indicates a higher level of strategy use or high frequency of strategy use, and a lower score shows a lower level of strategy use or low frequency of strategy use. The first column is the maxi, mini score, mean, and Std. Deviation of indirect listening strategies use. The second one is statistics of social-affective strategies use. The third one is for metacognitive strategy use.

**Table 4.1: Descriptive Statistics of IFLSS**

N	180	180	180
Minimum	111.00	30	79
Maximum	172.00	55	117
Mean	139.9611	42.3667	97.5944
Std.Deviation	14.12014	6.28103	9.87107

As a result of SPSS.13 analysis, it is a scale with high reliability, and the items are consistent.

**Table 4.2: The Reliability of the IFLSS**

Scale	Cronbach's alpha
IFLSS	.825
The scale of Metacognitive Strategies	.788
The scale of Social-Affective Strategies	.628

##### **4.1.2 Item Analysis of the IFLSS and Discussion**

Concerning the arranging and planning strategies, the means of Strategies 2, 3, and 4, except Strategy 1, are above 3.50, which, according to Oxford (1990), is a high level of strategy use. Before taking important tests, 51.1% of the participants report that they usually or always listen to English a lot in order not to be afraid of listening to tests. 57.7% report pre-test exposure to the test item types usually or always helps them, and none of the participants lacks this strategy. 80% admit that they usually or always read the items before listening to predict what will be heard next. Extensive exposure to listening, pre-exposure to test items, and pre-reading test items before listening are effective strategies that are used to arrange and plan to listen. It is not unusual that most participants use these strategies frequently because, firstly, that extensive exposure to listening before a test is generally helpful to most students; second, pre-exposure to test item types and pre-reading test items are the strategies taught and used frequently in middle schools and certainly they will keep using these strategies in the college listening tests. The content of the items is listed in the appendix.

**Table 4.3: Percent and Mean of Metacognitive Strategy Use Arranging and Planning Strategies (Strategies1, 2, 3, and 4)**

Item	1	2	3	4	5	Mean
1	5.6	10.6	37.2	41.1	5.6	3.31
2	1.1	14.4	33.3	35.0	16.1	3.51
3	1.1	5.6	13.3	42.2	37.8	4.10
4	0	7.8	34.4	44.4	13.3	3.63

About the arranging and planning strategies, the means of Strategies 7, 8, 22, 27, 28, 40, and 42 are below 3.5, with a minimum of 2.54 and maximum of 3.42, which shows a medium level of strategy use because the means from 2.5 to 3.4 is regarded as the medium level. That means these strategies are used sometimes but not frequently. Strategy 28, one of the weak strategies, is not recommended to be frequently used in listening since frequently using these kinds of strategies will impair listening and cause anxiety in listening; therefore, those who do not frequently use them are more effective listeners. However, there are still 15.5% of the participants who usually or always translate word by word in listening. Translating word by word is not recommended in the current listening stage because translation will certainly cost time and exhaust the memory, and it is likely to make the listener lag behind the listening task, feel at a loss and eventually cause unnecessary anxiety. As for strategy 40, 28.3% of the participants usually or always do not have a practical plan to improve their listening, and 40% of them only sometimes use this strategy. For

strategy 42, the result is better, with 45.5% of the participants reporting that they usually or always have an extra listening practice, yet more than half of them only sometimes or rarely, or even never have an extra listening practice. It is difficult for a learner to master a language without a practical plan for learning and listening. Since they have limited time and preparation plans for listening, the immediate result is a failure in listening tasks and less improvement in listening proficiency. Consequently, they would suffer more anxiety in listening. As to Strategy 7, 36.2% of the participants have a vivid plan for how they are going to listen. Most participants prefer to listen without a plan. As a result, they do not know how to listen. They often feel lost in listening tasks. Whether they do intensive or extensive listening, whether the task requires notetaking or not, whether the task demands an immediate response, or whether the background knowledge is called for, these students try desperately to keep pace with the speaker and catch every word the speaker says, and eventually they lose track of a message and end in feeling so frustrated in the tasks. Strategies 8 and 27 are the ones that concern the schema in one's mind. How to form a schema and using it is very important to successful listening. Listeners "construct meaning during the comprehension process by segmenting and chunking input into ...meaningful units, actively matching the results, known as intake, with their existing linguistic and world knowledge, and filling the gaps with logical guesses" (Bowman, 1981). World knowledge is based on experiences that enable the listener to infer and predict and "is organized around scripts, also called frames or schemata, ... Scripts are helpful in understanding input relating to commonplace situations because they fill in missing information ... When applied to the process of comprehending a foreign language, the advantage of activating the learner's [listener's] existing scripts in appropriate situations is obvious... Being able to instantiate an appropriate script can fit the bits and pieces that they have comprehended" (Long, 1989).

46.1% of the participants in this study report they have never or usually have not thought of similar texts before listening, and 32.2% of them only sometimes have done so. As they listen, 19.5% of the participants report they have never or usually have not formed a picture in their minds to help them with comprehension, and 31% of them only sometimes have done so. The importance of the schemata in listening is not recognized by most of them, and it is perhaps because the teachers may not have taught it as a strategy; some of them may only use this strategy subconsciously. As for Strategy 22, which is about the practice after a listening task, 51.7% of the participants report they will listen to the difficult parts again and again after class for better understanding. When the unclear bits are resolved, it progresses in listening, and those bits will be stored in long-term memory due to the repetition of those segments.

**Table 4.4: Percent and Mean of Metacognitive Strategies Use  
Arranging and Planning Strategies (Strategies 7, 8, 22, 27, 28, 40, and 42)**

Item	1	2	3	4	5	Mean
7	6.7	6.7	33.9	30.6	5.6	3.05
8	12.2	33.9	32.2	18.3	3.3	2.67
22	1.1	12.8	34.4	38.9	12.8	3.49
27	3.9	15.6	31.1	37.2	12.2	3.38
28	1.1	14.4	31.1	44.4	8.9	3.46
40	4.4	23.9	40.6	22.8	8.3	3.07
42	3.9	13.3	37.2	28.3	17.2	3.42

Concerning the attention controlling strategies, the means of Strategies 12, 23, 24, 26, 29, 34, 35, 36, 37, and 38 are higher than 3.5 but lower than 4.5, which shows that most of them often but do not always use these strategies. When they come across difficulties in listening, 70% of the participants report that they skip difficulties over and concentrate on what will follow, and all of the participants use this strategy. 63.9% of the participants report that they remind themselves that they must concentrate on listening during listening. Over half focus harder on listening when they run into problems in listening. When their minds wander, 56.7% of the participants report they can adjust their concentration. Strategy 29 is an alternate explanation of Strategy 26; therefore, the picture is roughly the same as Strategy 26. Strategies 34, 35, 36, 37, and 38 are some practical strategies that can be used to direct attention in listening. Paying attention to the subject and verb, to the main idea, the first part of the sentence, and the interrogative are the strategies that can direct the listener's attention to specific linguistic cues. These linguistic cues are critical to successful listening because, as learners of a foreign language, most of them cannot catch every word of the speaker, which is not necessary at this stage. Therefore, most of the participants report they direct their attention to these linguistic cues, and none of the participants ever use these strategies in listening.

**Table 4.5: Percent and Mean of Metacognitive Strategy Use  
Attention Controlling Strategies (Strategies 12, 23, 24, 26, 29, 34, 35, 36, 37, and 38)**

Item	1	2	3	4	5	Mean
12	0	7.2	22.8	46.7	23.3	3.86
23	3.3	7.2	25.6	40.6	23.3	3.73
24	4.4	3.3	40.0	36.7	15.6	3.55
26	0	10.6	32.8	46.1	10.6	3.56
29	1.1	7.2	33.3	47.8	10.6	3.59
34	0	8.3	36.1	42.8	12.8	3.60
35	0	17.8	22.8	49.4	10.0	3.52
36	0	4.4	12.8	52.8	30.0	4.08
37	0	10.0	30.0	45.0	15.0	3.65
38	0	5.0	37.2	50.0	7.8	3.61

Strategies 15, 25, and 30 are worded in the opposite way of the attention controlling strategies. 22.2% of the participants feel worried when they cannot catch some words. Most of the participants realize if they go on worrying, their attention will be distracted by their worries, and more information can be missed. 22.2% report that their minds often go blank while taking listening tests, and 33.1% of them sometimes have this experience. Although listening tests are highly anxiety-provoking and attention distracting, most of the test takers would not allow their attention to wander because failure in the test would be dreadful to most of the students. Therefore, attention is easily distracted by anxiety in listening tests but (it) is also easier to recover for most students in learning settings, like in listening classes and interactive listening. Only 5.5% of them stop listening when they have some difficulties understanding what they have heard. The reason may be that most of them realize that perseverance in listening is very important to the improvement in listening proficiency. Strategy 33 is the attention controlling strategy and is the only one that gets below 3.5 points. 30 % of the participants report that they would sometimes worry if they could not catch every single detail, and 20% of them always or usually worry. They may fear the missing information or details would destroy their listening comprehension severely. Listening to every detail is impossible, even for native speakers. Unless they understand it and use it as a strategy, can they survive the worry?

**Table 4.6: Percent and Mean of Metacognitive Strategies Use  
Attention Controlling Strategies (Strategies 15, 25, 30, 33)**

Item	1	2	3	4	5	Mean
15	4.4	17.8	33.9	37.8	6.1	3.23
25	1.1	21.1	31.1	37.2	9.4	3.33
30	1.1	4.4	17.8	45.6	31.1	4.01
33	2.2	17.8	30.0	38.3	11.7	3.39

Regarding the evaluation strategies in the metacognitive strategies, the average of Strategy 21 is higher than 3.5, and 51.6% of the participants usually or always recall the listening process to find their language problems and weakness; the mean of Strategy 31 and 32 is below 3.5. 44.4% of them usually or always recall how they have done and what they may do differently next time, and 28.3% of them periodically ask themselves if they are satisfied with their comprehension. To sum up, some do not use evaluation strategies frequently, and some even have never used these strategies.

**Table 4.7: Percent and Mean of Metacognitive Strategies Use  
Evaluation Strategies (Strategy 21, 31 and 32)**

Item	1	2	3	4	5	Mean
21	1.1	12.2	35.0	37.2	14.4	3.52
31	2.2	15.6	37.8	34.4	10.0	3.34
32	6.7	23.9	41.1	27.2	1.1	2.92

For the social-affective strategies, Items 6, 9, 10, 11, and 13 aim at testing the strategies for lowering your anxiety. According to Oxford (1990), a learner can lower his anxiety with progressive relaxation, deep breathing, meditation, and using music; or using laughter. In this study, considering that Chinese students would not like to show their feelings in public, the strategy of using

laughter is not included. However, it is still not satisfying as to the result of the strategy used. Most averages of these strategies are below 3.4, and some even below 2.4, which shows a comparatively low level of strategy use. Most students, except for Strategy 13, would not use these strategies to cope with listening anxiety. Other strategies are strange to most of them because these strategies have never been taught in listening classes.

**Table 4.8: Percent and Mean of Social-Affective Strategy Use  
Lowering Your Anxiety Strategies (Strategies 6, 9, 10, 11, and 13)**

Item	1	2	3	4	5	Mean
6	10.6	20.6	26.1	31.7	11.1	3.12
9	10.6	16.1	27.8	35.6	10.0	3.18
10	28.9	41.1	16.7	8.9	4.4	2.26
11	28.9	35.0	20.6	12.2	3.3	3.86
13	2.2	3.3	29.4	46.1	18.9	3.76

As to the strategies for encouraging yourself, except Strategy 14, which is higher than 3.5, Strategy 5, 16, and 20, which are lower than 3.4 but higher than 2.5, this shows a low-medium level of strategy use. 21% of the participants have never or usually have not encouraged themselves to listen by saying, "I will do very well." 22.7% of them have never or usually have not encouraged themselves constantly in listening. After a good listening performance, 30% of the participants do not reward themselves either with words or with a treat. However, 60% of them report that they usually or always tell themselves it is fair to all students when the listening task is difficult. Competition is an indispensable part of the life of Chinese students, so every student should have been taught to cope with the competition. Therefore, the students should be made aware that others may experience the same feeling and encounter the same difficulty. That could be a way to lessen the pressure of competition and make them feel relaxed and perform better in listening.

**Table 4.9: Percent and Mean of Social-Affective Strategy Use  
Encouraging Yourself Strategies (Strategies 14, 5, 16, and 20)**

Item	1	2	3	4	5	Mean
14	2.2	8.9	28.9	42.8	17.2	3.64
5	3.3	17.8	38.3	27.2	13.3	3.29
16	4.4	18.3	34.4	31.1	11.7	3.27
20	3.3	26.7	30.6	27.8	11.7	3.18

As to the strategies of taking your emotional temperature, the mean of Strategy 17 is 2.82; the mean of Strategy 18 is 1.94, which shows a low level of strategy use. 43.8% of the participants have never or usually have not discussed with their friends about their emotional problems in listening to seek help. As an English major, the clash of cultures and the clash between reality and expectations easily trigger anxiety and frustration. But most of them have not learned how to cope with internal problems with external help from teachers and friends. It may be a wrong belief in their minds that revealing their weakness and problems to others would make them look delicate and vulnerable. Strategy 19 is one item that is negatively worded; 33.3% of the participants report that they have never or usually have not talked with their teachers about the listening problems and sought their help, and 40.5% of the participants usually or always talk with their teachers. The more you talk with your teacher, the more the teacher will understand you and offer some suggestions to lessen your pressure so that you may feel better or more relaxed.

**Table 4.10: Percent and Mean of Social-Affective Strategy Use  
Taking Your Emotional Temperature Strategies (Strategies 17, 18, 19)**

Item	1	2	3	4	5	Mean
17	9.4	34.4	27.8	21.7	6.7	2.82
18	36.7	41.1	16.1	3.3	2.8	1.94
19	9.4	23.9	26.1	23.3	17.2	3.15

About the social strategies, three sets of strategies need to be noted: asking questions, cooperating with others, and empathizing with others. In this scale, only the strategy of asking questions is tested. Asking for clarification or verification is very important in interactive listening. It may ensure the listener that they can get the correct information; it may also make the speaker slow down



or clarify what has been said. Lastly, it ensures the interaction goes swiftly and smoothly. Strategy 39 and 41 are two strategies for asking questions; one is for repetition, and the other is for a slowdown in the speed of speaking. The mean for Strategy 39 is 3.44 and 3.12 for Strategy 41. 51.7% of the participants report that they usually or always ask to repeat when they do not understand, and 40% of them report that they usually or always ask the speaker to drop speed when they cannot follow. But there are still some who have never or have not often used this strategy. This may come from the wrong belief that it is impolite to ask for repetition or slowdown in a conversation. Or they are just too conscious and cautious about interrupting a speaker. As a result, they cannot keep up with the speaker's pace, and thus they may "have more problems identifying key input and often just give up when the velocity of incoming speech is too rapid" (Long, 1989).

**Table 4.11: Percent and Mean of Social-Affective Strategy Use  
Social Strategies (Strategies 39, 41)**

Item	1	2	3	4	5	Mean
39	3.9	7.8	36.7	43.9	7.8	3.44
41	8.3	15.0	36.7	36.7	3.3	3.12

Generally speaking, the participants are better off using metacognitive strategies than social-affective strategies.

#### **4.2 Analysis of the relationship between Three Variables**

##### **4.2.1 The Relationship between Language Proficiency, Indirect Strategy Use, and Listening Anxiety**

The mean of the CET-4 scores is positively and significantly correlated with the indirect foreign language listening strategies (IFLLS), especially metacognitive strategies (MS). It indicates if the level of strategies use goes up, the mean of the CET-4 listening scores (listening proficiency) goes up; and vice versa. However, there is a weak correlation between the mean of the CET-4 listening scores with social and affective strategies.

**Table 4.12: The Correlations between IFLLS and the CET-4M, between SAS and the CET-4M, and between MS and the CET-4M**

		CET-4	IFLLS	MS	SAS
CET-4M	Pearson correlation				
	Sig(two-tailed )				
	N				
IFLLS	Pearson correlation	.265*			
	Sig(two-tailed )	.000			
	N	180			
MS	Pearson correlation	.327*	.923**		
	Sig(two-tailed )	.000	.000		
	N	180	180		
SAS	Pearson correlation	.083	.797**	.504**	
	Sig(two-tailed )	.269	.000	.000	
	N	180	180	180	

As the result of a correlation test, the correlation between the listening proficiency (the CET-4M) of the participants and the listening anxiety is negatively significant at the .00 level. When the listening anxiety escalates, the proficiency will descend, and vice versa. There appears to be an indication of a causal relationship between them.

**Table 4.13: The Correlation between the CET-4M and Listening Anxiety**

		CET-4M	Listening Anxiety
CET-4M	Pearson Correlation		
	Sig. (2-tailed)		
	N		
Listening Anxiety	Pearson Correlation	-.350*	
	Sig. (2-tailed)	.000	
	N	180	

IFLLS (the indirect foreign language listening strategies) use level is significantly and negatively correlated with LA (listening anxiety) degree at the .03 level. If the IFLLS use level ascends, the degree of LA descends, and vice versa.

**Table 4.14: The Correlations between IFLLS and LA, between MS and LA, and between SAS and LA**

		IFLLS	MS	SAS	LA
IFLLS	Pearson correlation				
	Sig(two-tailed )				
	N				
MS	Pearson correlation	.923**			
	Sig(two-tailed )	.000			
	N	180			
SAS	Pearson correlation	.797**	.504**		
	Sig(two-tailed )	.000	.000		
	N	180	180		
LA	Pearson correlation	-.219*	-.330*	.027	
	Sig(two-tailed )	.000	.000	.714	
	N	180	180	180	

#### 4.2.2 The Difference between Three Groups of Strategy Use Level

As a result of One-Way ANOVA, the significance level is .008, which tells that the between-groups difference is significant. The Post Hoc tests indicate that the difference between the three groups of three levels is significant. The significance of the Homogeneity Variances test is .897, far higher than .05. This indicates the variances of the three level groups of strategies use are equal and "it fits the condition of one-way ANOVA because homogeneity variances are the basis of One-Way ANOVA" (Qin, 2003, P168). The high-level group of users' language anxiety is significantly different from the intermediate and low-level groups, but the difference in the anxiety degree between these two groups is not significant. As a result of the Means Plot, it gives a clear picture that the high-level group's anxiety is significantly lower than the other two groups, while the low-level group's anxiety degree is higher than the other two groups.

**Table 4.15: ANOVA Test of Differences between Groups**

			Sum of Squares	df	Mean Square	F	Sig.
Between Groups	(Combined)		1741.571	2	870.785	4.961	.008
	Linear Term	Unweighted	1556.135	1	1556.135	8.865	.003
		Weighted	1516.844	1	1516.844	8.641	.004
		Deviation	224.727	1	224.727	1.280	.259
Within Groups			81070.757	177	175.541		
Total			82812.328	179			

**Table 4.16: Test of Homogeneity of Variances of Listening Anxiety**

Levene Statistic	df1	df2	Sig.
.109	2	177	.897**

**Table 4.17: Multiple Comparison between Groups of Strategy Use**

	(I)Level of Strategy Use	(J)Level of Strategy Use	Mean Difference(I-J)	Std. Error	Sig.
Scheffe	High	Intermediate	-6.25354*	2.43538	.039
		low	-8.02131	2.69408	.013
	Intermediate	High	6.25354*	2.43538	.039
		Intermediate	-1.76778	2.35731	.755
	Low	High	8.02131	2.69408	.013
		Intermediate	-1.76778	2.35731	.755
LSD	High	Intermediate	-6.25354*	2.69408	.011
		Low	-8.02131*	2.35731	.003
	Intermediate	High	6.25354*	2.43538	.011
		Low	-1.76778*	2.69408	.454
	Low	High	8.02131*	2.69408	.003
		Intermediate	1.76778	2.35731	.454

## 5. Conclusion

### 5.1 Summary of the Results

After the analysis of data, the results of this study have been presented. The conclusions will be drawn, and pedagogical implications can be given in the following chapter.

First, the participants have slightly increased anxiety, which is consistent with the former research (Kim, 2000; Zhou, 2003). Secondly, the quantitative research presents a general picture of the indirect listening strategies use by the first-year English majors at DU. The overall level of the IFLLS (indirect foreign language listening strategies) use is intermediate; therefore, IFLLS training is feasible. Metacognitive strategies are used more often than social-affective strategies, in which attention controlling scores the highest because attention is crucial in affecting listening. The combination of the two sets of indirect listening strategies for them is good in listening since most of them have no idea about these strategies and lack systematic strategies training.

Thirdly, the correlation between the LP of participants and LA is negatively significant. As the LA rises, the LP will drop, and vice versa. This finding is consistent with the research done by Elkhafaifi (2005) and supports the conclusions reached in earlier studies (Aida, 1994; Cheng et al., 1999; Horwitz et al., 1986; MacIntyre & Gardner, 1991; Kim, 2000; Zhou, 2003 and Chen, 2004). Therefore, listening anxiety is a debilitating factor in listening in this study.

Fourthly, the result of the analysis shows that the correlation between IFLLS use and LP is positive. The correlation between metacognitive strategies use and LP shows the same result, whereas the positive correlation between the social-affective strategies use and listening proficiency is weak. This result suggests that those who frequently use IFLLS usually have higher listening proficiency, while those who rarely use IFLLS or lack some IFLLS enjoy lower listening proficiency. This is consistent with Moreira's (1996) study, in which he finds that the learners at three levels of listening proficiency reported the same strategies as measured by scores on a recall task. However, high-level learners use them more frequently than those with medium or low proficiency. It is very crucial to the proficiency to combine the strategies and use them frequently. However, the use frequency of social-affective strategies alone cannot predict his or her proficiency level. It may be that these kinds of strategies are not familiar to most Chinese language learners. The effect of the social-affective strategies on LP is not as significant as that of the metacognitive strategies on LP. This result is consistent with Li's (1996) empirical research on Chinese students' second language learning strategies use, which shows that social and affective strategies are less frequently used than metacognitive strategies and cognitive strategies in the language learning process. Therefore, it is highly recommended to teach social and affective strategies in strategy training. However, the use combination of metacognitive strategies and social-affective strategies can predict the proficiency of a learner. From this aspect, IFLLS have exerted a positive effect on one's listening performance or proficiency. Research so far, such as Wenden et al.'s (1987) research and Chamot's (1987) research, seems to indicate that the integrated, explicit training of language learning strategies would be the most effective one. Oxbrow (1999) has studied what kind of strategy is best in language learning, which deals specifically with metacognitive and affective language learning strategies as they are applied to writing skills (Mele, 2001). The results indicate that comprehensive training in both strategies is beneficial and effective since students experience less anxiety, more aware of their weaknesses and strengths.

Finally, a linear relationship between IFLLS use and LA is shown by a Chi-Square test. A negative correlation between them exists; if more indirect listening strategies are used, less listening anxiety is experienced, and vice versa. From the One-Way ANOVA analysis, we can see that the high-level IFLLS use group's anxiety is significantly lower than the other groups and the low-level IFLLS use group's anxiety is higher than the other two groups, although it is slightly higher than the intermediate level group. The significant negative correlation between IFLLS and LA is proved in this study. Therefore, the lack of some IFLLS or the rare use of some IFLLS can lead to listening anxiety in this study. This result is consistent with former research (Kim, 2000; Zhou, 2003; Vogely, 1999). This result offers empirical evidence that indirect listening strategies can lower listening anxiety, and indirect listening strategies training should be included in the syllabus. Metacognitive strategies are useful in attention direction and selection, getting rid of attention distraction caused by anxiety. Planning and arranging strategies and evaluating strategies can be used for learners' self-management and self-evaluation. Full preparation, careful planning, and pre-evaluation of listening will help the listener to be more involved in listening and thus lower listening anxiety. Strategies for lowering anxiety in social-affective strategies can be directly used for lowering anxiety and are very effective, but Chinese learners have little knowledge of them. Deep breathing, listening to music, and laughter are practical strategies to lower anxiety, according to Oxford (1990). Encouraging yourself strategies are based on psychological autosuggestion. By using these strategies, listeners can avoid the distraction of self-preoccupation due to a lack of confidence, which will distract listening attention and cause more anxiety in the listening process because "anxious self-preoccupation consists of heightened concern over one's inadequacies and shortcomings" (Sarason et al., 1991). By using the strategies of taking their temperature, the learner can talk about their problems and negative feelings with their teachers or friends and get help from others. Taking diaries to make themselves aware of listening anxiety and problems in learning is another effective measure to allay the anxiety of those introverted learners since they may be reluctant to talk with others about their feelings. Asking question strategies in social-affective strategies are especially useful to interactive listening, and it will make the speaker understand the needs of the listeners and adjust their speech speed, and even make clarifications and explanations for the listeners. The use of these strategies can also save some time for listeners to think; consequently, the anxiety caused by misunderstanding and high speed of speech will likely be avoided. To sum up, IFLLS are very useful for lowering anxiety and should be trained in listening training.

## 5.2 Recommendations for Further Research

Based on this preliminary study on the relationship between IFILS and LA, further research needs to be explored. First, the replication can be done for other samples to test its validity. Second, an experiment of indirect strategies training needs to be carried out. Third, the instruments in this research on the indirect strategies use by the subjects could be improved further. Self-reports, questionnaires, and open and semi-open interviews can be used as an integration. Fourth, a longitudinal study could be done to observe the change in degrees of listening anxiety during a long period of development.

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## References

- [1] Aida, Y. (1994). Examination of Horwitz, Horwitz, and Cope's construct of foreign language anxiety: The case of students of Japanese. *The Modern Language Journal*, 78(2), 155-168.
- [2] Alpert, R., & Haber, R. N. (1960). Anxiety in academic achievement situations. *Journal of Abnormal and Social Psychology*, 61, 207-215.
- [3] Bacon, S. M. (1989). Listening for real in the foreign-language classroom. *Foreign Language Annals*, 22(6), 543-551.
- [4] Berne, J. E. (1995). How do varying pre-listening activities affect second language listening comprehension? *Hispania*, 78(2), 316-329.
- [5] Berne, J. E. (2004). Listening comprehension strategies: A review of the Literature. *Foreign Language Annals*, 37(4), 521-533.
- [6] Bowman, M. (1981). A comparison of content schemata and textual schemata or the process of parachuting. *Reading World*, 21, 14-22.
- [7] Chamot A. U., & Kupper. L. (1989). Learning strategies in foreign language instruction. *Foreign Language Annals*, 22, 13-24.
- [8] Chastain, K. (1975). Affective and ability factors in second language learning. *Language Learning*, 25, 153-161.
- [9] Chen, X. (2004). A study of the relationship between English listening comprehension and Anxiety and its pedagogical implications. *Computer-assisted Foreign Language Education*, 96, 65-72.
- [10] Cohen, A. D. (1990). *Language learning: Insights for Learners, Teachers, and Researchers*. Boston: Heinle & Heinle.
- [11] Cohen, A. D. (2005). *Strategies in Learning and Using a Second Language*. Beijing: Foreign Language Teaching and Research Press.
- [12] Elkhafaifi, H. (2005). Listening Comprehension and Anxiety in the Arabic Language Classroom. *The Modern Language Journal*, 89, 206-220.
- [13] Ellis, R. (1994). *The Study of Second Language Acquisition*. Oxford: Oxford University Press. *English Teaching Syllabus for English Majors of Universities*. (2000). Beijing: Foreign Language Teaching and Research Press.
- [14] Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *Modern Language Journal*, 89(2), 206-220.
- [15] Eyesenck, M. W. (1979). Anxiety, learning, and memory: a reconceptualization. *Journal of Research in Personality*, 13, 365-385.

- [16] Gardner, R. C., Lalonde, R. N., Moorcroft, R., & Evers, F. T. (1987). Second language attrition: the role of motivation and use. *Journal of Language & Social Psychology*, 6(1), 29-47.
- [17] Gardner, R. C., & Macintyre, P. D. (1993). On the measurement of affective variables in second language learning. *Language Learning*, 43, 157-194.
- [18] Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132.
- [19] Huang, Z. (1998). Literature review of second language/ foreign language listening strategies studies. *Foreign Language World*, 2, 42-46.
- [20] Jiang, X, & Zheng, M. (2000). The Use of Listening Comprehension Strategies by Non-English Majors. *Journal of Capital Normal University*, 2000 supplement.
- [21] Jiang, Z. (1994). The relationship between learning strategies and listening comprehension. *Foreign Language Teaching and Research*, 1, 51-58.
- [22] Kim, J. H. (2000). *Foreign language listening anxiety: A Study of Korean Students Learning English*. Unpublished Doctoral Dissertation. The University of Texas.
- [23] Larsen-Freeman, D. (1985). Overview of theories of language learning and acquisition. In *Issues in English Language Development*. Rosslyn, Va.: National Clearinghouse for Bilingual Education.
- [24] Li, J. (2002). An empirical study--- the concept of second language learning strategies and application. *Foreign Language Teaching and Learning*, 23(1), 42-49.
- [25] Long, D. R. (1989). Second language listening comprehension: A schema-theoretic perspective. *The Modern Language Journal*, 73(1), 32-40.
- [26] Macintyre, P. D. (1995). How does anxiety affect second language learning? A Reply to Sparks and Ganschow. *The Modern Language Journal*, 79(1), 90-99.
- [27] Macintyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in Foreign Language and Second Language Learning: A Practical Guide to Creating a Low- anxiety Classroom Atmosphere*. (pp.24-45). Boston: McGraw-Hill.
- [28] May, R. (1996). *The Meaning of Anxiety*. New York: W. W. Norton & Company.
- [29] Mele, M. M. (2001). *Perceived Competence and Anxiety in Second Language acquisition: Effects of Raising General Awareness of Language Learning Strategies*. Unpublished Doctoral Dissertation. University of South Florida.
- [30] Moreira, M. L. (1996). *On Listening Comprehension: Linguistic Strategies used by Second Language Learners in Non-collaborative Discourse*. (Doctoral Dissertation. University of Illinois, Urbana-Champaign, 1995). *Dissertation Abstracts International*, 56, 3562A.
- [31] Naiman, N., Frohlich, M., & Todesco, A. (1975). The good second language learner. *TESL Talk*, 6, 58-75.
- [32] O'Malley, J. M., Chamot, A.U., & Kupper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10 (4), 418-437.
- [33] O'Malley, J. M., & Chamot, A.U. (2001). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- [34] Oxbrow, G. (1999). On the learning process of integrated, explicit training in metacognitive and affective learning strategies applied to writing skills in the formal instruction of EFL in a university context. Paper presented at Columbia University, *A Symposium on Language*, (March), New York.
- [35] Oxford, R. L. (1989). Use of language learning strategies: A synthesis of studies with implications for strategy training. *System*, 17, 235-247.
- [36] Oxford, R. L., & Crookall, D. (1989). Research on language learning strategies: Methods, findings, and instructional issues. *The Modern Language Journal*, 73(4), 404-419.
- [37] Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. Boston: Heinle & Heinle.
- [38] Oxford, R. L. (1993). Language learning strategies in a nutshell: Update and ESL suggestions. *TESOL Journal*, 2(2), 18-22.
- [39] Oxford, R. L. (1999). Anxiety in the language learner: new insights. In J. Arnold (Ed.), *Affect in Language Learning* (58-67). Cambridge: Cambridge University Press.
- [40] Richards, J. C., & Rodgers, T. S. (2000). *Approaches and Methods in Language Teaching*. Beijing: Foreign Language Teaching and Research Press.
- [41] Rivers, W. N. (1981). *Teaching Foreign Language Skills*. (2nd ed.). Chicago: University of Chicago Press.
- [42] Rost, M. (1990). *Listening in Language Learning*. London & New York: Longman.
- [43] Rost, M. (2005). *Teaching and researching listening*. Beijing: Foreign Language Teaching and Researching Press.
- [44] Rubin, J. (1994). A review of second language listening comprehension research. *The Modern Language Journal*, 78(2), 199-221.