

An exploration of listening strategy use and proficiency in China

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This article reports on an investigation of metacognitive awareness and listening strategy use by second-year Chinese college students (N = 127). Learners' metacognitive awareness and strategy use were examined in relation to their proficiency levels, as well as the differences between high and low proficiency learners' use of individual listening strategies. Significant differences were found in the use of planning and evaluation and mental translation strategies among students at various proficiency levels. In addition, six individual strategies were identified that separate students at high and low proficiency levels. The findings indicate that the listening needs of learners play an important role in effective instruction. This research can help teachers to better understand the needs of university EFL learners in China.

Key Words: metacognitive awareness; listening strategies; listening performance; tertiary EFL learners; China

Introduction

The importance of listening comprehension in the acquisition of English as a second or foreign language (ESL/EFL) is well recognized, yet, for many learners, it remains the most difficult of the four language skills to master (Graham, 2006; Rahimi & Abedi, 2014; Vandergrift, 2004; Y. Wang, 2002). Listening comprehension is a highly complex, interactive process (Buck, 2001). In order to be successful, learners must skilfully select and decipher input, construct meaning, and relate their own prior knowledge to the task at hand (O'Malley, Chamot, & Kupper, 1989; Rost, 2002). They need to be able to navigate the challenges that arise from aspects such as speaker accent, rate of delivery, and variations in stress, rhythm, and intonation; in addition, they must be able to recognize and comprehend reduced forms of speech, colloquial language, redundancies, a wide range of vocabulary, and complex syntactic structures (Brown, 2007). Finally, in real-world listening, learners are expected to engage in conversational give-and-take, adhering to established norms for interacting across a wide range of formal and informal contexts. Clearly, the complexity of the listening task necessitates that learners draw on a wide variety of knowledge sources, both linguistic and non-linguistic (Buck, 2001).

Listening difficulties are often heightened in EFL contexts such as China, where learners typically have little or no access to native speakers of English outside of the formal classroom environment (Zhang, 2008). In fact, as reported by Y. Wang (2002), listening is the weakest of the four language skills for Chinese university students. A few studies (Goh, 1999, 2000; L. Wang & Fan, 2015) have examined the specific causes of listening difficulties experienced by Chinese ESL/EFL learners of varying proficiency levels (high vs. low). Results of these studies indicate that low-proficiency Chinese listeners tend to rely heavily on a bottom-up approach to listening; and they struggle the most with the following types of elements: syntactically complex sentences, unfamiliar

lexical items, speaker accent, and overall speech perception. It is interesting to note that previous studies among participants spanning many cultural groups have also revealed the tendency for less proficient listeners to lean on bottom-up processing to a large extent (Field, 2004).

Another important finding reported by Goh (1999) is that high-proficiency Chinese learners demonstrate more awareness of their own difficulties in listening than do their low-proficiency peers. The importance of this type of awareness was highlighted by Vandergrift (2003), who asserted that many of the differences between highly skilled and less skilled L2 listeners fall in the arena of metacognitive awareness pertaining to listening (i.e., one's thinking about and regulation of the listening comprehension process) and listening strategy use. Vandergrift called for further investigation into the differences in metacognitive awareness and listening strategy use among learners of varying proficiency levels, across a wide range of contexts.

A few years later, Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) developed a survey instrument which measures learner's metacognitive awareness and listening strategy use. The *Metacognitive Awareness Listening Questionnaire* (MALQ) has been utilized in a few recent studies among Chinese learners of English (Goh & Hu, 2014; Li, 2013; Zeng, 2012), and results have shown that there is a positive relationship between listening comprehension and MALQ scores. However, additional research is needed to explore (a) the complex interaction between a learner's proficiency level and his/her metacognitive awareness and strategy use, and (b) the differences between high and low proficiency learners' use of individual listening strategies. The current study adds to the existing research by addressing these vital areas within the context of a university setting in central China.

Literature review

Research findings over the past forty years have consistently revealed a significant relationship between strategy use and English proficiency among learners in ESL and EFL contexts (Cohen & Macaro, 2007; Oxford, 2011; Vandergrift, 2003). In particular, studies have demonstrated significant associations between strategy use and proficiency in the areas of reading, writing, vocabulary learning, speaking and listening (Griffiths, 2008; Oxford, 2011; Vandergrift, 2003). Researchers in each of these arenas have concluded that more proficient learners tend to (a) use more strategies and employ a greater variety of strategies than their less proficient counterparts, and (b) use strategies in a more orchestrated fashion (see, for example, Goh, 2002; Vandergrift, 2003).

One strand of research on ESL/EFL listening strategies has focused on learners' metacognitive awareness and perceived strategy use in relation to listening tasks. This stems from the work of Vandergrift (2003, 2004), who identified the importance of metacognition in learners' regulation of listening strategies. Metacognitive awareness, in the context of listening, pertains to the ways in which individuals (a) think about the listening process; (b) plan, monitor, and evaluate a given listening task; and (c) address the problems they encounter during listening (Rahimi & Abedi, 2014). As noted by Yeldham (2016), listening strategies are comprehension strategies, or "conscious, deliberate, goal-directed procedures that are used to compensate for actual or anticipated communication breakdowns and that are transferable across tasks or situations" (p. 395).

Vandergrift et al. (2006) developed the *MALQ*, a 21-item survey instrument for assessing "the extent to which language learners are aware of and can regulate the process of L2 listening comprehension" (p. 432). The *MALQ* addresses learners' self-appraisal and self-regulation (Vandergrift et al., 2006) which allows them to "appraise their

awareness of the listening process and reflect on their strategy use when listening to texts in the L2” (p. 432).

The MALQ identifies five categories of listening strategies: problem-solving, planning and evaluation, mental translation, person knowledge, and directed attention strategies. A number of studies have used it to investigate ESL/EFL learners’ listening strategy use, some of which have examined the impact of listening strategy instruction, with researchers reporting positive outcomes in regard to increased strategy use and listening proficiency (for example, Rahimirad & Shams, 2014; Vandergrift & Tafaghodtari, 2010; Zeng, 2012).

A few recent studies (Goh & Hu, 2014; Li, 2013; Zeng, 2012) have specifically focused on measuring metacognitive awareness and strategy use in relation to listening proficiency among Chinese learners of English as a foreign language and found a significant positive correlation between listening proficiency and overall MALQ score among Chinese university students. The strongest correlation was reported by Goh and Hu (2014), who show that 22% of the listening score differences can be explained by the MALQ scores.

The other studies (Li, 2013; Zeng, 2012), reported a similar, if less strong, correlation. These studies provide evidence that there is a significant positive relationship between listening comprehension and MALQ scores among this population. However, more research is needed to examine how proficiency level impacts types of listening strategy use, and differences in the use of individual strategies. This study contributes to filling this gap by addressing the following research questions:

1. What types of listening strategies are favoured by second-year college students in China?
2. What differences exist in types of listening strategies preferred by learners at varying proficiency levels?
3. What differences exist in the use of individual strategies by learners at high and low proficiency levels?

Methodology

Participants

Participants in this study were 127 second-year EFL students at a university in central China. Their ages ranged from 19 to 23, with a mean age of 20.42. They were majoring in marketing, internet engineering, architecture, nursing, or business English (Table 1).

Table 1. Characteristics of study participants ($N = 127$)

| Characteristics | | No. of participants | Percentage |
|-----------------|------------------|---------------------|------------|
| Gender | Male | 45 | 35% |
| | Female | 77 | 61% |
| Majors | Engineering | 34 | 27% |
| | Business English | 32 | 25% |
| | Nursing | 27 | 21% |
| | Marketing | 23 | 18% |
| | Architecture | 11 | 9% |

Note: Five participants did not report gender

Data collection instruments

The listening test of CET-4

Listening proficiency was measured using the listening section of the College English Test Band 4 (CET-4). The CET-4 was developed by the Ministry of Education of China to measure student English proficiency in listening, reading, and writing. The reliability coefficient for CET-4 is reported as .91 (Ling, 2015).

The listening section of the CET-4 consists of listening comprehension of short dialogs, longer dialogs, and passages. This section is worth 35%, or 249 points, of the cumulative CET-4 score (the highest possible cumulative score being 710 points). The dialogs and passages are “daily-life conversations with less complex topics and sentence structures, as well as stories, talks and narratives of general topics that most students are familiar with” (from the specifications for the CET-4, as cited in Chen, 2009, p. 30).

The Metacognitive Awareness Listening Questionnaire (MALQ)

The MALQ (Vandergrift et al., 2006) was used to measure students’ metacognitive awareness of listening strategies. The questionnaire contains 21 items that assess language learners’ awareness and perceived use of listening strategies. Each item is rated on a six-point Likert scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *partially disagree*, 4 = *partially agree*, 5 = *agree*, and 6 = *strongly agree*). The MALQ (Appendix A) consists of five subscales including problem-solving (6 items), planning and evaluation (5 items), mental translation (3 items), person knowledge (3 items), and directed attention (4 items).

To enhance participants’ understanding of the items, the MALQ was translated into Chinese by two college English teachers independently. Their translations were compared, and the most accurate and clear items were selected. This translation was then back translated by the principle researcher to assure accuracy. The English/Chinese bilingual MALQ was pilot tested with a group of 23 second year college students to check the clarity of the translated items. Final revisions were made based on their feedback.

The reliability of the subscales in the bilingual version of the MALQ used in this study (reported using Cronbach’s alpha) was compared with the reliability of Vandergrift et al.’s (2006) original implementation of the MALQ (Table 2). The comparison showed similar values for problem-solving and planning and evaluation strategies but lacked similarity for the remaining three subscales. The generally-accepted social science cut-off is that Cronbach’s alpha should be .70 or higher (Rovai, Baker, & Ponton, 2014). Due to the low reliability scores for person knowledge and directed attention, these two subscales were not included in the two main analyses that involve examination of the subscales. The mental translation subscale (.62) was included in these analyses; however, the results related to this subscale are interpreted with caution.

Table 2. The reliability of the subscales reported using Cronbach’ alpha

| Subscales | Cronbach’s alpha from Vandergrift et al. (2006) | Cronbach’s alpha from the current study |
|-------------------------|---|---|
| Problem solving | .74 | .85 |
| Planning and evaluation | .75 | .78 |
| Mental translation | .78 | .62 |
| Directed attention | .68 | .58 |
| Person knowledge | .74 | .51 |

Procedures

An English teacher from the university was invited to administer the MALQ, along with an information sheet, to 204 students from four intact classes before they took the CET-4. The information sheet contained demographic questions such as name, age, gender, and major, and it also contained a space for the listening score of their CET-4 to be entered. Participants were informed of the purpose of the study, that their involvement was voluntary, and that all information would be confidential. The students were also asked to give the teacher permission to enter their listening scores of the CET-4 on the information sheet when they would become available. Students were informed that (a) inclusion of names on the information sheet was for the purpose of matching their MALQ scores and CET-4 listening scores when the scores became available; and (b) once they were matched, the names would be deleted from the data set.

After students took the CET-4, their scores were sent to the university to be distributed to the students. The teacher, with the permission from the students and the administrator, entered the listening scores in the space provided on the information sheet.

Data analyses

Data were analysed using the SPSS statistical analysis software (version 22). Six items of the MALQ (3 and 8 for person knowledge, 16 for directed attention, and the three mental translation items 4, 11, 18) are negatively worded. According to the authors of the MALQ, these items should be reverse coded since they are strategies that skilled listeners try to avoid (Vandergrift et al., 2006). For example, for item 4, “I translate in my head as I listen”, if the student circled 1 (*strongly disagree*), it would be reverse coded as 6 (*strongly agree*), with the higher number indicating more effective strategy use.

Before proceeding with data analysis, data cases were first screened for missing CET-4 listening scores and for missing multiple scores on the MALQ. Not all students took CET-4 at the same time (they can take it several times before graduation) and the teacher only entered the listening scores of those who took the most current test. As a result of the screening, 127 participants with complete data were kept in the study.

The next step in the preliminary data analysis was to categorize the 127 participants into low, intermediate, and high proficiency groups based on their listening scores. The highest possible score for the CET is 710, of which 249 points are for the listening portion of the CET. There is no cut-off score that separates passing from failing; however, the majority of universities in China consider 425 the cumulative passing score (Gu, 2018). No information can be found regarding how these listening scores correlate to other measures of listening proficiency of Chinese college students.

For the purpose of this study, assignment into the listening proficiency groups was based on group size. Those whose scores were ranked in the top third were assigned to high proficiency, students whose scores were in the bottom third were assigned to low proficiency, and those in between were categorized as intermediate proficiency. Student scores were clustered rather than continuous, with gaps between scores. Also, due to the fact that many students had the same score, the three proficiency groups were not exactly the same size. For example, 18 students scored 135 points, and to keep the groups approximately same in size, these 18 students were assigned to the intermediate group. Table 3 shows the distribution of the proficiency groups.

Table 3. Proficiency groups

| Proficiency Groups | Listening Scores | Number of Participants | Percentage |
|--------------------|------------------|------------------------|------------|
| Low | 94 - 121 | 42 | 33% |
| Intermediate | 126 - 135 | 48 | 38% |
| High | 139 - 203 | 37 | 29% |

Three main analyses were conducted using descriptive statistics, multivariate analysis of variance (MANOVA), and independent samples t-tests.

Results

Research question 1: What types of listening strategies are favoured by second-year university students in China?

This question was examined through a descriptive analysis of overall strategy use, as well as strategy use in three of the MALQ subscales (two subscales were excluded due to their low reliability scores). Table 4 presents the means and standard deviations of these categories. The mean overall MALQ score was 3.67 on a six-point scale, showing that the participants reported a moderate level of strategy use and confidence regarding listening. Of the three MALQ subscales, participants scored considerably higher on problem solving, followed by planning and evaluation strategies; they scored the lowest on mental translation strategies.

Table 4. Pattern of strategy use by categories ($N = 127$)

| Strategy Categories | Mean | SD | Min | Max |
|-------------------------|------|------|------|------|
| Problem solving | 4.13 | 0.86 | 1.17 | 6.00 |
| Planning and evaluating | 3.52 | 0.92 | 1.00 | 5.80 |
| Mental translation | 3.04 | 0.93 | 1.00 | 5.67 |
| Overall strategy use | 3.67 | 0.48 | 2.38 | 4.95 |

Research question 2: What differences exist in types of listening strategies preferred by learners of varying proficiency levels?

Table 5 presents the descriptive statistics of strategy use by proficiency levels. The mean scores indicate that high proficiency listeners used more strategies overall than intermediate and low proficiency listeners. They also used more strategies in problem solving and planning and evaluating than participants at intermediate and low proficiency levels. However, they scored lowest in mental translation.

Table 5. Descriptive statistics of strategy use by proficiency levels

| Strategies | Proficiency | Mean | <i>SD</i> | <i>n</i> |
|-------------------------|--------------|------|-----------|----------|
| Overall strategy use | High | 3.90 | 0.48 | 37 |
| | Intermediate | 3.56 | 0.45 | 48 |
| | Low | 3.60 | 0.45 | 42 |
| Problem solving | High | 4.37 | 0.92 | 37 |
| | Intermediate | 4.02 | 0.76 | 48 |
| | Low | 4.04 | 0.91 | 42 |
| Planning and evaluating | High | 3.85 | 0.90 | 37 |
| | Intermediate | 3.48 | 0.91 | 48 |
| | Low | 3.26 | 0.87 | 42 |
| Mental translation | High | 2.84 | 0.94 | 37 |
| | Intermediate | 2.92 | 0.86 | 48 |
| | Low | 3.35 | 0.94 | 42 |

To test whether the differences were significant, a MANOVA test was conducted. In this test, proficiency level is the independent variable (IV), while overall strategy use and the three listening strategy subscales are dependent variables (DVs). Box's Test of Equality of Covariance Matrices was conducted to check for possible violations of homogeneity covariance across the groups. The result was not significant ($p = .87$), indicating the assumption of equal covariance matrices was met.

Using an alpha level of .05, the MANOVA test was significant, Wilks' Lambda = .81, $F(8, 242) = 3.45$, $p = .001$, multivariate $\eta^2 = .102$. This significant F indicates that there are significant differences among the proficiency groups on the four dependent variables. The multivariate $\eta^2 = .102$ indicates that approximately 10% of multivariate variance of the dependent variables is associated with the group factor.

Prior to conducting follow-up ANOVAs, the homogeneity of variance assumption was tested for the overall strategy use and the three strategy subscales. Based on a series of Levene's F tests, the homogeneity of variance assumption for all variables was satisfied. One-way ANOVAs on the overall and each of the three strategy subscales were conducted as follow-up tests to the MANOVA. All of the ANOVAs were statistically significant at $p < .05$ except for the problem-solving subscale (Table 6). The effect sizes (partial eta squared) ranged from .095 to .032.

Table 6. One-way ANOVAs with strategy subscales as dependent variables and proficiency level as independent variable ($N = 127$)

| | Levene's | | ANOVAs | | η^2 |
|-------------------------|-------------|------|-------------|------|----------|
| | $F(2, 124)$ | p | $F(2, 124)$ | p | |
| Overall strategy use | 0.489 | .614 | 6.67 | .002 | .095 |
| Problem solving | 1.188 | .308 | 2.044 | .134 | .032 |
| Planning and evaluation | 0.465 | .629 | 4.427 | .014 | .067 |
| Mental translation | 0.554 | .576 | 3.724 | .027 | .057 |

Note: η^2 = Partial eta squared

Finally, a series of post-hoc analyses (Fisher's LSD) were conducted to compare mean differences across the three proficiency levels in overall strategy use and the strategy subscales that were significant ($p < .05$), excluding the problem-solving subscale (Table 7). Cohen's d for each comparison was also reported. Based on 800 meta-analyses in educational contexts, Hattie (2012) defined effect sizes in educational contexts as the following: less than .3 is a small effect size, .3 to .6 is a medium effect size, and more than .6 is a large effect size. Hattie's effect size definition was adopted for this study.

Results of this analysis reveal that there is a significant difference between the high and low proficiency groups in the overall strategy use and the strategies of planning and evaluating and mental translation. Differences with a large effect size were found in the overall strategy use and the use of planning and evaluating strategies. Significant differences with a moderate effect size were found in the use of mental translation strategies. However, strategy use in the mental translation category is reversed: students in the low proficiency group seemed to avoid mental translation strategies more than students in the high proficiency group. In other words, high proficiency listeners seemed to use more mental translation strategies than low proficiency listeners.

Significant differences were also found between high and intermediate proficiency groups in the overall strategy use and between intermediate and low proficiency groups in mental translation. Table 7 illustrates the differences between proficiency levels in all categories.

Table 7. Comparison of mean differences in strategy subscales between proficiency levels

| Strategy Subscales | High vs. Low | | | High vs. Inter | | | Inter vs. Low | | |
|-----------------------|-----------------|------|-----|-----------------|------|-----|-----------------|------|------|
| | Mean Difference | p | d | Mean Difference | p | d | Mean Difference | p | d |
| Overall strategy use | 0.30** | .004 | .64 | 0.34** | .001 | .73 | -0.04 | .689 | -.09 |
| Planning & evaluation | 0.60** | .004 | .68 | 0.37 | .061 | .41 | 0.23 | .234 | .25 |
| Mental translation | -0.51** | .014 | .54 | -0.09 | .668 | .10 | 0.43* | .029 | .47 |

Note

*The mean difference is significant at the .05 level

**The mean difference is significant at the .01 level

d = Cohen's d

Research question 3: What differences exist in the use of individual strategies by learners of high and low proficiency levels?

Research Question 3 concerns the differences between high ($n = 37$) and low ($n = 42$) proficiency students in terms of their use of individual strategies. Independent samples t tests comparing the mean scores of all the strategies ($n = 21$) between the high and low proficiency groups revealed that significant differences exist in six specific listening strategies ($p < .05$), three in the planning and evaluation subscale, and one in each of the three subscales of problem solving, mental translation, and directed attention. Table 8 illustrates comparison between the two groups in the six specific strategies.

Table 8. Comparison between high and low proficiency groups in the use of six strategies

| Strategies | High | | Low | | Mean Difference | Effect Size (<i>d</i>) | <i>p</i> - Value |
|--|----------|-----------|----------|-----------|--------------------|-----------------------------|---------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | |
| 1. Before I start to listen, I have a plan in my head for how I am going to listen. (P & E) | 4.24 | 0.93 | 3.31 | 1.09 | 0.93 | .92 | .000** |
| 2. I have a goal in mind as I listen. (P & E) | 4.27 | 1.15 | 3.43 | 1.31 | 0.84 | .68 | .003** |
| 3. I translate in my head as I listen. (MT) | 2.43 | 1.19 | 3.24 | 1.38 | -0.81 | .63 | .007** |
| 4. I focus harder on the text when I have trouble understanding. (DA) | 4.46 | 0.84 | 3.93 | 1.22 | 0.53 | .51 | .029* |
| 5. As I listen, I quickly adjust my interpretation if I realize that it is not correct. (PS) | 4.14 | 1.25 | 3.57 | 1.11 | 0.56 | .48 | .037* |
| 6. After listening, I think back to how I listened, and about what I might do differently next time. (P & E) | 3.84 | 1.30 | 3.29 | 1.09 | 0.55 | .46 | .044* |

Notes

* The mean difference is significant at the .05 level.

** The mean difference is significant at the .01 level.

P & E: Planning and Evaluation, MT: Mental Translation, DA: Direct Attention, PS: Problem Solving

Based on Hattie's (2012) effect size definition, three of the six specific listening strategies have a large effect size with Cohen's *d* ranging from .63 to .92, and three have a medium effect size with Cohen's *d* ranging from .46 to .51. Since the items in the mental translation subscale are reverse coded, a lower score means that participants use more of the strategy. It is interesting to note that the high proficiency students scored significantly lower on the specific item "I translate in my head as I listen", with a large effect size.

Discussion and implications

The purpose of the study was to identify the types of metacognitive strategies used by skilled EFL students in China, and to identify the differences in specific strategy use between more and less skilled listeners.

The findings of this study indicate that university students in China favour problem-solving strategies the most, strategies in planning and evaluation somewhat less, and (avoiding) mental translation strategies the least. This is consistent with the findings of Li's (2013) study of the metacognitive awareness in listening among non-English major university students in China. Her participants favoured problem-solving and directed attention strategies the most, followed by planning and evaluation strategies, with mental translation and person knowledge as the least favoured strategies.

The examination of the types of strategies by proficiency level shows both similarities with and differences from other studies. The current study found no significant difference across proficiency levels in problem-solving strategies, which is in contrast to other studies which suggest that high proficiency learners use significantly more problem-

solving strategies than low proficiency learners (for example, Goh & Hu, 2014; Li, 2013). Some researchers (for example, Macaro, Graham, & Vanderplank, 2007) have also suggested that less-skilled listeners draw heavily upon contextual and co-textual information to form hypotheses (not necessarily correct ones) of what is heard; in other words, less-skilled listeners frequently use problem-solving strategies to compensate for gaps in their linguistic knowledge.

On the other hand, the use by high proficiency students of more planning and evaluation than low proficiency students is consistent with other studies (for example, Goh, 1998; Li, 2013). This result supports the notion that strategy instruction develops learners' metacognitive awareness and strategy use when listening (Graham & Macaro, 2008).

A surprising finding is that high proficiency listeners reported using more translation strategies than low proficiency listeners. It is generally agreed that translating word-for-word impedes listening comprehension, is usually associated with low proficiency L2 listeners (Eastman, 1991) and should be avoided to become a skilled listener (Vandergrift et al., 2006). One possible explanation for the unusually frequent use of translation strategies by high proficiency listeners in this study could be that translating during listening helps rather than hinders comprehension, especially in an EFL context such as China, where translation activities in the language classroom are prevalent. According to Butzkamm and Caldwell (2009), using the native language in the classroom is "the greatest pedagogical resource" (p. 13) and can enhance learners' confidence and focus on meaning. Another interpretation of this finding is that perhaps students were not actually translating word-for-word during listening (although they reported doing so) but were interpreting meaning by drawing on their first language. If this is the case, students may have been using problem-solving strategies, not translating strategies. The same observation was made by Vandergrift and Tafaghodtari (2010), who found in their study that there was an increase of reported mental translation after a metacognitive, process-based approach to teaching second language listening over a semester. However, after analysing the interview data, they concluded that the participants did not use word-for-word translation but appeared to confuse word recognition and inferencing with translation.

Of the six specific strategies identified as separating high and low proficiency listeners, three of them fall under the planning and evaluation category. Students in the high proficiency group have a goal in mind before listening, have a plan for how to accomplish the goal, and reflect on what they might do differently the next time. Although students in general use more problem-solving strategies to make inferences and to monitor and evaluate understanding, the high proficiency listeners differ from low proficiency listeners in using strategies to monitor and evaluate understanding ("As I listen, I quickly adjust my interpretation if I realize that it is not correct"). In addition, although directed attention strategies are popular among university students in China, and they know that they must concentrate hard when listening to unfamiliar texts, high proficiency students may be able to focus more on solving problems rather than focusing on individual words or messages ("I focus harder on the text when I have trouble understanding"). They may be able to accomplish this by focusing on various parts of the text to confirm what they have just heard.

One limitation of this study is the low reliability scores for two of the five subscales on the MALQ for this population. Since the inclusion of subscales that have low reliability may result in inaccurate estimates of association, we excluded these two subscales in relevant analyses. Interestingly, the study conducted by Goh and Hu (2014) among Chinese EFL learners in Singapore reported acceptable reliability for the subscales.

Future studies using the MALQ among Chinese EFL learners may shed additional light on this issue.

A second limitation of the current study is the reliance on quantitative data and a lack of qualitative data to investigate more fully how mental translation strategies were used during the listening test. Including qualitative methods such as interviews to examine what students think and do about strategy use, especially the use of mental translation strategies while listening would shed more light on the nature of strategy use. We recommend that further research be conducted using qualitative data and analysis in conjunction with quantitative measures.

Conclusion

The findings in this study lend support to the existing body of literature that shows the important role of learners' strategies and metacognitive knowledge in listening proficiency (for example, Graham & Macaro, 2008; Vandergrift & Goh, 2012). Although a causal relationship between metacognitive awareness and listening proficiency cannot be assumed, the results point to the fact that low proficiency listeners do differ significantly from high proficiency listeners and may benefit from help in developing their strategies and metacognitive awareness in listening.

As argued by Field (2008), teachers need "to first establish what their learners' listening needs are, and then to go on to consider how to address them" (p. 452). Developing a thorough understanding of learners' metacognitive awareness and listening strategy use should be a necessary precursor to determining priorities for effective instruction to help learners become successful listeners. Teachers can use the MALQ to identify learners' needs, taking into consideration not only the types of strategies that students favour, but also the specific strategies.

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Appendix A. The original monolingual questionnaire (Vandergrift et al., 2006)

Metacognitive Awareness Listening Questionnaire

The statements below describe some strategies for listening comprehension and how you feel about listening in the language you are learning. Do you agree with them? This is not a test, so there are no “right” or “wrong” answers. By responding to these statements, you can help yourself and your teacher understand your progress in learning to listen. Each statement is followed by six numbers, 1, 2, 3, 4, 5, and 6 and each number means the following:

| | | | | | |
|----------------------|----------|----------------------|-----------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Partly agree | Agree | Strongly agree |
| 1 | 2 | 3 | 4 | 5 | 6 |

After reading each statement, **circle the number** (1, 2, 3, 4, 5, or 6) which applies to you. Note that there are **no right or wrong responses** to any of the items on this survey.

Statement

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