

Learners' Self-Reports on Comprehension and Learning Strategies for Listening

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This article reports the results of a questionnaire study conducted on 118 ESL learners from China to identify comprehension and learning strategies used for listening. The study also examined the interaction between gender and strategy use. The variables in the questionnaire were based on the strategies and their respective tactics identified from a qualitative study conducted with a similar group of learners. A strategy framework that comprised metacognitive, cognitive, social/affective categories was adopted. A distinction was made between comprehension and learning strategies. Whereas comprehension strategies refer to those used for facilitating understanding during listening, learning strategies are for improving listening ability in general. Out of 15 comprehension strategies, respondents reported using 5 strategies frequently. Of the 4 learning strategies, only one was used frequently. Some studies on strategy use have reported differences between male and female learners. The present study, however, showed differences to be small and none came close to any statistical significance. In fact, there were remarkable similarities between the two gender groups. Both groups reported a high level of use for 12 tactics and a low level of use for four tactics. These similarities suggest that factors other than gender might have had an influence on strategy choice. On the whole, the learners reported a moderate level of strategy use.

Introduction

It may be fair to say that until recently there has been little concerted effort in most parts of China to help students develop their English listening comprehension until they reach tertiary education. In the universities,

where both undergraduates and postgraduates have to complete prescribed courses and pass English exams before their degrees are awarded, the teaching and learning of listening becomes more important (Cortazzi & Jin, 1996). Before that, school students learning English generally have few reasons or opportunities to develop their listening. This situation, however, may be changing in many parts of China. With the country's recent socio-economic and political developments, many people have ambitions of using English fluently in furthering their studies and careers. They are therefore prepared to invest time and money in developing their oral communication skills. Moreover, a new set of ELT textbooks which places more emphasis on speaking and listening competence is gradually reaching different levels in China's schools (Cortazzi & Jin, 1996). With the use of these textbooks, we can expect the development of listening and speaking fluency of the new generation of Chinese learners to receive greater systematic attention. In view of these important developments and the intrinsic importance of listening comprehension to language acquisition, we can envisage listening research to play a key role in informing the teaching and learning of English among Chinese learners.

Although research into learner listening has been on the increase in these last two decades (see McDonough, 1999; Rost, 2002; Rubin, 1994), there is still relatively little research on listening strategies of learners from the Republic of China. The present study was an attempt to gain further insights into this area. A questionnaire '*Techniques for Learning to Listen*' (TELL) was used to examine strategy use among a group of tertiary-level students. The items were derived mainly from an inventory of strategies and tactics identified in the study reported in Goh (1998). This earlier work was an introspective study with a similar group of Chinese learners, and the data were obtained through immediate retrospective verbalisations and listening diaries.

Background

In her review of second language listening comprehension research, Rubin (1994) listed five factors that researchers believed affected listening comprehension: text, interlocutor, task, listener and process. Research on listening strategies is a key focus of the last factor — process characteristics. Different conceptual frameworks have been adopted in examining strategy use. For example, Laviosa (1991) used a problem-solution cognitive framework in a study of receptive strategies. More recently, a

first language reading comprehension model proposed by Pressley and Afflerbach (1995) was adapted by Gruba (1999) for investigating video-mediated listening comprehension.

Several other researchers have applied or adapted models of general learning strategies which included cognitive, metacognitive and social/affective strategies (O'Malley & Chamot 1990; Oxford 1990). Studies that described strategies through one or more of these categories include those by Bacon (1992), Vogely (1995), Young (1996), Goh (1998) and the present study. *Cognitive* strategies are used to process input directly by transforming it into a mental representation that can be stored and recalled. Common cognitive strategies identified for comprehension are inferencing, elaboration, prediction (also referred to as forward inferencing), translation, contextualisation (e.g., O'Malley, Chamot & Küpper 1989; Oxford, 1990; Ross, 1997; Rost, 1983, Rubin 1987; Young 1997) and visualisation (DeFillipis, 1980). *Metacognitive* strategies are used to control and regulate cognitive processes that occur at every stage of comprehension to ensure that they proceed efficiently. They are also used to manage difficulties that arise during comprehension. Metacognitive strategies can be divided into three categories based on their roles in managing cognition: planning, monitoring and evaluation. Common metacognitive strategies identified in listening include attention monitoring, comprehension monitoring, selective attention and self-evaluation (e.g., Bacon, 1992; Chamot, 1995; Young 1997). *Social* strategies involve getting speakers to assist directly in improving comprehension while *affective* strategies enable the listeners to control emotions that interfere with comprehension. Global query/reprise (Rost & Ross, 1991; Vandergrift, 1997), which include asking for repetition, rephrasing, or simplification, is an example of a social strategy.

Besides identifying strategies used for listening, some studies have also examined the interaction between gender and strategy use. Bacon and Finnemann (1990, cited in Bacon 1992) who conducted a questionnaire on comprehension and learning strategies among university level learners found a significant difference in the responses of men and women. In a subsequent study that focused on comprehension strategies, Bacon (1992) found that women used the metacognitive strategy of monitoring more than men though the difference was not statistically significant. There was also no significant difference in the kinds and incidence of cognitive strategies used. Young (1996) reported that women listeners used metacognitive and social/affective strategies more often than men, with the difference in

metacognitive strategies reaching significance. In research on general learning strategies, significant relationships between gender and strategies have been reported. Female learners tended to use more social strategies and displayed a higher frequency of use (Oxford & Nyikos, 1989; Oxford, Nyikos & Ehrman 1988). Affective strategies were also reported to be used significantly more by female learners (Goh & Kwah, 1997).

Operationalisation of Strategies

Many strategy researchers assign every technique that learners use as a strategy. A disadvantage of this is that it leads to long lists of strategies and the process of creating these lists can become “unwieldy” as Rost (2002, p. 111) noted. Other researchers make the distinction between general and specific strategies. Such a differentiation between generality and specificity is useful as it acknowledges that certain mental techniques actually belong to the same broad strategic approach. Nevertheless, it does not sufficiently distinguish a general strategy from its operationalisations.

The present study uses the strategy-tactic distinction to reflect the different ways in which a strategic approach is realised. The term ‘tactic’ is used here to refer to individual techniques through which a general strategy is put into action (following Snowman, 1986, Schmeck, 1988). In listening comprehension, selective attention, which is a metacognitive strategy, can be operationalised through several tactics, such as noticing familiar words and paying attention to intonation. A strategy for developing listening such as management of learning could be operationalised by several tactics with practical benefits. For more examples, please see Appendix I for the tactics and their respective strategies discussed in this study.

Oxford and Cohen (1992) noted that there could be confusion about hierarchic relationships among strategies and also advocated a strategy-tactic distinction as a way of offering greater conceptual clarity in ongoing discussions about strategies. They argued that such a distinction could overcome the problem of “hypertaxonomizing” where overly long lists of strategies are produced. For example, the strategy list for listening in Oxford (1990) contains about 50 items. An added advantage of examining tactics rather than just broad strategies for comprehension is that it can enhance our understanding of comprehension processes. An examination of how tactics combine to facilitate comprehension at different points of listening can reveal qualitative differences between learners when the same

strategies are applied. This may offer some insights into why some learners are more effective listeners. As explorations of interaction patterns of comprehension tactics are beyond the scope of the present article, please see Goh (2002) for further discussions.

The Study

The aim of this study was to identify the strategies and tactics used by a group of Chinese ESL learners for assisting their comprehension as well as for developing their overall listening ability. The following research questions were asked:

1. Which strategies do the learners frequently use to assist them in their listening comprehension?
2. Which learning strategies do the learners frequently use for developing their listening ability?
3. Do male and female students differ significantly in their use of comprehension and learning strategies for listening?

Strategies identified for research question 1 are referred to here as *comprehension* strategies while those for research question 2 are *learning* strategies. This is to distinguish between strategies applied during use or actual communication and those that improve learning in general (see Rubin, 1987 and Rost, 2002 for a discussion of communication and learning strategies, and Cohen, 1998 for strategies in learning and using a language). Research question 1 investigated those strategies that the learners perceived themselves as using when they had to process aural input. Research question 2 examined strategies which they used for enhancing day-to-day efforts at improving their overall listening ability.

Participants

The respondents in this questionnaire study were 118 tertiary-level Chinese students newly enrolled in an intensive English language programme in a Singapore university. There were 94 males and 24 females. Their average age was 18. This unequal distribution of male and female students was representative of the enrolment trend in the said English language programme. The enrolment figures for the last four cohorts of students showed the ratio of male to female to be about 4:1. This is perhaps unsurprising because the students were on scholarships for

undergraduate courses that have traditionally been the domain of male students everywhere: engineering, computer science and computer technology. Before coming to Singapore, these students had all studied a science-based course for one semester in a Chinese university.

Instrument

The items in the *Techniques for Learning to Listen* questionnaire (TELL) reflected a number of tactics for operationalising comprehension and learning strategies (see Appendices I and II.). The items were written in English. This questionnaire underwent several stages of development, beginning with the draft version that consisted of two main parts. Part one focused on comprehension strategies and included all cognitive and metacognitive tactics identified from the introspective study reported in Goh (1998). The second part focused on learning strategies which were based on a study of Chinese learners' task and strategic knowledge about listening (Goh, 1997). The inclusion of variables identified from empirical research was an attempt to enhance the validity of the questionnaire study.

A pre-pilot test was conducted on the first draft by asking a group of Chinese learners (author's students) to answer the questions during a listening lesson. Difficulties with understanding the wording and other queries were noted down. The questionnaire was then edited for precision and language. Its length was cut down by removing several items on learning strategies which did not yield results that sufficiently differentiated the respondents. Examples of these items included those that referred to listening to the different radio stations available in Singapore, including the BBC world service, and watching various television programmes.

A few students had said that they could not fully understand the meaning of some items on comprehension tactics. These items were retained but the language and the formulation of the questions were further simplified. It was also decided that the final TELL questionnaire would focus mainly on comprehension rather than learning strategies. The reason was that at the time of the study, there were several surveys on learning strategies for listening but studies on perceived use of comprehension strategies were still lacking.

The edited items were divided into more sections and the revised version was pilot-tested several months later with a new intake of students. 20 students from a listening class were invited to answer the questionnaire. They were told to read each item and consider times when they had to

listen to spoken English. In a short interview after the pilot test, the students said that they could understand all the items, although some had to consult a dictionary for several words. They also said that they found many of the tactics mentioned in the questionnaire potentially useful although they did not always use them.

The final version of the TELL questionnaire¹ was administered to the rest of students studying on the language programme. It consisted of several pages with a cover note explaining the purpose of the study. The cover note encouraged them to be honest about their responses and to base their responses on actual listening experiences. An answer sheet with all the sections and numbers was provided. On it was printed the question “Have you used these techniques before?” To ascertain the learners’ frequency of using specific tactics of the various strategies, they were asked to respond based on a 5-point scale from (1) never (2) once or twice (3) sometimes (4) most of the time (5) all the time. The items’ internal consistency was calculated. Items that had a low consistency value were deleted before further analysis was conducted. The remaining 52 items had an overall alpha reliability of 0.79. (See Appendix II.) The alpha reliability values for the various sections and sub-sections are shown in Appendix III.

The Survey

The survey was administered during the listening class in the second week of the language programme. At the time of the study, the respondents had been in Singapore for about three weeks. They were from six classes. The author administered the survey to four of these classes while a colleague helped with the other two. The same procedure was used in each class. Explanations were given mainly in English with Chinese being used whenever necessary. A total of 141 students responded. Students who did not wish to participate were asked to return a blank answer sheet. 23 response sheets were excluded because of incomplete responses. There were no blank sheets.

Data analysis

Mean frequency scores and significant differences were examined. First of

¹ The TELL questionnaire has since been translated into Chinese for another study.

all, strategies used for facilitating comprehension were examined under the broad categories of metacognitive (Part I), cognitive (Part II) and social/ affective (Part III) strategies. Next, the frequency of use for each strategy was examined for each of the categories. The four learning strategies (Part IV) were examined at this stage. Finally, frequency scores for individual tactics were calculated. The mean scores of male and female students were compared and these were examined for significant differences. Two tests were used. First the t-test was conducted. Due to the unequal distribution of male and female respondents, the Mann-Whitney U test was also conducted.

Results

This section presents the results to the three research questions. The following scores were adopted as benchmarks for indicating levels of use:

High	5.0 – 4.0
Moderately high	3.9 – 3.5
Moderate	3.4 – 2.6
Moderately low	2.5 – 2.1
Low level of use	2.0 – 1.0

A. Comprehension Strategies

Table 1 shows that all three categories of strategy had means of about 3.00. This indicates an overall moderate level of use for metacognitive, cognitive and social/affective strategies.

Table 1. Frequencies of use for three categories of listening comprehension strategies

	N	Minimum	Maximum	Mean	SD
Part I Metacognitive	118	2.05	4.21	3.21	0.44
Part II Cognitive	118	2.22	4.11	3.23	0.42
Part III Social / affective	118	1.33	4.67	3.09	0.78

A further analysis according to individual strategies was conducted. The scores were derived from taking the mean of the scores for individual tactics that belonged to the same strategy. For example, the score for the

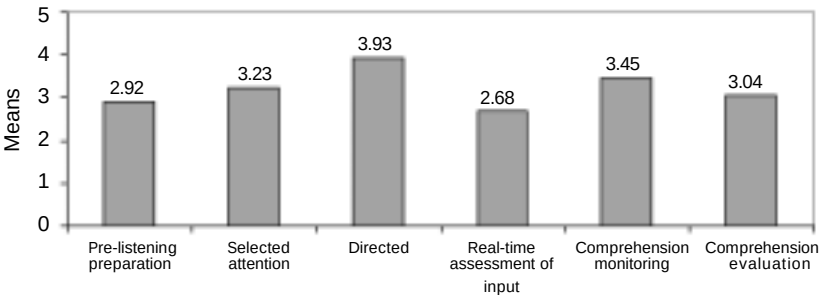


Figure 1. Metacognitive Strategies

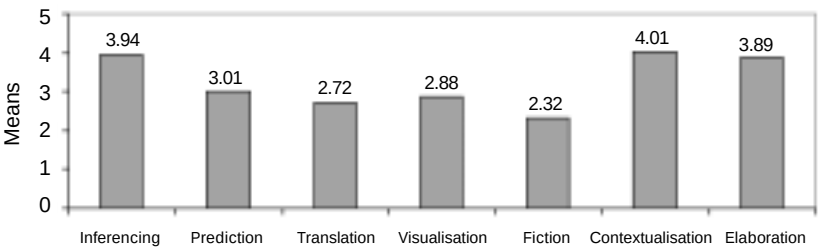


Figure 2. Cognitive Strategies

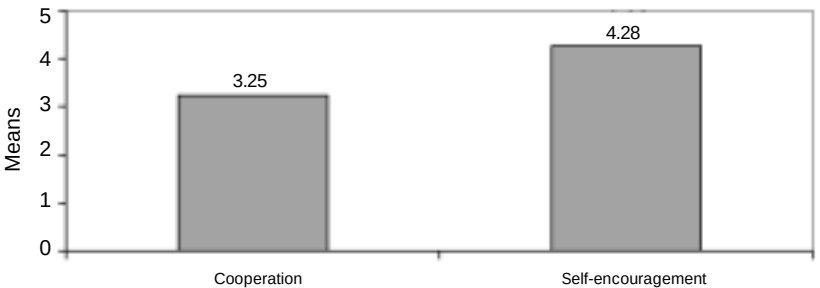


Figure 3. Social/Affective Strategies

strategy of inferencing was calculated from the scores of five items (items 20–24). Figures 1, 2 and 3 compare the mean frequency for each strategy within their respective categories.

We can see that although the level of use for the broad categories of cognitive, metacognitive and social/affective strategies was only moderate (Table 1), a number of individual strategies in fact had high levels of use. In other words, the learners focused on only a few selected strategies in

each category to help process spoken English. Correspondingly, many strategies were seldom or never used. Figures 1 to 3 show five comprehension strategies with mean scores close to or above 4.0, suggesting that the levels of use for these strategies were moderately-high to high. These strategies were directed attention, inferencing, contextualisation, elaboration and self-encouragement. The affective strategy of self-encouragement had the highest mean of 4.28 and a mode of 5.0.

To examine qualitative variations, individual tactics for operationalising each strategy was analysed. Strategies such as inferencing and selective attention can be operationalised by a number of tactics. An analysis of the frequency of use for each tactic would shed light on differences in the respondents' strategy application. Table 2 shows 12 tactics with a moderately-high to a high level of use. More than two-thirds (67%) of the 118 respondents reported that they used these tactics 'most of the time' or 'all the time'. Nine of these tactics operationalised the five high frequency strategies identified earlier. Two of the remaining three were selective attention tactics and one was for pre-listening preparation.

Table 2. Listening tactics used frequently by the majority of respondents

Tactic	Strategy	Frequency means	Number of respondents	Percentage
1. Use visual clues	Inferencing	4.35	105	89.0%
2. Listen for gist	Selective attention	4.19	99	84.9%
3. Stay positive	Self-encouragement	4.28	98	83.0%
4. Find related information on hearing a key word	Contextualisation	4.15	93	78.9%
5. Continue to listen in spite of difficulty	Directed attention	4.05	92	78.0%
6. Use contextual clues	Inferencing	4.08	91	77.1%
7. Use familiar content words	Inferencing	4.06	90	76.3%
8. Encourage oneself to relax	Pre-listening preparation	3.93	84	71.2%
9. Relate one part of text to another	Contextualisation	3.86	82	69.5%
10. Draw on world knowledge	Elaboration	3.89	82	69.5%
11. Concentrate hard	Directed attention	3.82	81	68.6%
12. Attend to speakers' body language	Selective attention	3.71	80	67.5%

In sum, the results show that the respondents used only five strategies frequently to facilitate listening comprehension. One strategy had a relatively low level of use while the rest were used moderately. (See Table 3.)

Table 3. Listening comprehension strategies and their frequencies of use

<i>Moderately-high to high</i>	Inferencing, directed attention, elaboration, contextualisation, self-encouragement
<i>Moderate</i>	Real-time assessment of input, pre-listening preparation prediction, translation, visualisation, comprehension monitoring, comprehension evaluation, selective attention, cooperation
<i>Moderately-low to low</i>	Fixation

B. Learning Strategies

Due to the small number of strategies in this part of the questionnaire, the analysis for the three broad categories was not done. Figure 4 shows the mean frequency scores for all four learning strategies. The category of strategy they belong to is indicated.

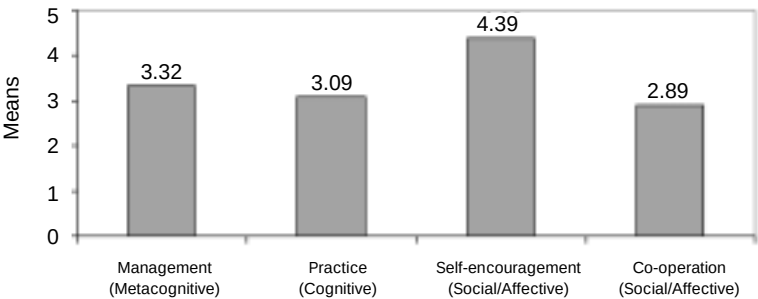


Figure 4. Learning Strategies for Improving Listening

Figure 5 shows the level of use reported for each tactic. Similar to the results for comprehension strategies, the strategy with the highest mean frequency was the affective strategy of self-encouragement (Mean = 4.39; Mode = 5.0). This was operationalised in this context by the tactics of persevering in practice in spite of slow progress and being patient in building up one’s listening ability gradually. The strategy for management of learning reported a moderate level of use. Nevertheless, 78.9% of the

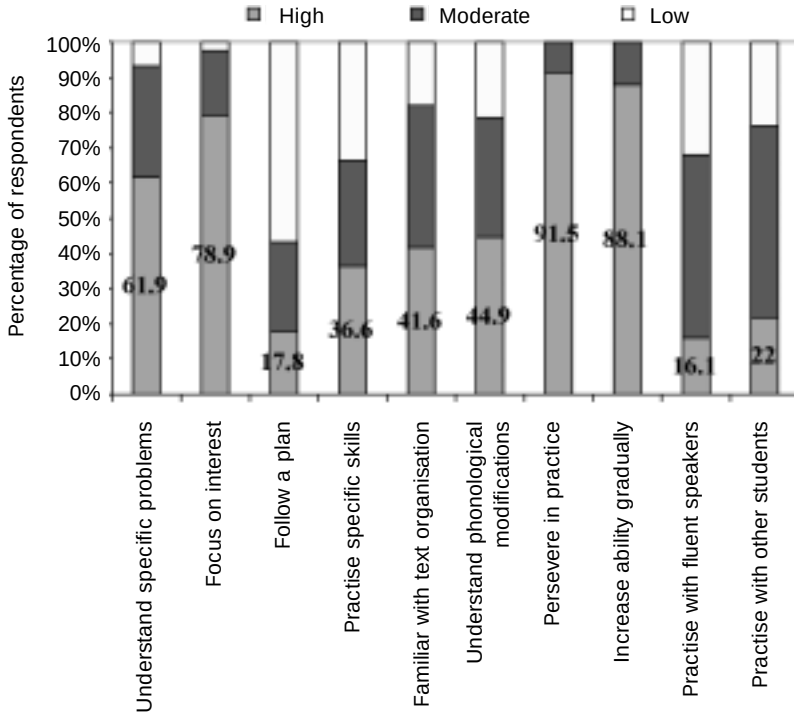


Figure 5. Levels of use for ten learning tactics listening development

respondents reported that to practise listening they frequently focused on materials and subject matter they were interested in. On the other hand, another management tactic — to follow a practice plan closely — had a low level of use among more than half of the 118 respondents. As for the three listening practice tactics, less than half of the respondents used them regularly. The two cooperation tactics were used even less frequently.

In sum, when it came to making a conscious effort at developing their listening outside class, strategies which could improve listening directly were used only moderately. The indirect strategy of self-encouragement, however, was regularly applied by about 90% of the learners.

C. A Comparison of Male and Female Learners

A comparison was conducted using the t-test and the Mann-Whitney U test

at each of the three levels of responses in the questionnaire: broad strategy categories, strategies within each category and their respective tactics. Contrary to the findings of some studies mentioned earlier, there were no significant differences between male and female learners in their choice of comprehension and learning strategies. Further examination of the responses in fact revealed a remarkable degree of similarity between the two groups.

This similarity was clearest when the scores for each of the 52 tactics were further compared (see Table 4). Male learners reported a high level of use for 10 of the 12 tactics while female learners reported a high level of use for 11. The remaining tactics also recorded moderately high levels of use. It may therefore be concluded that these 12 tactics were important to both male and female learners. A similar pattern can be seen in the four tactics reported low levels of use (see Table 5.)

Table 4. Learning tactics with a high level of use by male and female learners

Item	Tactic	Strategy	Male	Female
3	Encourage oneself to relax	Pre-listening preparation	3.88	4.13
4	Listen for gist	Selective attention	4.12	4.50
12	Continue to listen in spite of difficulty	Directed attention	4.04	4.08
20	Use familiar content words	Inferencing	4.11	3.88
23	Use visual clues	Inferencing	4.33	4.42
24	Use contextual clues	Inferencing	4.09	4.08
35	Find related information on hearing a key word	Contextualisation	4.11	4.33
37	Draw on world knowledge	Elaboration	3.86	4.00
41	Stay positive	Self-encouragement	4.29	4.25
44	Listen to what one's interested in	Management	4.01	4.29
49	Persevere in practice	Self-encouragement	4.38	4.46
50	Be patient and build up ability gradually	Self-encouragement	4.34	4.50

Table 5. Learning tactics with a low level of use by male and female learners

Item	Tactic	Strategy	Male	Female
2	Memorise pronunciation of content words	Pre-listening preparation	2.02	1.88
31	Stop to think about spelling of words	Fixation	2.04	1.67
32	Repeat sounds of difficult words	Fixation	1.78	2.00
45	Follow a systematic plan	Practice	2.01	2.03

Discussion

The cognitive strategy which had the highest level of use — making inferences at lexical and semantic levels — is crucial to both L1 and L2 listening comprehension (Rost, 1990). More than 75% of the respondents used visual clues, contextual clues and familiar content words to help them bridge gaps in their understanding. In addition, they frequently contextualised new input within familiar social, linguistic or factual framework. Interpretations were also embellished and expanded ('elaborated') in order to make them personally meaningful and complete. Knowledge about the topic, however, was reported to be used only moderately. This is probably because the learners were not always familiar with the contents of what they heard and were therefore unable to use this aspect of their prior knowledge. Nevertheless, the overall high level of use of other top-down tactics in the above strategies has again underscored the key role that prior knowledge plays in learner comprehension. As Skehan (1998) pointed out, learners who lack knowledge of the target language will most likely exploit their "schematic and contextual knowledge to overcome their systemic limitations" (p. 15).

A key feature of strategy use must be the high level of use for the affective strategy of self-encouragement for both comprehension and learning ($M = 4.28$ and 4.39 respectively). This supports the observation that much of the Chinese culture of learning, even in modern day China, is founded on Confucian values and beliefs (Biggs, 1998; Bond, 1991; Jin & Cortazzi, 1998). Learning attitudes that might have influenced the high levels of use for self-encouragement tactics include "seeing learning as a moral duty" and "believing that effort and hard work can compensate for lack of ability" (Jin & Cortazzi 1998, p. 757). In general, Chinese learners have been socialised from young to value learning and, even more importantly, to persevere. Success is attributed to hard work and failure is believed to be due to lack of effort rather than lack of ability. As Biggs (1998) noted, "this pattern of attributions clearly encourages persistence after failure" (p. 728). Thus, when the learners in the study did not understand everything they heard, they tried to remain positive. When they felt their overall progress in listening was slow, they persevered and continued to find ways to practise. They also tried to be patient and be content with building up their ability gradually. Their persistence in the face of challenge and disappointments reflects an old Chinese adage: "With persistence and effort, one can make a needle of an iron rod". While

the learners' attitudes are praiseworthy, these were not always matched by their use of direct strategies for processing and managing listening. In other words, though long on persistence, the learners were generally short on techniques.

One strategy that the learners could benefit from using more frequently is comprehension evaluation. They did not seem to have the habit of checking the accuracy of their interpretation. Perhaps, they were content just to know that they had managed to make sense of the input. Of the four evaluation tactics, the one with the highest mean score ($M = 3.62$) was checking the meaning with classmates or teachers, indicating a moderately high level of use. The tactics of comparing interpretations with general knowledge and contexts or co-texts were used only moderately ($M = 2.99$; $M = 3.31$, respectively). The learners could have found the first tactic (asking classmates or teachers) a quicker way to confirm whether they were right or wrong than the other tactics. Even less frequently done was to paraphrase or explain their understanding to the speaker to check whether they were right ($M = 2.27$), indicating moderately-low level of use. This tactic is crucial to good listening regardless of first or second/foreign language situations. Unfortunately, it is also something that not many people do regularly even in their first language. However, considering the potential for misunderstanding to be greater in second/foreign language communication, learners might face considerable disadvantage for not using this tactic.

The most frequently adopted metacognitive strategy was directed attention. Both tactics that operationalised this strategy had mean scores of about 4.00. Although concentrating hard and continuing to listen in spite of difficulty are two useful tactics for not losing the general message, these tactics could also make listening a tense and stressful activity for language learners. In this regard, another metacognitive strategy could have been better utilised to determine how one should listen: the assessment of input as it unfolds. By deciding whether a problematic part is important to the overall message and the listening purpose, listeners could vary the intensity of their concentration. If something that is being said or thought as going to be said is assessed as non-crucial, listeners could relax a little rather than try to process everything thoroughly. This strategy could have a positive effect on overall comprehension.

Comprehension monitoring, an important strategy, had a mean score of 3.45, suggesting moderate use. The two tactics included here (items 14 and 15) may be considered as advanced monitoring tactics. We can assume

that the respondents engaged in a low-level form of comprehension monitoring, that is simply recognising whether or not they had understood but had generally failed to compare their developing interpretation with their general knowledge and the listening context. This lack of monitoring can have a negative effect on the eventual outcome. For example, learners may not recognise that they are on the wrong track and may eventually find that what they think they have understood does not make sense or is not what the speaker intends to convey. If listeners recognise any misinterpretations early, they may be able to use other tactics to redress the problem. Thus, a moderate use of the two advanced monitoring tactics in the questionnaire suggests inadequate monitoring of comprehension.

Although selective attention did not have a high mean score, two of its tactics showed high to moderately-high levels of use by the majority of the learners: listen for gist (84% of the respondents; $M = 4.19$) and attend to speakers' body language (67.5%, $M = 3.71$). Other tactics, such as notice discourse markers, wait for repetitions and attend to intonation, were only employed sparingly. As selective attention tactics focus on particular features of the input, the learners might have opted to use tactics that seemed less complicated. Noticing the speaker's body language, for example, does not require processing of language, but could greatly enhance comprehension by using the visual clues to draw inferences. This is corroborated by the fact that 89% of the respondents frequently used visual clues, for example, speakers' expressions and pictures, to make inferences (Item 23, Mean = 4.35). The narrow range of selective attention tactics reported may also suggest lack of planning. For example, noticing markers such as 'but' and 'next' could help listeners to follow the development of the message. By deciding in advance to notice these words, learners could have found it easier to arrive at the general meaning of the message or speakers' intention.

Metacognitive strategies were generally under used. One possible reason could be that these learners often encountered problems when perceiving and parsing the input. Their attention could have been mostly directed at recognising the sounds in the streams of speech, and processing them syntactically and semantically. This would have left little processing capacity for thinking about how they were actually processing the input. This might account for the higher levels of use for cognitive strategies reported. In other words, the learners spent more time making immediate sense of the input and less on managing the input and checking the meaning they had arrived at.

Another feature worth noting is the moderate use of social strategies for both comprehension (Mean = 3.25) and learning to listen (Mean = 2.89). The learners reported that they seldom asked interlocutors to explain, to slow down or repeat something, and to write down or spell a word that they did not understand. One possible explanation is that the learners did not always have the opportunity to do so. Given the large class size in China and Chinese students' perceptions that interrupting their teachers is rude (Jin & Cortazzi, 1998), the learners may have relied more heavily on other means of processing and managing the input. Another likely reason for this infrequent involvement of speakers in helping their listening is that the learners might have found it embarrassing to reveal to their interlocutors that they could not understand what was said. This is a more likely explanation for situations when the learners were listening to people other than their language teachers. When it came to learning to listen outside class, the learners seldom engaged other fluent speakers of English in conversation and they also did not actively seek out other language learners to practise their conversations. It might have been difficult for the learners to look for fluent speakers of English in certain places in China. In their two to three weeks in Singapore, it could also have been difficult for them to do so. Firstly, they might not have known anyone sufficiently well in such a short time. Secondly, since Putonghua (called 'Mandarin' in Singapore) is a lingua franca in the predominantly Chinese-populated island republic, the learners might have had few opportunities to use English outside their language classrooms. What is more interesting is that the learners also did not frequently involve their fellow students in oral practice.

Many of the learners revealed in informal interviews that listening was their weakest language skill and that they often experienced a great deal of anxiety related to it. Given their high level of motivation in learning English, one would therefore expect the learners to engage in concerted and focused practice. However, looking at the mean scores of individual learning tactics, it is apparent that the learners did not manage their development of listening adequately. Only 17.8% of the respondents had a plan for listening practice which they followed closely. This dismal figure could have been due to a lack of awareness about the ways listening can be developed. It might also have been due to a common misconception that listening is something one 'picks up' in and outside class. Thus, the learners might not have seen the need to make a plan for systematic practice. In spite of this, the learners did show other attempts at managing

their learning. Many chose materials they were interested in to listen to and some also tried to understand the specific problems they had with their listening.

Also noteworthy is the moderate scores for the three tactics that operationalised the strategy for listening practice (Mean = 3.09). Of the three tactics, the lowest score was recorded for the practise of specific skills such as listening for details and listening for gist ($M = 2.81$). This could suggest that on those occasions when the learners practised listening, they were merely listening to get the meaning without paying attention to the processes and skills involved. Alternatively, they could have been labouring over details in the input. Such a way of practice may yield very little results and can sometimes be demotivating. Other practice tactics that the learners did not fully exploit were sensitising themselves to phonological modifications in connected speech ($M = 3.19$) and learning about the organisation of various text types commonly encountered in listening ($M = 3.26$). All of these direct tactics, if employed regularly, could help to improve their comprehension.

Conclusion

The present study identified the range of strategies and tactics that a group of Chinese tertiary-level ESL students reported using for listening. The results showed no significant difference in male and female learners' strategy choice and frequency of use. One interpretation of this is that the core comprehension processes they engaged in when listening to English were similar to those for first language comprehension. It is also possible that the learners' academic predispositions made them equally inclined to use the same strategies and tactics as well as avoid certain ones. Equally possible is that their strategy use was influenced by the learning culture in China into which they had been socialised.

On the whole, the aim of this study has been achieved and the findings have also provided confirmation for an earlier study by the author. Some limitations, however, should be reported. Firstly, the data on comprehension strategies were based on the participants' self-reports of what they perceived themselves as doing when they listened to English. Although further introspective research with the same participants was originally planned, that had to be abandoned due to limited time and resources. These findings would therefore be more appropriately considered as perceptions of use, rather than actual use. Secondly, there was unequal distribution of

male and female respondents due to the enrolment pattern in the language programme from which the sample was drawn.

Besides research, the TELL self-report questionnaire also has potential for teaching. The questionnaire items could provide stimulus for collective instruction, group discussion or individual reflection in the language classroom. Teachers can use some questionnaire items to conduct process-oriented activities to help learners reflect on factors that may affect their comprehension processes and consider effective ways of managing and practising their listening outside class. Based on responses from their class, teachers could also conduct activities to sensitise learners to relevant aspects of English speech as well as practise using appropriate listening strategies and tactics.

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Appendix I

An Inventory of Comprehension Strategies and Tactics for TELL Questionnaire

COGNITIVE

Inferencing (Filling in missing information and guessing meaning of words)
 Use contextual clues
 Use familiar content words
 Draw on knowledge of the world
 Apply knowledge about the target language
 Use visual clues

Elaboration (Embellishing an interpretation to make it meaningful and complete)
 Draw on world knowledge
 Draw on knowledge about the target language

Prediction (Anticipating contents before and during listening)
 Anticipate general contents (global)
 Anticipate details while listening (local)

Contextualisation (Relating new information to a wider familiar context)
 Place input in a social or linguistic context
 Find related information on hearing a key word
 Relate one part of text to another

Translation (Changing words, phrases or sentences into L1 before interpretation)
 Find L1 equivalents for selected key words
 Translate a sequence of utterance

Fixation (Focussing attention on understanding a small part of a text)
 Stop to think about the spelling of unfamiliar words
 Stop to think about the meaning of words or parts of the input
 Memorise/repeat the sounds of unfamiliar words
 Memorise words or phrases for later processing

Visualisation (Forming a mental picture of what is heard)
 Imagine scenes, events, objects etc. being described
 Mentally display the shape (spelling) of key words

SOCIAL/ AFFECTIVE STRATEGIES

Cooperation
 Ask speaker to repeat
 Ask speaker to clarify
 Ask speaker to write or spell difficult words

Self-encouragement
 Remain positive in spite of difficulties

METACOGNITIVE

Pre-listening Preparation (Preparing mentally and emotionally for a listening task)
 Preview contents
 Rehearse sounds of potential content words
 Encourage oneself to relax

Selective Attention (Noticing specific aspects of input)
 Listen to words in groups
 Listen for gist
 Listen for familiar content words
 Notice how information is structured (e.g. discourse markers)
 Pay attention to repetitions
 Notice intonation features (e.g. fall and rise tones)
 Listen to specific parts of the input
 Pay attention to visuals and body language

Directed Attention (Monitoring attention and avoiding distractions)
 Concentrate hard
 Continue to listen in spite of difficulty

Comprehension Monitoring (Checking/ confirming understanding *while* listening)
 Confirm that comprehension has taken place
 Identify words or ideas not understood
 Check current interpretation with context of the message
 Check current interpretation with prior knowledge

Real-time Assessment of Input (Determining the value of specific parts of the input)
 Assess the importance of problematic parts that are heard
 Determine the potential value of subsequent parts of input

Comprehension Evaluation (Checking interpretation for accuracy, completeness and acceptability *after* listening)
 Check interpretation against some external sources
 Check interpretation using prior knowledge
 Match interpretation with the context of the message

Appendix II

Techniques for Learning to Listen Questionnaire (TELL)²

PART I

Before I listen to something in English

1. I first find out more about the topic.
2. I memorize the pronunciation of important words related to the topic.
3. I try to relax.
4. When I listen, I try to do the following:
 - Listen for the general meaning and not every word
 - Listen for familiar key words.
 - Pay attention to words in groups, not single words.
 - Notice marker words, such as 'but' and 'next'.
 - Wait for the speaker to repeat what is said.
 - Pay attention to the rise and fall in the speaker's voice.

10. Look at the speakers' movements and facial expressions.
11. I concentrate hard so that I can hear clearly what is said.
12. When I can't understand, I will continue to listen to other parts.
13. When I hear something I don't understand, I will immediately decide whether or not it is important to the whole message.
14. When I think I understand something, I will compare it with my general knowledge.
15. When I think I understand something, I will check if it fits in with the situation.

After I have finished listening,

16. I explain the meaning and ask the speaker if I am right.
17. I check the meaning with my classmates or teachers.
18. I compare the meaning with other things I know about the topic.
19. I check if the meaning fits with the whole message or situation.

PART II

When I don't understand something, I guess the meaning by using the following:

20. Other surrounding key words.
 21. My experience and knowledge about the topic.
 22. My knowledge about the English language (e.g. whether a word is an adjective or a noun)
 23. Information from pictures or the speakers' expressions.
 24. My knowledge about the situation.
- I do this to help my comprehension:*
25. Before I hear anything, I try to guess what will be said.
 26. I use what I have just heard to guess what the next part is.

Before trying to understand everything,

27. I first translate some difficult English words into my mother tongue.
28. I first translate the whole sentence into my mother tongue.

When I'm listening

29. I imagine a picture of what I hear.
30. I picture in my mind the spelling of some key words.
- When I hear words I don't recognize,
 31. I stop to think about the spelling.
 32. I try to repeat the sounds of the words.
 33. I stop to think hard about what they mean.
 34. I try to memorize the pronunciations so as to check the meaning later.

I do this to help my comprehension:

35. When I hear something new, I think about other information related to it.
36. I relate what I hear to other things the speaker has just said.
37. I use my experience and knowledge to expand the meaning of what I get.

Part III

When I don't understand something,

38. I ask the speaker to explain.
39. I ask the speaker to repeat or slow down.
40. I ask the speaker to write down or spell a word.
41. I try to be happy with what I understand.
42. I ask my teacher or friends to explain the meaning of difficult words or sentences.

Part IV

To improve my listening ability, I do the following:

43. I seek to understand the specific problems I have with my listening.
44. I try to improve by listening to those things I am interested in.
45. I have a plan for listening practice that I follow closely.
46. I practise specific skills, such as listening for details and listening for general meaning.
47. I familiarize myself with the organization of different types of spoken English (e.g. news, lectures, conversations).
48. I learn about the way sounds of words change when they are said in a sentence.
49. I encourage myself to practise listening even when I feel my progress is slow.
50. I try to be patient and build up my listening ability step by step.
51. I look for people who are fluent in English to talk with.
52. I look for other students to practise our conversations in English

² For permission to use this questionnaire or the Chinese translation, contact the author at cmcgo@nie.edu.sg

Appendix III

Variables in the TELL Questionnaire

Part	Variable	Brief description	No. of items	Alpha
I	Metacognitive strategies for comprehension	Tactics for operationalising six strategies used for planning, monitoring and evaluating listening comprehension.	19	0.60
II	Cognitive strategies for comprehension	Tactics for operationalising seven strategies for directly processing listening input.	18	0.68
III	Social/affective strategies for comprehension	Tactics for operationalising two strategies involving the interlocutors and the listeners	5	0.64
IV	Learning strategies	Tactics for operationalising four strategies for developing listening ability	10	0.64

Alpha for TELL questionnaire: 0.79