



***ASSOCIATION BETWEEN METACOGNITIVE LISTENING STRATEGY  
USE AND LISTENING COMPREHENSION ABILITY AND PROBLEMS  
AMONG MALAYSIAN ESL STUDENTS***

**SEYEDEHSIMA SADATMIR**

**FBMK 2019 27**



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By

**SEYEDEHSIMA SADATMIR**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in  
Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

**November 2018**

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## **DEDICATION**

To my beloved family, without whom nothing at all would be achieved

&

To my father' s soul



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

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**November 2018**

**Chairman : Professor Ain Nadzimah Abdullah, PhD**  
**Faculty : Modern Languages and Communication**

Listening comprehension is a fundamental part of both L1 and L2 communication. Although the number of research on different aspects of L2 listening comprehension has increased, there are still many other aspects that can be discovered about listening comprehension. One of the most problematic issues in research on listening comprehension is that the performance of the learner mostly includes mental procedures that are not directly noticeable. This research seeks to identify and describe the association of metacognitive listening strategy use of ESL students with different listening comprehension ability levels and comprehension problems based on the theory of cognitive process of listening. Both quantitative and qualitative methods were used in this research. The Listening section of International English Language Testing System (IELTS) was conducted to identify listening comprehension ability levels among 135 ESL students. Two adapted questionnaires, the Listening Comprehension Problem Questionnaire (LCPQ) and the Metacognitive Listening Strategy Questionnaire (MLSQ), were also distributed to the participants after completing the test in order to examine their perceived listening comprehension problems and metacognitive listening strategy use. The Think- Aloud (TA) method was used in this research in order to identify the types, frequency and patterns of metacognitive listening strategy use. Six cases were selected purposively from the participants in two groups of skilled and less- skilled listeners. They underwent TA procedures after TA training to expose the way they apply metacognitive listening strategies while doing a listening task. Verbal protocols obtained from the TA procedure were transcribed and analysed both quantitatively and qualitatively. The results revealed more frequent use of metacognitive listening strategies by the skilled listeners. Subsequently, the qualitative results exposed the linear sequence of Metacognitive Listening Strategy Use (MLSU) for all cases. This result showed the skilled cases applied linear patterns more than the less- skilled peers although there were some recursive moves in each pattern. This finding can be an effective start in visualizing and examining patterns of MLSU which is absent in the literature in a

variety of contexts. Moreover, TA procedure can be used as a dynamic methodology for investigating how to use strategies in EFL/ ESL teaching and learning.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**PERKAITAN ANTARA PENGGUNAAN STRATEGI PENDENGARAN  
METAKOGNITIF DENGAN KEMAMPUAN PEMAHAMAN PENDENGARAN  
DAN MASALAH PEMAHAMAN PENDENGARAN DALAM KALANGAN  
PELAJAR ESL MALAYSIA**

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Pemahaman pendengaran merupakan bahagian asas bagi kedua-dua komunikasi L1 dan L2. Walaupun penyelidikan ke atas aspek yang berbeza dalam pemahaman pendengaran L2 telah meningkat, masih terdapat banyak aspek lain lagi yang perlu diterokai mengenai pemahaman pendengaran. Salah satu isu yang bermasalah dengan penyelidikan mengenai pemahaman pendengaran ialah prestasi kebanyakan pelajar termasuklah prosedur mental yang secara tidak langsung ketara. Penyelidikan ini bertujuan untuk mengenal pasti dan menerangkan penggunaan strategi pendengaran metakognitif oleh pelajar ESL dengan tahap kemampuan pemahaman pendengaran yang berbeza dan masalah pemahaman berdasarkan teori proses kognitif pendengaran. Kedua-dua kaedah kuantitatif dan kualitatif telah digunakan dalam kajian ini. Bahagian pendengaran Sistem Pengujian Bahasa Inggeris Antarabangsa (IELTS) telah dilaksanakan bagi mengenal pasti tahap kemampuan pemahaman pendengaran dalam kalangan 135 orang pelajar ESL. Dua soal selidik yang telah diubah suai, iaitu Soal Selidik Masalah Pemahaman Pendengaran (LCPQ) dan Soal Selidik Strategi Pendengaran Metakognitif (MLSQ), juga telah diedarkan kepada responden selepas menyelesaikan ujian bagi mengenal pasti masalah pemahaman pendengaran teranggap dan penggunaan strategi pendengaran metakognitif mereka. Dapatan diperoleh daripada LCPQ memberikan penyelidik satu lagi pemboleh ubah tak bersandar, iaitu masalah pemahaman pendengaran tinggi/rendah. Kaedah Fikir Berulang-ulang (TA) telah digunakan dalam kajian ini untuk mengenal pasti jenis, kekerapan dan pola penggunaan strategi pendengaran metakognitif. Enam kes telah dipilih secara sengaja daripada responden dalam dua kumpulan pendengar cekap dan kurang cekap. Mereka melalui prosedur TA selepas latihan TA bagi mendedahkan cara mereka mengaplikasikan strategi pendengaran metakognitif sambil melaksanakan tugas pendengaran. Protokol verbal yang diperoleh daripada prosedur TA telah ditranskripsi dan dianalisis secara kuantitatif dan kualitatif. Dapatan memperlihatkan penggunaan strategi pendengaran metakognitif yang lebih kerap oleh

pendengar cekap. Seterusnya, dapatan kualitatif memperlihatkan urutan linear Penggunaan Strategi Pendengaran Metakognitif (MLSU) bagi semua kes. Dapatan ini menunjukkan pendengar cekap mengaplikasikan lebih banyak pola linear daripada pendengar kurang cekap walaupun terdapat beberapa gerakan rekursif dalam setiap pola. Dapatan ini merupakan permulaan yang efektif dalam pengamatan dan penelitian pola MLSU yang tiada dalam sorotan kajian dalam pelbagai konteks. Lebih-lebih lagi, prosedur TA dapat digunakan sebagai suatu metodologi dinamik bagi penelitian bagaimana strategi ini dapat digunakan dalam pengajaran dan pembelajaran EFL/ ESL.



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## LIST OF ABBREVIATIONS

CTA:	Concurrent Think- Aloud
DV:	Dependent Variable
EDA:	Exploratory Data Analysis
EFL:	English as a Foreign Language
ESL:	English as a Second Language
FL:	Foreign Language
IELTS:	International English Language Testing System
IV:	Independent Variable
L2:	Second Language
LCP:	Listening Comprehension Problems
LCPQ:	Listening Comprehension Problem Questionnaire
MLSU:	Metacognitive Listening Strategy Use
MLSQ:	Metacognitive Listening Strategy Questionnaire
SC:	Sub- Category
TA:	Think- Aloud
RTA:	Retrospective Think- Aloud

## CHAPTER 1

### INTRODUCTION

In this chapter, a brief summary has been provided about the increase of research in second language (L2) listening and the ways that it has been significantly influenced by studies in cognitive science. This background offers a framework for the current research. The chapter then proceeds to the problem statement, objectives and research questions of the research. Subsequently, it provides a discussion of the significance of study, the conceptual framework, the scope of study, and finally the operational definitions of terms used in this thesis.

#### 1.1 Background of the Study

Listening comprehension has attracted a lot of attention recently among EFL/ESL students. Development in educational research from the 1970s to the 1980s is one of main reasons for this. A majority of second language educators claimed that comprehension always leads to language production and no production can occur without developing. Supporters of comprehension methodology recommended that listening comprehension should be the fundamental process in ESL/ EFL learning, mostly at the initial steps of learning (Dunkel, 1986, p. 99).

The position of listening as an important and distinct skill in L2 learning was given a boost when, in the early 1970's, the European Council designed a model depicting the communicative necessities for adults learning a Foreign Language (FL) (Howatt, 1984). In 1978, Munby proposed a communicative syllabus design which provided models for the four language skills based on the original work of the European Council. Among the four language skills was the listening skill, which was viewed as a complex set of skills or micro-skills. It was no longer perceived as something that could simply be picked up by L2 learners, but rather, as a complex communicative skill that had to be learned like other language skills. Soon, other taxonomies and models of listening skills and sub-skills were published for many types of communicative situations, which directly influenced how listening was presented in many course books (Vandergrift and Goh, 2012).

Listening in English is an active skill requiring listeners to deal with different complicated tasks, such as discriminating between sounds and interpreting stress and intonation. In addition, listeners use various mental procedures to give sense to what they hear. The mental procedures listeners use in order to understand spoken English can be mostly defined as listening comprehension strategies. To Cohen (2000), many researchers in the field of foreign language (FL) and second language (L2) listening have the same idea that listeners mostly cannot handle listening tasks effectively. Therefore,

L2 listening researchers agree that listening should be approached as a skill requiring strategy use.

In addition, Brown (2001), views listening as being a significant component in the process of FL learning. Listening is one of the accessible abilities that can influence the other language abilities. Through listening, the learners attain a deep understanding of linguistic information and without it, learners are unable to produce a language.

The development of students' metacognition, or their ability to comprehend and control their own thinking, has been acclaimed by some learning strategies experts (Anderson, 2002; Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Rubin, 2001; Wenden, 2002). For a richer understanding of metacognitive strategies, it is first essential to clarify and classify language-learning strategies. Learning strategies are defined as "behaviors or actions which learners use to make language learning more successful, self-directed, and enjoyable" (Oxford, 1989, p. 235). These strategies can be classified into three main groups, which are listed as follows (O'Malley et al., 1985, pp. 582-584): (1) cognitive strategies (repeating, translation, grouping, note taking, deducting, imagery, auditory representation, contextualization, elaboration, transfer), (2) metacognitive strategies (planning for learning which means thinking of the learning procedure while it is happening, monitoring of individuals' production or comprehension, and learning evaluation after a task is accomplished), and (3) Socio-affective strategies (social-mediating activity and transacting with others).

To Anderson (1991), among these groups of strategies, metacognitive strategies are considered as the most crucial in enhancing learners' skills. In the absence of metacognition, learners have no ability or direction to monitor their improvement, accomplishment, and learning guidelines in the future (O'Malley, Chamot, Stewner-Manzares, Kupper, & Russo, 1985). Furthermore, learners with strong metacognition probably become more self-directed language learners by utilizing metacognitive strategies (Hauck, 2005). Likewise, Chamot (2005) has pointed out that less effective language learners do not have the metacognitive awareness that is needed to use suitable strategies. Goh, (2002) has emphasized the importance of metacognitive strategy use in disputing that learners' metacognition is allied to successful learning in all contexts. Goh, C. and Taib (2006) have focussed specifically on the context of L2 listening and claimed that strategy use has a positive and direct influence on listening comprehension performance. According to Yang (2009), one of the distinguishing features for discriminating an effective listener from a non-effective one is his/her use of metacognitive listening strategies. As Luo-Xiang (2005) has concluded, more discussion is still needed regarding learners' metacognition in listening.

Simply defined, metacognition is thinking about thinking. Its technical definition originates from cognitive psychology, which defines metacognition as individuals' knowledge about their own cognitive processes, products or anything linked to them. Active monitoring, subsequent regulation, and organization of these procedures to reach a goal are also necessary components of metacognition (Flavell, 1976). According to this

definition, metacognition can be described as a conscious development in an individuals' metacognitive ability, such as moving towards greater knowledge, control, and awareness of individuals' learning, selecting strategies, monitoring the progress of learning, correcting errors, analysing the usefulness of learning strategies, and changing learning behaviours and learning strategies when needed (Ridley, Schutz, Glanz, & Weinstein, 1992).

Vandergrift (1997a) has indicated that the use of metacognitive listening strategies causes the differences between skilled and less-skilled listeners. He has classified these strategies into three main categories: planning, monitoring, and evaluation. In addition, there are nine sub-categories for these three categories; Advance organization, selective attention, self-management and directed attention are sub-categories for planning strategies. Comprehension monitoring, double-check monitoring and problem solving are sub-categories for monitoring strategies. Performance evaluation and strategy evaluation are sub-categories for evaluation strategies (Vandergrift, et al., 2006). Using this taxonomy as a guide, this research aims to identify the use of these strategies among Malaysian ESL learners with different listening comprehension abilities and listening comprehension problems.

ESL learners may face different problems in their listening comprehension processes. Some researchers have concentrated on a variety of these problems and explored many listening challenges for second or foreign language learners (Goh, 2000; Liu, 2002). Listening comprehension problems are defined as all the difficulties that may occur during the three phases of perception (in this phase, listener's focus is on the text, segmenting the phonemes from the stream of speech, and keeping them in their working memory.), parsing (in this phase, listeners match the information in their working memory with the linguistic knowledge in their long-term memory to create meaningful mental representations), and utilization ( in this phase, listeners relate the information which they have kept in the two previous phases to their schemata to understand what they have heard) (Anderson, 1995; Goh, 2000; Vandergrift, 2003).

To achieve the aim of this study, the researcher needs to identify learners' listening comprehension problems in each of these interrelated phases. A more detailed explanation about the model of listening comprehension problems (Anderson, 1995) will be provided in the second chapter.

## **1.2 Problem Statement**

There has been a number of studies on listening strategy use (Carrier, 2003; Chamot, & Kupper, 1989; McGruddy, 1995; O'Malley; Ozeki, 2000; Thompson & Rubin, 1996) as well as some other studies on metacognitive listening strategy use (Graham & Macaro, 2008; Kohler, 2002; Van Aaken, 1999; Vandergrift & Tafaghodtari, 2010; Zheng, 1998; Taghizadeh & Abady, 2016). However, some gaps can still be found in all the above-mentioned studies. This is due to the fact that all the studies conducted on the effect of

treatment and training on learners' listening comprehension performance or strategy/metacognitive strategy use. In other words, none of them concentrated specifically on metacognitive listening strategy use with the focus on Think-Aloud (TA) process.

Using TA as the methodology, some other studies have been done on strategy use of listeners with different listening comprehension proficiency levels during 3 phases of comprehension (Bacon, 1992a; Chamot & Kupper, 1989; Goh, 2000; O'Malley, 1989; O'Malley et al., 1996; Peters, 1999; Vandergrift, 2003a). However, there is still a lack of comparability between skilled/ less- skilled listeners' self- perception of their listening comprehension problems.

Though a survey has been conducted on metacognitive listening strategy use between learners with different listening comprehension proficiency levels in Malaysian context (Malik, 2011) in which TA was used as part of methodology, this study, however, explored all metacognitive listening strategies and compared listeners with different levels of listening comprehension abilities, disregarding listeners' comprehension problems. Another study was also conducted, on strategy use and listening comprehension problems in Malaysia but in the Iranian context (Noroozi, Sim Tam, Nimehchisalem, & Zareian, 2014). Thus, it is evident that none of the above- mentioned studies have been concerned with how listeners differ in the pattern of metacognitive listening strategy use through TA procedure.

There are yet more studies conducted in the area of language learning strategies, metacognitive/cognitive listening strategies, metacognitive listening awareness and listening comprehension skill. Amongst them are an investigation on the relationship between language learning strategy use and their language proficiency level (Akbari, 2003), the correlation between metacognitive knowledge, learning English, and learning conception (Salehi & Farzad, 2003), the difference between strong and weak university students in metacognitive strategies awareness and metacognitive knowledge (Zare & Sarmadi, 2004), the interrelationship between gender and the preferred English learning strategy use (Pishghadam, 2009), the relationship between listening strategies and their learning style preferences (ShiraniBidabadi & Yamat, 2010), the correlation between motivation, metacognitive knowledge of learning strategies and listening comprehension of English learners (Sutudena & Taghipur, 2010), the relationship between learning strategies and listening ability (ShiraniBidabadi & Yamat, 2011), the relationship between metacognitive listening strategy awareness and listening self-efficacy (Rahimi & Abedi, 2014), the relationship between metacognitive listening strategy awareness and listening comprehension (Al-Awan, Asassfeh, & Al-Shboul, 2013), the relationship between different metacognitive strategies and listening comprehension skill (Mohammad & Negin, 2014; Ummah & Arifani, 2017), the differences between high/ low proficiency listeners in their strategy use, motivation, and problems (Lau, 2016). Despite the number of studies listed, the researchers mostly used questionnaires and interviews in their surveys and they mostly reported the participants' perceived strategy use, and none of these studies employed TA methodology to attain more scientific outcomes.



Therefore, the current research tries to cover these gaps by comparing metacognitive strategy use of ESL listeners with different listening ability levels not only through the questionnaires to obtain data on participants' self-perception of Metacognitive Listening Strategy Use (MLSU) but also through TA procedure to detect MLSU of skilled and less-skilled cases more scientifically. Moreover, using the TA process, this research seeks to examine the patterns of metacognitive listening strategy use between ESL listeners with different listening comprehension ability levels while doing a listening comprehension task.

Furthermore, comprehending spoken English is essential for ESL students in UPM as one of the international universities of Malaysia. First of all, the language used in most lectures, seminars and reference materials in this university is English. Therefore, it is crucial for students in UPM to have an adequate level of English comprehension skill. Furthermore, as most of the discussions in tutorials and seminars are conducted in English, students who are less skilled in expressing and comprehending in English will be unable to take part efficiently. Incompetence in expressing themselves and comprehending what they listen to can be very demotivating and may affect their confidence and interest in their academic affairs.

One probable reason for the students' lack of listening skills is their inability to listen effectively. According to Graham (2006), a majority of the students attributed their listening problems to either the difficulty of listening texts, their inability to understand them, or their lack of skill or strategy use in listening. Graham added in another study that "These attributions show a sense of helplessness and passivity in L2 learners that could simply result in becoming discouraged and being less effective listeners" (Graham, 2006, p. 178). In these cases, offering more listening passages to the learners who have difficulty in listening will most probably just add to their feeling of inefficiency (Chambers, 1996; Field, 2002; Graham, 2006). Graham (2006) cited that listening is an invisible and complicated mental procedure; therefore, it is hard for the L2 learners to have an obvious understanding of how they perform in listening. Accordingly, the importance of doing more research on listening is highlighted to reveal the significant factors affecting one's listening ability.

According to Vandergrift (2003a), the above problem relates to the shortage of learners' metacognition in listening. This means that they are not capable of defining precisely what they are trying to do and are unable to recognize the strategies they use. They are also not capable of evaluating how the strategies are working. Therefore, they fail to choose other strategies to progress in their listening comprehension tests. According to O'Malley et al. (1985), these learners do not have the direction or opportunity to review their accomplishments and improvement. As there is a lack of research done specifically on listeners' metacognition ability in the Malaysian context, the current study investigated metacognitive listening strategy use in an ESL environment of a non-English speaking country from a new perspective, which is visualizing the patterns of MLSU.

### 1.3 Research Objectives and Research Questions

The central purpose of this research is to examine how ESL students with different listening ability levels differ in their metacognitive listening strategy use. The objectives of the proposed research are:

- 1- To identify if ESL students with different listening ability levels vary in their perceived listening comprehension problems.
- 2- To identify if ESL students with different listening ability levels vary in their metacognitive listening strategy use.
- 3- To examine how ESL students with different listening ability levels vary in patterns of metacognitive listening strategy use while doing a listening comprehension task.

Based on the objectives mentioned in the previous section, the research questions for this study are presented in this section. RQ1 and RQ2 are corresponding research questions to the first objective, while RQ3 and RQ4 are corresponding research questions to the second objectives. However, RQ4 is also the corresponding research question to the third objective.

RQ1. What are the levels of listening comprehension ability among ESL students?

RQ2. What is the significant difference in the skilled and less- skilled ESL students' perceived listening comprehension problems?

RQ3. What is the significant difference between the skilled and less- skilled ESL students' perceived metacognitive listening strategy use?

RQ4. How do ESL students with different listening comprehension ability levels vary in their types, frequencies and patterns of metacognitive listening strategy use during a listening comprehension test?

The participants were divided to two groups of skilled and less- skilled listeners (IV) based on the result of the conducted IELTS listening section in this research.

Perceived listening comprehension problems were identified through LCPQ (Listening Comprehension Problem Questionnaire) in three domains of perception, parsing and utilization (DV) and among two groups of listeners (skilled and less- skilled).



Perceived use of metacognitive listening strategies was also examined through MLSQ (Metacognitive Listening Strategy Questionnaire) in three main categories of planning, monitoring and evaluation (DV) and nine sub- categories (advance organization, selective attention, self-management, directed attention, comprehension monitoring, double-check monitoring, problem solving, performance evaluation and strategy evaluation) among two groups of listeners.

More scientifically, types and frequency of MLSU also were recognized through TA methodology. Using TA method, the patterns of MLSU were examined to reveal different sequences (linear and recursive) of strategy use among listeners with different listening comprehension abilities. The ways TA cases use metacognitive listening strategies were revealed through visualizing these patterns according to outputs of their TA verbalizations.

#### **1.4 Significance of the Study**

Findings from this research can help to enhance what is currently understood about comprehension strategies for L2 listening. As the research is based on the theory of cognitive process of listening (Anderson, 1995; Vandergrift & Goh, 2012), the findings of the study may also contribute to the current discussion on L2 listening skill.

The review of literature has revealed that successful listeners are more effective in comprehending as they can effectively coordinate a number of strategies in order to understand what they are listening to (Graham & Macaro, 2008). This research is innovative in examining how listeners with different listening comprehension ability levels differ in patterns of metacognitive listening strategy use.

Over the past century, educational researchers and psychologists have attempted to use the TA method in order to try to see into individuals' minds. Individual theorists and researchers have discussed the usefulness of TA methods to light up thought procedures in their particular pedagogy or research area. Yet, there have been a few debates on use of strategies recognized by the TA process. In this regard, by using the TA process, this study seeks to debate on learners' metacognitive strategy use in greater details to identify the patterns engaged by ESL listeners while attempting a listening comprehension test.

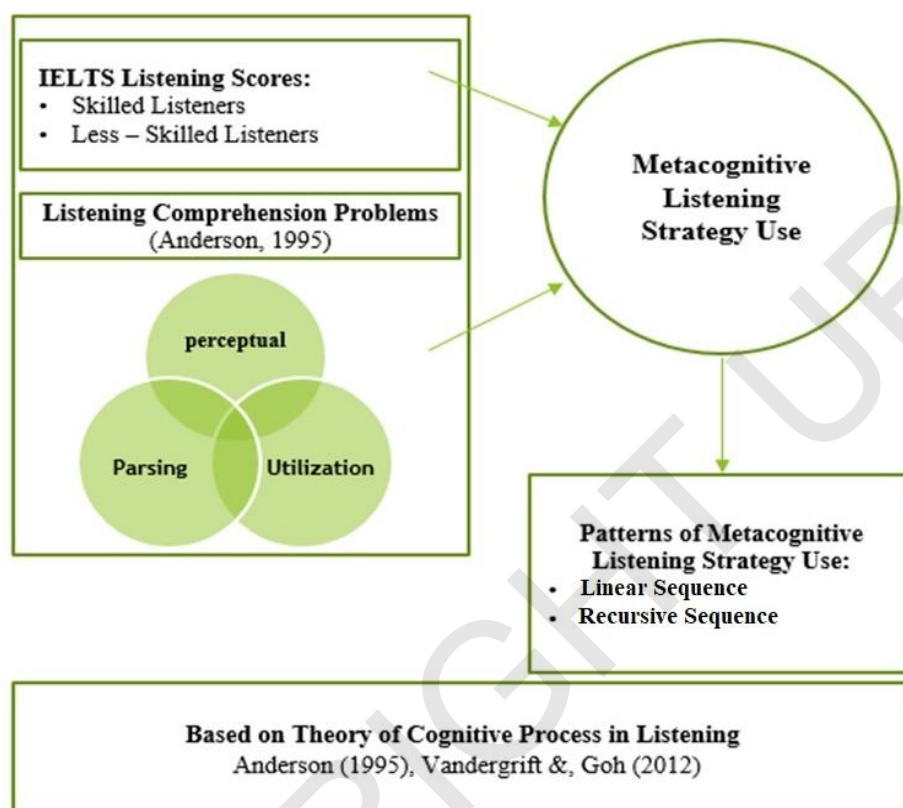
According to listening comprehension's momentary nature and its restricted degree of control by the listener, this research addresses the necessity for future studies about the effects of using metacognitive listening strategies on ESL listeners in order to avoid anxiety, low self-confidence, and a negative listening self-concept. The capability of using metacognitive listening strategies means the students can actively select the most applicable strategy for a specific situation and value a strategy's usefulness in their daily learning tasks. When the students are conscious of the metacognitive listening strategy they are using, they will become better L2 learners. This is because they will have a

chance to concentrate and reflect upon the fundamental procedures of their own learning process. This is critically effective to develop self-regulated learning (Wenden, 1998).

As there have been only a few studies done in Malaysia on listening comprehension with a specific focus on MLS, research in this area seems essential in this context. Many studies have examined the strategies utilized in reading and writing skills (Margaret, 1999; Vijay, 1999) and similarly examined the strategies for general language learning (Mohamad Amin Embi, 1996). Studies which concerned the influence of using metacognitive strategies on reading (Yusoff, 2001) and the correlation of academic performance and metacognitive strategies among secondary school-students (Norehan Zulkipli, Mohamad Raduan Kabit, & Kartini Abd Ghani, 2009) have proposed more research on metacognition in learning process. Therefore, the current research is one of the few researches that inspects the metacognitive listening strategy use in an ESL environment of a non-English speaking country. Moreover, this research would be one of the few researches which examines metacognitive listening strategy use to identify an effective pattern in which fewer listening comprehension problems happen.

## **1.5 Conceptual Framework**

In this section, a conceptual framework of the current research is presented. The metacognitive framework covers in greater detail, the metacognitive experience, metacognitive knowledge and strategy use. The conceptual framework of research is summarized in Figure 1.1 below:



**Figure 1.1 : Conceptual Framework**

Figure 1.1 is an explicit presentation of the conceptual framework developed for this research. As illustrated in Figure 1.1, this research is based on the theory of cognitive process in listening. The Model of Listening Comprehension Problems (Anderson, 1995) was adopted to identify listening comprehension problems of listeners through three interrelated phases of listening process, which are perceptual processing, parsing processing and utilization processing. These phases are explained in 2.1.3. As can be seen in Anderson's model (1995), these different phases are not linear but interrelated. This means that the processing can be different between individuals with different listening comprehension ability levels. Identifying metacognitive strategy use between listeners with different listening comprehension ability levels and listening comprehension problems, the researcher comes up with different patterns listeners applied during a listening comprehension task concerning linear sequence or recursive sequence.

## **1.6 Scope of the Study**

This research focuses on the metacognitive listening strategy use without examining the cognitive and socio-affective strategies as its main focus is the role of metacognition in language learning. Metacognition or the act of thinking about thinking is defined as the learners' ability to regulate their thoughts and to control their own learning which comes into play in learning to listen (Baker, 2002; Wenden, 1991). Accordingly, the metacognitive process involves not only the consciousness of learners about using strategies, but also in monitoring the success and progress of the learning process while other strategies are just employed to learn language (O'Malley & Chamot, 1990). The choice of focusing on metacognitive listening strategy in this research is justified firstly based on the above distinction and secondly through the objectives of the current research as the self- perception of metacognitive listening strategies are needed in both MLSQ and TA methodology.

## **1.7 Conceptual Definitions**

Some chief terms utilized in this research are clarified in this section. Major operational terms used in this thesis are: (1) Listening, (2) Listening comprehension, (3) Listening comprehension ability levels, (4) Listening comprehension problems (5) Metacognition, (6) Metacognitive Listening Strategy, (7) Think – Aloud (TA), (8) Linear Sequence, (9) Recursive Sequence.

### **1.7.1 Listening**

According to Purdy (1991), listening is defined as an “active and dynamic process of attending, perceiving, interpreting, remembering and responding to the expressed (verbal and nonverbal) needs, concerns and information offered by other human beings” (p. 11). Carroll (1993) defined listening as a group of exercises that include “the individual’s ability to catch, perceive, distinguish or even overlook” (p. 364). Rubin (1995) described listening as “a dynamic procedure in which the information which comes from auditory and visual cues is chosen and then interpreted by the listener in order to define what is going on and what the speakers are trying to express” (p. 151). Buck (2001), reviewing listening research in the previous decades, suggested that listening is a set of personal and individual procedures which starts with decoding the received sounds and later making them meaningful.

### **1.7.2 Listening Comprehension**

As defined in 1.8.1, listening generally deals with the act of gathering information. Nevertheless, in a scholastic setting, listening is not just used for this purpose. Alongside gathering, information needs to be processed and integrated to help the students form a body of knowledge to scrutinize, question, and combine new learning. To fulfil the

above, listening should be combined with comprehension. Accordingly, since this study mainly focuses on examining listening in an academic environment, it is limited to listening comprehension rather than listening, as in section 1.8.1.

### **1.7.3 Listening Comprehension Ability Levels**

Listening comprehension ability levels are defined operationally by the participant's LCT (Listening Comprehension Test) scores. The LCT is a test of listening success, applied to find out how well participants comprehend the listening content of a test (Buck, 2001). According to Buck (2001), the LCT measures the students' skills in four areas: listening to key words, listening for specific information, listening for main ideas and supporting details, and simple note-taking.

In this research, the LCT is the IELTS listening section adapted from previous IELTS tests (Appendix E) to classify the participants into two groups of skilled and less-skilled listeners according to their LCT scores.

### **1.7.4 Listening Comprehension Problems**

Listening comprehension problems are identified by LCPQ (Listening Comprehension Problems Questionnaire) which has been developed based on the listening theory founded by Anderson. To Anderson (1995), listening comprehension includes three phases: perception, parsing, and utilization. In the perception phase, the listener's focus is on the text, segmenting the phonemes from the stream of speech, and keeping them in their working memory. In the parsing phase, listeners match this information in their working memory with the linguistic knowledge in their long-term memory to create meaningful mental representations. Lastly, in the utilization phase, listeners relate the information which they have kept in the two previous phases to their schemata to understand what they have heard (Anderson, 1995). According to Goh (2000), listening comprehension problems refer to the problems that may occur at these three cognitive phases.

### **1.7.5 Metacognition**

Metacognition is our capability to think about our own thinking or "cognition", and, furthermore, to think about the way we are processing information for a sort of goals and managing the way we choose to do it. It is the ability to turn back in time from what occupies our mind at an actual moment in order to analyze and evaluate what we were thinking (Vandergrift & Goh, 2012).

### **1.7.6 Metacognitive Listening Strategy**

According to Goh (1998), metacognitive strategies are displays of the executive dimension of metacognition. Metacognitive strategies are not used to manipulate and process the text in the same way as cognitive strategies. The function of metacognitive strategies is to manage and control cognition. A learner can control cognitive processes by using metacognitive strategies so that these mental processes can continue more efficiently.

O'Malley and Chamot (1990) describe a metacognitive strategy as a learning strategy that includes information about the learning procedure or thinking about it and scheduling and monitoring learning or self-evaluation of it. Oxford (1990), defines it as activities utilized by students to control their own cognitive procedures, whereas Vandergrift (1997a) calls it mental activities for guiding L2 learning that comprise activities allied to planning, monitoring, and evaluating learner's comprehension.

Metacognitive strategies applied in this research are according to Vandergrift's (1997) listening strategies' taxonomy. In his organization, metacognitive strategies are classified into three focal groups: planning, monitoring and evaluation. These main classifications are further organized into nine sub-categories. For planning strategy, the sub-categories are advance organization, selective attention, self-management and directed attention. The sub-categories for monitoring strategies are comprehension monitoring, double-check monitoring, and problem solving. Evaluation strategy is divided into two sub-categories: performance evaluation and strategy evaluation. Following Goh's (2000) recommendation, each of the sub-categories of metacognitive strategies can be operationalized in numerous ways called 'tactics'. In total, there are 35 metacognitive listening tactics used in this research (Appendix B).

### **1.7.7 Think – Aloud**

Think-aloud as a research methodology is a process in which a participant speaks aloud any word in mind while or after doing a task. A brief review of the literature has shown that think-aloud research methodologies have a complete theoretical foundation and supply a valid source of data around participant thinking, particularly during language activities.

Two following terms are defined operationally based on the way they were used in this research; linear sequence, and recursive sequence.



### **1.7.8 Linear Sequence**

In this research a 'linear sequence' is a sequence of using metacognitive listening strategies in which the cases apply the strategies through different categories/ sub-categories of metacognitive strategies linearly without moving back and forth through them.

### **1.7.9 Recursive Sequence**

In this research a 'recursive sequence' is a sequence of using metacognitive listening strategies in which the cases apply the strategies through different categories/ sub-categories of metacognitive strategies recursively moving back and forth through them.

## **1.8 Summary**

This chapter is an introduction to the research and provides an argument for the research background. It is then followed by the problem statement, objectives of research and research questions. The chapter also presents the significance of the study followed by the conceptual framework. The scope of the study has been also discussed. The chapter ends with a glossary of definition of the significant terms used in this research. The second chapter is a review of related literature of this study.

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