

THESIS

LISTENING COMPREHENSION STRATEGIES OF ARABIC-SPEAKING ESL LEARNERS

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ABSTRACT

LISTENING COMPREHENSION STRATEGIES OF ARABIC-SPEAKING ESL LEARNERS

The main goal of this investigation was to identify the listening strategies of advanced and intermediate second language listeners in English and to compare the listening strategies of both groups of research participants.

A total of 30 Arabic-speaking ESL learners were administered a listening comprehension test and a listening strategy use questionnaire. The test instrument was constructed by the researcher to serve as both a listening comprehension measure and a listening input upon which the participants could reflect with regard to their mental strategies while completing the questionnaire items. The test consisted of two lectures, each followed by subtests comprised of multiple choice and essay questions. After completing the test, participants were also asked to complete a Likert-scale questionnaire that included 20 items asking about the use of cognitive, metacognitive, and socioaffective strategies.

The listening test and listening strategy use questionnaire data was run through multiple statistical tests, including factor analysis, multiple regression, and t-tests, to identify the strategies the research participants had used and explain the relationship between strategy use and listening comprehension.

The results indicated that both advanced and intermediate listeners used metacognitive, cognitive, and socioaffective strategies. However, there was some variation in terms of the use of cognitive and metacognitive strategies. As far as cognitive strategies were concerned, the results revealed that the advanced listeners

employed more top-down strategies than the intermediate listeners, whereas there were no significant differences in the use of metacognitive strategies. The results also indicated that cognitive strategies are the most powerful predictor of listening comprehension, followed by socioaffective strategies, whereas metacognitive strategies were the predictor that accounted the least for listening comprehension.

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CHAPTER I

INTRODUCTION

The literature of the language skills is very dense, and as a result, an intense amount of sources dealing with the importance of speaking, writing and reading exists. However, the skill of listening had been neglected in the L2 literature until recently. L2 researchers considered Listening an ability that could be developed without assistance, and a deep investigation into the history of language learning reveals this lack of attention to the skill of listening (Chiang & Dunkel, 1992; Morley, 1984; Moyer, 2006; Mendelsohn, 1998; Schmidt-Rinehart, 1994).

The neglect of the listening skill was accompanied with an ongoing debate about which of the four language skills (speaking, listening, reading, and writing) is the most crucial for the learning and acquisition of a second language. However, past research has thus far revealed that a large proportion of the L2 research findings indicates that listening is the most important skill for language learning because it is the most widely used language skill in normal daily life (Morley 2001; Rost 2001), and it develops faster than the three other language skills, which in turn suggests that it can facilitate the emergence of the other language skills (Oxford, 1990).

Listening comprehension as an independent and essential component of language learning has come into focus after a significant debate in the L2 literature about its importance. In the 1970s, more attention was paid to listening comprehension, and the status of listening changed from being incidental and peripheral to a status of utmost importance.

The importance of listening in language learning was brought into attention when Gary (1975) stated that focusing on listening comprehension, especially in the early phases of second language learning/ teaching, creates four different types of advantages: cognitive, efficiency, utility, and affective. The cognitive advantage of an initial exposure to listening gives learners a more natural way to learn the language. Listening should be stressed before speaking because recognition knowledge is required to process and decode the aural input, whereas retrieval knowledge is required to encode and generate speech. Concentrating on speaking in initial stages leaves little room for listening, and hence little room for comprehension.

The second advantage is efficiency. Language learning is more efficient when learners are not immediately required to speak and are only required to listen to the language. This early emphasis on listening is efficient because learners are exposed only to good models of the language (the teacher and realistic recordings).

The third advantage is utility, or the usefulness of the receptive skill. According to research in the fields of communication, while communicating, adults spend 40-50% of communication time listening, 25-30 % speaking, 9 % writing, and about 11-16 % reading (Rivers in Gilman and Moody, 1984). It follows then that learners will make greater use of comprehension skills: listening and reading.

The last advantage of emphasizing listening from the beginning is the affective advantage. Learners feel embarrassed and sometimes discouraged when they are forced to make early oral production. When this pressure does not exist, learners can relax and stay focused on developing the listening skill, which helps the emergence of the other

language skills. Since Listening leads to earlier achievement and success, learners are more motivated to continue learning.

Listening was no longer taken for granted in second language learning after the emergence of communicative and proficiency-oriented approaches to language teaching, which has emphasized listening in all levels of language learning. Several FL teaching methods stressed the importance of listening back in 1960s. These methods were predicated on the assumption that the second language learning and first language acquisition are parallel and that there should be a silent period preceding the production stage in learning a second language. The Delayed Oral Method and the Total Physical Response were among the first teaching methods that advocated for the primacy of listening in learning a second language.

Postovsky (1978) found results that lent support to the Delayed Oral Method by comparing two groups of Russian learners. The control group received instruction that required intensive oral production on the part of learners, whereas the experimental group received intensive exposure to aural materials. At the end of the treatment, the experimental group performed better than the control group not only on the listening skill but also on the speaking skill.

Asher's Total Physical Response (TPR) Method focused on listening comprehension using commands that students learn by copying the action of the teacher. The students who were exposed to the TPR method outperformed their counterparts who were taught the audio-lingual method on several language tests. Asher also found that the TPR method helped students improve their reading and writing skills. The TPR Method gained further empirical support when it was used by LeBlanc to teach language

courses in the engineering and science faculties in Canada in 1986, in which the TPR group scored significantly higher than the control groups on all language skills (Vandergrift, 1992).

Much of L2 literature gives support to the importance of listening and how comprehensible input facilitates the learning of a second language. Krashen and Terrell (1984) argue that the priority of listening in second language learning is the same as the priority of the listening-only stage a child needs to acquire his/ her first language. Dunkel (1986) also indicates that developing proficiency in listening is the key to achieving proficiency in speaking.

However, despite the fact that listening has been now subjected to research for more than three decades, consensus on a definition of listening has never been reached among language researchers. According to Chastain (1971), listening comprehension is the ability to understand native speech at normal speed in unstructured situations. Morley (1972) defines listening comprehension as the ability not only to discriminate auditory grammar, but also to reauditorize, extract essential information, remember it, and relate it, everything that entails processing sound and construction of meaning. Neisser (1976) views listening comprehension as a temporally constant process in which the listener anticipates what will come next. Goss (1982) defines listening comprehension as a mental process in which the listeners attempt to construct a meaning out of the information received from the speakers. Wipf (1984) defines listening as a complex mental process that entails receiving, interpreting and reacting to sounds being received from a sender, and finally retaining what was gathered and relating it to the immediate as well as the broader sociocultural context of the utterance.

Although these definitions differ to some extent, they basically consider listening as a mental process that requires a great deal of cognitive effort on the part of the listener such as interpreting the sounds, figuring out the meaning of the words, and activating the background knowledge. However, a perfect match between input and knowledge does not always exist; comprehension gaps are frequent and special efforts to infer meaning are required for second language learners in particular. The mental processes on which listeners draw to understand, learn, or to retain new information from the aural input are referred to as listening comprehension strategies (Discussed in Chapter II). The current study aims to identify these strategies and find out which type of these strategies contributes the most to listening comprehension.

Previous L2 listening research revealed that learners need to develop certain listening strategies that help them capitalize on the oral language input they are receiving and overcome those difficulties. These strategies are classified into three main types: cognitive, metacognitive, and socioaffective strategies (Discussed in Chapter II). The emergence and reliance on these strategies depend on the level of the learner proficiency, for example, previous research has indicated that more-skilled learners use more top-down strategies than bottom-up strategies, which are frequently used by less-skilled learners (Clark, 1980; Conrad, 1985; Tsui & Fullilove, 1998; O'Malley, Chamot, & Kupper, 1989).

Previous research has also indicated that more-skilled learners use more metacognitive strategies (i.e. planning, self-monitoring, and self-evaluation) than less-skilled learners (Baker & Brown, 1984; O'Malley & Chamot, 1990; Rubin, 1987). O'Malley, Chamot, and Kupper (1989) stated that successful listeners use more repair

strategies; when there is a comprehension breakdown, successful listeners try to redirect their attention back to the task and continue listening actively, while less successful listeners stop listening further. The current study will investigate and identify the strategies that proficient and less proficient listeners use in the academic setting. It will also attempt to find how often these strategies are utilized by proficient and less proficient listeners.

Based on the findings of previous L2 listening literature, a number of teaching strategies are now considered crucial for teaching L2 listening. These strategies include cognitive strategies that help learners to listen for gist, to activate background knowledge in prelistening, and to make predictions and inferences (Hinkel, 2006), and metacognitive strategies, which help learners control their learning through self-monitoring, and self-evaluation. When learners were taught those strategies, their listening performance has considerably improved. L2 listening research has also showed that more-skilled learners tend to rely on a repertoire of strategies to regulate their listening processes. Not only do they employ more metacognitive strategies than their less-skilled learners (Goh, 2000; O'Malley & Chamot, 1990; Vandergrift, 2003), but more-skilled learners appear to manipulate these strategies in a continuous metacognitive cycle (Discussed in Chapter II). The present study will seek to find whether or not the use of these types of strategies increases listening comprehension, and whether or not they are worth being taught to EFL/ ESL learners.

There has been a general agreement in L2 listening research that all second language learners encounter difficulties while listening to the target language. However, the degree and types of the difficulty differ, and huge L2 listening research has been

conducted to examine these differences. Much attention in second language learning has been devoted to identifying the factors that can influence the listener difficulties (Boyle, 1987; Flowerdew and Miller, 2005). L2 listening research has focused on some factors such as speech rate (Conrad, 1989; Blau, 1990; Griffiths, 1992), phonological features (Henrichsen, 1984), and text cues used by learners (Conrad 1981, 1985; Harley 2000) (discussed in Chapter II)

Other studies have focused on the learner characteristics that affect an individual's listening comprehension such as language proficiency (DeFilippis, 1980; Murphy, 1985, 1986; O'Malley, Chamot, and Kupper, 1989), memory (Call, 1985; Greenberg and Roscoe, 1987), and background knowledge (Markham and Latham, 1987; Chiang and Dunkel, 1992).

Other issues related to the listener difficulties are text structure, syntax and personal factors such as insufficient exposure to the target language, and a lack of motivation. Shang (2008) examined the performance of Taiwanese listeners of English as a foreign language with different proficiency levels on three different linguistic patterns: negative, functional, and contrary-to-facts statements. The results showed that listeners with both advanced and beginning proficiency levels yielded higher scores on contrary-to-fact statements, followed by functional expression and then negative expression.

Previous L2 Listening Comprehension Research

Language acquisition researchers and language teachers have explored listening strategies using a variety of methods, including think-aloud procedures (Murphy, 1985; Chamot and Kupper, 1989; O'Malley, Chamot, and Kupper, 1989), interviews

(Vandergrift, 1996; Goh, 2002a), listening strategies inventories (Fujita, 1985), questionnaires (Fujita, 1985; Goh, 2002b; Vandergrift, 2002, 2005), recall task (Moreira, 1996; Schmidt- Rinehart, 1992;), and diaries (Goh, 1997).

Previous research in the field of second language acquisition has investigated all the listening strategies: cognitive, metacognitive, and socioaffective. However, to the best of my knowledge, none of the studies conducted in this paradigm have explored all of those strategies together. Some studies have focused on metacognitive strategies (i.e. Goh, 2006; Vandergrift, 2005; Goh, 2006). Other studies have investigated the strategies learners rely on while taking a listening test (Cohen, 2000, Taguchi, 2002). Furthermore, in most studies conducted in this area, the participants were native speakers of languages that were cognates of English such as French and Spanish.

The Present Study

The primary purpose of this study is to identify the strategies used by the advanced and intermediate ESL learners at IEPS to enhance their listening comprehension in the academic context. The study also seeks to compare the strategies used by the advanced and intermediate listeners. I will examine the baseline data gathered for the main study to answer the following questions:

(a) What are the strategies that ESL learners use while listening to an authentic text in English in an academic setting (i.e., lecture)?

Hypothesis (1) Both advanced and intermediate listeners use cognitive, metacognitive, and socioaffective strategies.

(b) Are there differences between advanced and intermediate listeners in their perceived use of metacognitive strategies?

Hypothesis (2) Advanced listeners use more metacognitive strategies than intermediate listeners.

(c) Are there differences between advanced and intermediate listeners in their perceived use of cognitive strategies?

Hypothesis (3) Advanced listeners use more top-down (i.e., inferencing and elaboration) strategies than intermediate listeners.

The theoretical framework which has led to the formulation of these hypotheses is introduced in Chapter II. The participants, the instruments, the study, and the data collection are outlined in Chapter III. Chapter IV contains the statistical analysis of the data collected through the data gathering instruments described in Chapter III. Chapter V concludes this paper with a discussion on the meanings and implications of the results of the present study.

CHAPTER II

LITERATURE REVIEW

Chapter II presents information on the theories and research on which the methodology and hypotheses of this study are based. This chapter is divided into seven interrelated sections. Section I discusses the role that Listening plays in the acquisition of a second or foreign language. Section II presents the potential problems in learning to listen to English and how learners can overcome these problems. Section III provides definitions and descriptions of the listening comprehension strategies. Section IV presents the contributions by Oxford to the classification of listening comprehension strategies. Section V presents histories of research conducted within the paradigm of language learning strategies. This section also discusses the specific aspects of those research studies that have led to the operationalization of these variables and to the development of the protocols employed in this study. Then, Section VI discusses the relationship between overall language proficiency and listening proficiency, and it also introduces the studies that had explored the relationship between language proficiency and listening comprehension strategies. The final section discusses the effects of metacognition on learning.

Role of Listening in Second or Foreign Language Acquisition

As stated in Chapter I, until recently the skill of listening was paid the least attention of the four language skills. This neglect may have derived from the fact that listening was viewed as a passive skill. However, recent L2 studies reconsidered speaking-only initial focus when this production-oriented initial emphasis was found to interfere with the students' learning, disrupting the association process essential for

integration and retention of the target language (Asher, 1969; Gary, 1978). Empirical studies have shown that pushing learners to produce material they have not yet stored in their memory can overload their short-term memory.

L2 research studies have also found that there is a high degree of positive transfer between a listening-only initial focus and other language skills, while lower scores were reported in all language skills when learners were required to develop simultaneously the skills of speaking and listening (Gary, 1978). A listening-only initial focus has been found to yield a significant affective advantage for foreign/ second language learners, increasing their effectiveness and concentration in language learning.

Some of the empirical evidence that gives support to the importance of listening in second/ foreign language acquisition was provided by Feyten's (1991) study of ninety students of French and Spanish. Feyten worked with 36 students of French and 54 students of Spanish who enrolled in the summer intensive program at the University of Tennessee. The program included aspects of proficiency-oriented instruction in that the oral skills were emphasized. Participants were asked to respond to the video version of WBLT at the beginning of the program, and this was set as the pretest for this study. At the end of the program, the subjects completed the Foreign Language Test that consisted of an oral interview, a listening comprehension component, and a written grammar, reading, and vocabulary component.

The qualitative data of the pretest was quantified so that the pretest and posttest data were compared. To determine the relationship between listening ability and foreign language proficiency, simple bivariate correlations were computed. As shown in Table

2.1, the results revealed significant correlations between listening ability and overall FL proficiency.

TABLE 2.1 shows the correlations between listening ability and overall FL proficiency

Foreign Language Proficiency	French (n = 36)	Spanish (n = 54)
Overall	.41*	.39**
Listening comprehension skills	.30	.43*
Oral proficiency (speaking skills)	.37*	.29

*p<.05. **p<.01.

Also, L2 research has found that several external and internal factors can influence listening comprehension in a foreign or second language (Rubin, 1994). One of these factors is the learning strategies used by the learner (O'Malley & Chamot, 1990). Chamot and O'Malley (1987) state that individual learner differences (beliefs, previous learning experiences) together with other situational factors (target language, nature of instruction, nature of tasks) determine which strategies learners choose to use.

Potential Problems in Learning to Listen to English

Underwood (1989) outlines seven potential problems that could hinder listening comprehension.

First, the speed of delivery is beyond the control of listeners. Underwood says, "Many language learners believe that the greatest difficulty with listening comprehension, as opposed to reading comprehension, is that listener cannot control how quickly a speaker speaks" (Underwood, 1989, p.16).

Second, it is not always possible for learners to have words repeated. This is a major problem in learning situations. In the classroom, it is the teacher who decides

whether or not a recording or a section of recording needs to be replayed. It is “hard for the teacher to judge whether or not the students have understood any particular section of what they have heard” (Underwood, 1989, p.17).

Third, the small size of the learner vocabulary frequently impedes listening comprehension. The speaker does not always use words the listener knows. Sometimes when listeners encounter a new word, they stop to figure out the meaning of that word, and they therefore, miss the next part of the speech.

Fourth, listeners may not recognize the signals that the speaker is using to move from one point to another, give an example, or repeat a point. Discourse markers which are utilized in formal situations (i.e., firstly, and after that) are relatively clear to listeners. However, in informal situations, signals such as gestures, increased loudness, or a clear change of pitch are very ambiguous, especially to L2 learners.

Fifth, it can be very challenging for listeners to concentrate in a foreign language. It is generally known that in listening, even a slight break or a wander in attention can impede comprehension. When the topic of the listening passage is interesting, it can be easier for listeners to concentrate and follow the passage; however, students sometimes feel that listening is very challenging even when they are interesting in the topic because it requires a lot of effort to figure out the meaning intended by the speaker.

Sixth, learning habits emphasized in the classroom such as a desire to understand the meaning of every word. Teachers oftentimes want students to understand every word they encounter while listening by pronouncing and repeating words clearly and carefully, and by speaking slowly and so forth. As a result, students tend to feel worried when they fail to recognize what a particular word means and may further be discouraged by the

failure. Students should therefore, be instructed to tolerate incompleteness and vagueness of understanding.

Seventh and last, comprehension problems arise when students lack contextual knowledge. Even if students can understand the main idea of the text, they may still find it difficult to comprehend the whole meaning of the text. Listeners from different cultural backgrounds can also misinterpret nonverbal cues such as facial expressions, gestures, or tone of voice.

In order to overcome these listening comprehension problems, learners need to develop techniques known as “listening strategies. These strategies are mental processes that enable learners comprehend the aural text despite their lack of knowledge. Listening strategies include inferring, elaboration, and regulating and monitoring comprehension, and they are discussed in detail in the next section.

Listening Comprehension Strategies

Early L2 listening research had an interest in a theory that being merely exposed to comprehensible input would improve listening skills and promote language acquisition, and it overlooked the processing of this input (Krashen, 1985). L2 listening research in recent years has, however, shifted to focus on how learners manipulate this input. Therefore, understanding the strategies second language learners tend to use to cope with the difficulties they experience while listening had become an integral part of L2 listening research. L2 listening research has been increasingly directed to clarifying listener’s mental processes and identifying facilitative strategies (Mendelsohn, 1995; Thompson & Robin, 1996; Vandergrift, 1999).

The interest in listening comprehension strategies has evolved in a number of studies (O'Malley, Chamot, & Walker, 1987; Oxford & Crookall, 1989; Wenden & Robin, 1987). Oxford (1990) defines language learning strategies as the techniques that learners utilize to improve the use of the target language information. O'Malley and Chamot (1989) categorize strategies into two groups: cognitive, metacognitive. However, a third category, socio-affective, was added to describe the learning that takes place when learners interact with classmates, ask the teacher for clarification, or use specific techniques to lower their anxiety.

Previous research has also revealed that the learner proficiency is one of the main factors that determine the choice of a strategy (Conrad, 1985; O'Malley & Chamot, 1990; Rost & Ross, 1991). Skilled learners were found to use more strategies than their less-skilled counterparts. Also there were differences in the types of strategies skilled and less-skilled learners used. Let us now talk about each type of these strategies separately, and in the next section, I introduce some of the studies that had explored the listening comprehension strategy use by skilled and less-skilled learners.

(a) Cognitive Strategies

Cognitive strategies are problem-solving techniques that learners use to handle the learning tasks and facilitate the acquisition of knowledge or skill (Derry & Murphy, 1986). An article which “presents findings from research into listening strategies of ESL learners” offers the following definition:

Cognitive strategies are more directly related to a learning task and involve direct manipulation or transformation of the learning materials (Brown and Palincsar, 1982; O'Malley and Chamot, 1990). Language learners use cognitive strategies

to help them process, store and recall new information (Goh, 1998, p. 124).

Two broad types of cognitive strategies have been the subject of L2 listening research: bottom-up and top-down. Bottom-up strategies include word-for-word translation, adjusting the rate of speech, repeating the oral text, and focusing on prosodic features of the text. Top-down strategies, on the other hand, include predicting, inferencing, elaborating and visualization. Previous research has revealed that advanced learners employ more top-down strategies than beginners (Clark, 1980; Conrad, 1985; Tsui & Fullilove, 1998; O'Malley, Chamot, & Kupper, 1989). Among the cognitive strategies, four strategies will be analyzed here.

The first cognitive strategy, trying to comprehend without translating, is used when the listener attempts to understand the L2 input without translating to the L1. This strategy is useful because oftentimes, many words do not have equivalents in one of the languages, tendering the comprehension process more difficult. This strategy, therefore, directs the listener's attention to the meaning and structure of the target language.

The second cognitive strategy is focusing on the main words to understand the new words. The listener creates meaning by applying his/ her knowledge of words from the target language to sentences. This strategy is very useful, especially for beginning listeners, who rely on their small vocabulary repertoire to build their comprehension.

The third cognitive strategy is relying on the main idea to comprehend the whole text. This strategy helps the listeners locate the theme first and details later on. One of the techniques that this strategy involves is skimming. The learner who uses this strategy locates the main idea quickly and understands the L2 aural input very rapidly.

The fourth cognitive strategy is guessing the meaning by relying on any clues (contextual or linguistic). Listeners use this strategy when they do not know all the words, or they do not understand the overall meaning of the sentence. Both native and non-native speakers use this strategy either when they have not listened well enough or when the meaning is not clear.

(b) Metacognitive Strategies

Metacognitive strategies are management techniques employed by learners to have control over their learning through planning, monitoring, evaluating, and modifying (Rubin, 1987). For example, for metacognitive planning strategies, listeners would clarify the objectives of an anticipated listening activity and attend to particular aspects of the aural language input or situational details that facilitate the comprehension of aural input. According to Oxford (1990), the conscious use of metacognitive strategies helps learners get back their focus when they lose it. However, learners do not use metacognitive strategies very frequently despite the importance of self-monitoring and self-evaluation.

Baker and Brown (1984) identified two types of metacognitive ability: knowledge of cognition (i.e., knowing what) and regulation of cognition (i.e., knowing how). The first type is concerned with the learners' awareness of what is going on, and the second type relates to what learners should do to listen effectively. Empirical studies have found that an important distinction between skilled and less skilled L2 listeners lies in their use of metacognitive strategies (e.g., Bacon, 1992; Goh, 1998, 2000; O'Malley & Chamot, 1990; Vandergrift, 1998, 2003).

O'Malley et al. (1989) found that skilled listeners use more repair strategies to redirect their attention back to the task when there is a comprehension breakdown, whereas less skilled listeners give up and stop listening. Vandergrift (2003) found that skilled listeners used twice as many metacognitive strategies as their less-skilled counterparts. Among the metacognitive strategies, two strategies will be analyzed here.

Focusing on what the speaker is saying is a strategy that enables the listener to focus his/ her attention on the speaker's message without being distracted by any distractors. This strategy is very useful in participating in the classroom, watching TV, listening to the radio, or talking to other people.

The second metacognitive strategy is deciding in advance what to pay attention to. Listeners employ selective attention as a technique to facilitate the comprehension process. For example, some listeners choose to focus on pronunciation and accents as a way to understand the spoken language with different accents. However, focusing too much on accents can have a negative impact on comprehension because it can be a distracter, leading to misunderstanding.

(c) Socioaffective Strategies

The last category of strategies is socio-affective, which encompasses the attempts to create and promote positive emotional reactions and attitudes towards language learning (Chamot & O'Malley, 1987). Vandergrift (2003) defined socioaffective strategies as the techniques listeners employ to collaborate with others, to verify understanding, or to lower anxiety. According to Gardner & MacIntyre (1992, 1993), the affective strategies used to control learning experiences are very important because the

learning context and learners' social-psychological factors (i.e., how learners feel about the learning experience) are directly related.

Aneiro (1989) found a significant correlation between low anxiety and high listening performance, which suggests that using affective strategies could facilitate and enhance listening. O'Malley & Chamot (1987) found that among the four strategies of management, cognitive strategies, social strategies, affective strategies in listening comprehension, social and affective strategies influenced the learning context immediately.

Oxford's Classification of Learning Strategies

Oxford (1990) classifies language learning strategies into direct strategies (memory, cognitive, and compensation), and indirect strategies (metacognitive, affective, and social). Oxford outlines direct strategies as follows: (a). Memory strategies, also known as mnemonics, are divided into four sets: Creating mental images, applying images and sounds, reviewing well, and employing actions. (b). Cognitive strategies, which may vary from repeating to analyzing expressions to summarizing, have a unified function, namely to manipulate or transform the target language by the learner.

Cognitive strategies fall into four sets: Practicing, receiving and sending messages, analyzing and reasoning, and creating structure for input and output. (c). Compensation strategies allow learners to use the target language for either comprehension or production despite their inadequate knowledge of grammar and vocabulary.

Compensation strategies are grouped into two sets: Guessing in Listening and Reading, also known as "inferencing", and overcoming limitations in Speaking and Writing.

While indirect strategies are outlined as follows: (a) Metacognitive, which means

beyond or with cognitive, provides learners with ways to coordinate their learning. Metacognitive strategies are clustered into three sets: centering your learning, planning your learning, and evaluating your learning. (b) The affective field, which is extremely hard to describe, refers to emotions, attitudes, and motivations. Affective strategies include three sets: lowering your anxiety, encouraging yourself, and taking your emotional temperature. (c) Language is a communication that occurs between and among people. Thus learning a language involves other people, and appropriate strategies are necessary in this learning process. Social strategies are clustered into three groups: Asking questions, cooperating with others, and empathizing with others.

Language Learning Strategy Research

Although second language strategy research has expanded in recent years, Bacon and Swaffar (1993) argue that the number of studies conducted about listening comprehension is relatively small. Rubin (1994) also argues that despite the expansion in the second language strategy research, the research base for listening strategies is still very limited. Recent studies reporting on the differences in the strategy use between proficient and less proficient listeners have indicated the magnificent role of metacognitive strategies for promoting success in second language listening, and these studies have also indicated the possibility of instructing students on strategy use to enhance their performance on listening tasks (O'Malley and Chamot, 1990; Vandergrift, 1997b).

McDonough (1999) also asks for further examination into the relationship between learner proficiency and learning strategies in the skill areas (listening and speaking in particular). Lynch (1998) also asks for the relationship between second

language listening and listening strategies to be further investigated. Lynch calls for the learner's on-line procedures for monitoring and recovering comprehension to be further examined as well. The following studies have attempted to identify the strategies learners employ in listening tasks.

The first study conducted about listening strategies of skilled and less skilled learners was by Murphy (1985), in which the listening strategies were investigated using a think-aloud procedure. Murphy determined that skilled learners used a greater variety of different strategies, and less- skilled learners, on the other hand, focused too much on the text or on their own knowledge, or they were too slow in handling the text information in the listening process. Although Murphy concluded that skilled learners use a greater variety of strategies than less skilled learners do, he could not categorize many of the strategies he had identified for a systematic taxonomy of language learning strategies had not been adequately developed yet.

Henner Stanchina (1987) brought attention to the important roles that metacognitive strategies play in listening comprehension, the integral role of monitoring in the process in particular. She explained that the way in which syntactic, semantic, and schematic knowledge is utilized is a matter of effective or ineffective strategy use. She stated that proficient listeners can constantly elaborate and transform what they hear by (1) using their background knowledge and predictions to generate hypotheses on the text; (2) integrating new information with their ongoing predictions; (3) making inferences to fill gaps; (4) evaluating their predictions; (5) revising their hypotheses as necessary. She concluded that proficient listeners can recognize failure in comprehension and activate appropriate knowledge to recover comprehension.

Rubin (1988) investigated the effect of different types of listening strategy instruction on performance with high school learners of Spanish. She compared the performance of three experimental groups with that of two control groups. The results showed that using some listening strategies can help learners cope with more difficult material.

Using a think-aloud procedure, Chamot and Kupper (1989) investigated the differences in listening strategies between skilled and less skilled high school learners. They determined that skilled learners at the intermediate level relied a great deal on strategies such as selective attention, self-evaluation, note-taking, and elaboration (use of world knowledge).

O'Malley et al. (1989) used a think-aloud procedure to investigate listening strategies in greater depth with high school ESL learners at the intermediate level. A qualitative analysis of the protocols showed that skilled listeners appeared to plan what to pay attention to while listening, maintain attention, and recover it when distracted. They also try to approach the text globally by guessing meaning from context and relating what they heard to their schematic knowledge and personal experience. Less skilled listeners, on the other hand, were not able to recover attention when they experienced attention breakdown, and they tended to interpret what they heard on word-by-word base and make a few connection between new information and their personal experience.

Bacon (1992a, 1992b) also used a think-aloud procedure to investigate the listening strategies of university-level students learning Spanish. Using a quantitative analysis, she found that the participants used more cognitive than metacognitive strategies, and that females used a higher proportion of metacognitive strategies than

males. While in her qualitative analysis of the differences between proficient and less proficient listeners, she concluded that success in listening seemed to be related to factors such as the use of a variety of strategies, ability and flexibility in changing strategies, motivation, self-control, maintaining and recovering attention, and adequate use of background knowledge. Interestingly, Bacon found that monitoring appeared to be equally used by both proficient and less proficient listeners.

Vandergrift (1996) used a structured interview to investigate the strategies that high school Core French students at different course levels reported using in different types of listening tasks. Vandergrift found that students at all four course levels had used strategies related to three broad categories: metacognitive, cognitive, and socioaffective strategies. The total number of distinct strategies used increased by proficiency (course) level. According to the total number of distinct strategies reported by each student, cognitive strategies were the largest percentage, followed by metacognitive strategies, which also increased by proficiency (course) level. However, females tended to report more metacognitive strategies than males. Although a smaller number of socioaffective strategies were reported, socioaffective strategies appeared to increase by level course too.

This review of the literature on listening strategies and listening comprehension reveals that the studies conducted in this area thus far are very few, and they were all qualitative in nature. Furthermore, some of these studies did not obtain conclusive results. The current study will, therefore, add to the body of research that has been conducted in this paradigm, and it will investigate listening strategies quantitatively to find out whether similar findings can be obtained using quantitative measures. In

addition, this study aims to find out whether there is a relationship between high listening proficiency and metacognitive strategies (i.e. planning, and monitoring), and whether there are differences in the cognitive strategy use between proficient and less proficient listeners.

Overall Language Proficiency and Listening Proficiency

It is important to examine how learners are classified as more- or less-skilled learners, and how these classifications could be related to the overall language proficiency. There is a great deal of variation with regard to how researchers have classified learners. DeFilippis (1980) and Murphy (1986, 1987) relied on commercial listening tests to determine learners' listening proficiency. Fujita (1985) used listening tests given to learners as part of their coursework to determine listening proficiency. O'Malley, Chamot, and Kupper (1989) used a common set of criteria developed with the assistance of researchers to test the learners' listening proficiency. Ross and Rust (1991) used a dictation test to judge the learners' listening proficiency, whereas Moreira (1996) and Chao (1997) measured the learners' listening proficiency through performance on recall protocols. Vandergrift (1993, 1997b) measured listening proficiency using strategies that learners reported using and teachers' assessment of the learners' performance.

Due to the lack of a standardized measure of listening proficiency and the reliance of some studies on purely subjective measures such as teacher assessment, it may be difficult to generalize the findings of these studies. In addition to that, listening performance can vary according to the degree of difficulty of the listening task used to assess it (Berne, 1993).

There is also variation with regard to the relationship between listening proficiency and overall language proficiency. While some studies explored the listening comprehension of learners at a single language proficiency level (DeFilippis, 1980; Murphy, 1985), others were interested in finding out whether there was a relationship between listening proficiency and overall language proficiency (i.e., Murphy, 1986; Rost and Ross, 1991).

Using a semi-structured interview, DeFilippis (1980) investigated the listening strategies used by skilled and less skilled second language listeners in three second-semester elementary French courses. A test instrument consisting of a series of audio-taped aural comprehension tasks was administered to the 26 skilled and less skilled research participants within the parameters of a semi-structured interview. Participants were asked to self-report the listening strategies they utilized to handle each of the aural comprehension tasks. The results showed that the listening strategies of both skilled and less skilled listeners were more similar than dissimilar. Almost all the strategies reported by one group were also reported by the other. In addition, the total number of strategies reported by each group was similar. However, despite these similarities, some differences were observed. More-skilled learners often reported using the following strategies than less-skilled learners:

- (a) automatic flow of the auditory stimulus; (b) a contextual inferencing strategy;
- (c) a grammar strategy; (d) a visualization strategy; (e) a cognate strategy, and (f) a role identification strategy.

In Contrast, less-skilled learners mostly reported using a translation strategy and a keyword method more often than more-skilled learners.

Murphy (1985) investigated the listening comprehension strategies of learners at the intermediate level only too. 12 high and low intermediate ESL college students participated in this study, and they were asked to listen to 5 commercially audio-taped listening passages and verbalize or write their responses to these listening passages. The students' written and oral responses were called 'the students' listening protocols', and the analysis method used was called 'the protocol analysis.' On analyzing the data, Murphy was able to identify seventeen listening strategies from the students' responses, which he categorized into six broad categories as follows:

1. Recalling (i.e., paraphrasing, revision, and checking).
2. Speculating (i.e., inferring, connecting, and anticipating).
3. Probing (i.e., analyzing the topics, and evaluating the topics).
4. Introspecting (i.e., self-evaluating, and self-describing).
5. Delaying (i.e., repeating, and fishing).
6. Recording (I.e., note-taking, and drawing).

The data analyses showed that there were no recognizable differences in the strategy use by high and low intermediate students. In other words, both high and low intermediate groups used the same strategies.

O'Malley et al. (1989) investigated the listening strategies used by intermediate ESL learners only. 11 high school students from a Spanish linguistic background participated in this study, and they were designated as effective or less effective listeners by their ESL teachers. A think-aloud procedure was used to collect the data from three sessions at two weeks intervals. The participants listened to a listening comprehension activity during which they were interrupted and asked to report what they were thinking,

and they were given the option to think aloud in Spanish or in English. The results of this study revealed that effective listeners appeared to use both bottom-up and top-down strategies, whereas less effective strategies reported using only bottom-up strategies. The results also showed that the three predominant strategies that differentiated effective listeners from less effective listeners were self-monitoring, elaboration, and inferencing.

O'Malley et al. (1989) also differentiated three distinct stages of listening comprehension. In the initial (perceptual processing) stage of listening, effective listeners were better able to monitor and recover their attention when distracted than less effective listeners. In the second (parsing) stage of listening, effective listeners were more concerned with larger chunks of information and attended to individual words only if there is a comprehension breakdown. They also tended to use inferencing strategies at this phase. In contrast, less effective listeners were more concerned with individual words and tended to heavily rely on translation. In the final (utilization) stage of listening, while effective listeners tended to use as different strategies as elaboration, inferencing, relating information to their own personal experiences and judging the value of the information, less effective listeners relied less on elaboration, and they did not relate the text information to their own personal experiences.

On the other hand, a number of studies attempted to find out whether there is a relationship between overall language proficiency and listening proficiency. I will now discuss the findings of these studies. Fujita (1985) developed two inventories of listening strategies, one for skilled learners and the other for less-skilled learners. He also developed a questionnaire with respect to the strategy use in which he identified six factors involved in the listening process: (a) self-confidence in listening comprehension,

(b) search for meaning; (c) recall notes; (d) attention to form, self, and others; (e) active participation, and (f) previous experience and language learning. When a factor analysis of the responses to this questionnaire was conducted, three of these six factors appear to distinguish skilled learners from less-skilled learners: self-confidence in listening comprehension, search for meaning, and active participation.

Murphy (1986, 1987) examined the differences between more-skilled learners and less-skilled learners by looking at what strategies learners with different proficiency levels use. Murphy identified four different patterns used to interpret the aural text. While two of these patterns, which are text-heavy and listener-heavy, are characteristics of less-skilled learners, the patterns of wide distribution and holding off until the end are characteristics of more-skilled learners. Murphy also made some observations such as more-skilled learners used many more specific strategies than less-skilled learners. In addition to that, Murphy noted that more-skilled learners appeared to pay more attention to the rhetorical organization and that they were able to find main ideas and supporting details, whereas less-skilled were more attentive to the definition and pronunciation of unknown words.

Rost and Ross (1991) investigated the listening comprehension of Japanese-speaking English learners at four levels (beginners, elementary, intermediate, and advanced). There were 18 subjects in each level. Subjects in the beginning and elementary levels were classified as less-proficient learners, whereas the subjects in the intermediate and advanced levels were designated as proficient learners. First, the subjects received training on using questioning strategies, and then, they were asked to

listen to a narrative and ask clarification questions in their L1. The subjects' questions were transcribed and categorized into one of the following heading:

1. Global Questioning Strategies (i.e., global reprise, continuation signal).
2. Local Questioning Strategies (lexical reprise, fragment reprise, lexical gap, positional reprise).
3. Inferential Strategies (i.e., hypothesis testing, forward inference)

Rost and Ross found that subjects in the intermediate and advanced levels had better understanding of the listening text and were better at writing summaries than subjects in the beginning and elementary levels, suggesting that there is a correlation between listening proficiency and overall language proficiency. The results also showed that four questioning strategies distinguished between proficient and less-proficient learners. Strategies such as forward inferencing and continuation signal were employed by proficient learners, whereas less-proficient learners tended to employ strategies such as lexical reprise and global reprise.

Vandergrift (1993) investigated the strategy use of Core French High School students at four different language proficiency levels (Novice I to Intermediate III). The study was comprised of three phases. In Phase I, structured interviews, conducted on an individual basis, were employed to collect data. A total of 36 students were recruited for this phase. The interviewees were asked to recall the listening strategies they employed to comprehend spoken French in different contexts.

In Phase II, participants were chosen for the stimulated recall (Phase II) and think-aloud (Phase III) sessions according to the data collected from structured interviews (Phase I). Those reporting the greatest variety of LLS use were designated as skilled

listeners, whereas those who reported the least variety of LLS use were classified as less-skilled listeners. Because of sample attrition, only 15 students participated in this phase and the subsequent one. The recall sessions were conducted to collect data on the students' thought processes during a proficiency interview replayed on a videotape immediately afterwards.

In Phase III, after taking think-aloud training sessions, participants listened to authentic texts recorded on tape with predetermined pauses. The tape was stopped at each pause, and participants were asked to report what they were thinking. The results revealed clear differences in the strategy use by listening ability and proficiency level. While both less- and more-skilled learners tended to heavily use cognitive strategies, the main difference between the two groups lies in the heavy use of metacognitive strategies by more-skilled learners, particularly monitoring comprehension and identifying problems. Moreover, more-skilled learners relied a great deal on their world knowledge, and were better able to overlook irrelevant information. Less-skilled learners got stuck because they wasted time and attention using ineffective strategies such as translation.

Moreira (1996) explored the listening strategy use of 12 students of Portuguese. Moreira used three introspection procedures, each one in a different phase. In Phase I, participants listened to a text without interruptions, and then, they were asked to summarize what they heard in the L2 passage. The participants were classified as beginning, intermediate, or advanced learners based on their performance in the recall protocols.

In Phase II, the participants listened to the same passage but with pauses this time. At each pause, participants were asked to verbally recall what they had just heard. In

Phase III, a delayed retrospection procedure was employed. Participants were interviewed through a retrospective interview task in which participants talked about their point of view on the listening comprehension process.

Results showed that all participants used few and the same strategies. However, the advanced learners used those strategies more frequently than beginning and intermediate learners. In addition, the introspections showed that the advanced learners were more aware of the strategies they employ as they listen to spoken language.

Vandergrift (1997) used a think-aloud procedure to investigate the strategies of proficient and less-proficient listeners of French as a second language. 21 French learners participated in this study, and they were from four different French course levels. 10 of the participants were designated as proficient listeners, whereas the other 11 learners were less-proficient listeners. All the think-aloud data-collecting sessions were conducted on an individual basis, and the think-aloud data was recorded for three different aural texts.

The results of this study revealed differences in the strategy use between proficient and less-proficient listeners. The biggest difference between proficient and less-proficient listeners appears to lie in the reported use of metacognitive strategies. Proficient listeners reported using more metacognitive strategies than less-proficient listeners. Also, less-proficient listeners used more surface-processing cognitive strategies such as translation and transfer, whereas skilled listeners used more deep-processing cognitive strategies including comprehension monitoring and problem identification. However, some cognitive strategies (summarization, elaboration, and inferencing) were equally reported by proficient and less-proficient listeners.

Chao (1997) investigated the strategy use of 229 Chinese-speaking learners of English through multiple qualitative and quantitative measures. After watching and listening to a listening text, a recall session was conducted in which the participants were asked to write down in Chinese what they could remember about the text they had just listened to. Participants were classified as beginners, intermediate, or advanced according to their recall scoring. A listening strategy use questionnaire in Chinese was also administered to the participants after the recall session. Finally, 28 participants, 14 beginners and 14 advanced listeners, were chosen to participate in a group focus interview.

The recall data showed that learners at beginning, intermediate, and advanced levels reported using the same strategies. However, those with high levels of listening proficiency reported using those strategies more often than those with low or intermediate levels of listening proficiency. Moreover, the advanced learners appeared to be more aware of their strategy use, and they were better able to monitor their strategies in a more flexible way.

Chao also analyzed learners' strategies using each of these three variables individually (listening proficiency, years of language study, and overall language proficiency). She found a few significant correlations between listening proficiency and overall language proficiency. Advanced learners used strategies more frequently than beginning and intermediate learners. Moreover, advanced learners were much better than beginning learners at focusing their attention, keeping up with the speed of the aural text, inferencing, summarizing, and elaborating upon new information. In addition, advanced

learners took more notes of the aural text and were better able to grasp the overall meaning of the aural text.

Vandergrift (2003) examined the strategies of skilled and less-skilled listeners of French using a think-aloud procedure. A total of 36 French learners participated in this study. A pre-listening comprehension test was first administered, and according to the scores obtained, the participants were classified as skilled or less-skilled listeners. Then all the participants were asked to listen to three aural texts with predetermined breaks. At each break, the participants were asked to verbalize what they were thinking. Vandergrift found that participants used mostly cognitive strategies, followed by metacognitive strategies. There was also very little use of socioaffective strategies. The results also showed significant differences between skilled and less skilled listeners in the use of metacognitive strategies, as well as in individual strategies for comprehension monitoring, questioning for elaboration, and translation. Skilled listeners reported using these skills twice as often as the less-skilled listeners.

To sum up, all of these eight researchers have explored listening comprehension strategies qualitatively. Some of these researchers found differences in the strategy use between proficient and less-proficient listeners, but others did not. This research will therefore, quantitatively investigate the listening strategies of proficient and less-proficient listeners to find out whether similar findings can be obtained using quantitative measures.

Metacognition and Learning

Flavell (1979) defined metacognitive knowledge as “that segment of your knowledge (a child’s, an adult’s) stored world knowledge that has to do with people as

cognitive creatures and with their diverse cognitive tasks, goals, actions, and experiences” (p. 906). Flavell (1976) states that metacognition includes both knowledge of cognitive processes and the ability to monitor, regulate, and organize these processes, and he further explained that metacognitive knowledge is mainly comprised of knowledge and beliefs about these factors (task, person, and strategic) that interact during any cognitive activity (Flavell, 1979). However, the capacity to use this knowledge is as important as the knowledge itself (Nelson, 1996; Sternberg, 1998).

According to Paris and Winograd (1990), metacognitive knowledge involves two main features: control or executive aspects, and knowledge about cognitive states and processes. Control or executive aspects refer to using metacognitive strategies, whereas knowledge about cognitive states and processes can be divided into three types of knowledge: *Person knowledge* which consists of the judgments that one makes about his/her learning abilities and knowledge of the factors, whether internal or external, that impact the success or failure in one’s learning, *task knowledge* which is about the demands, nature, and purpose of learning tasks, and it is meant to enable learners to consider the various factors that can contribute to the difficulty of a learning task , and *strategy knowledge* which helps achieve one’s learning goals and choose the appropriate strategy to achieve these goals (Vandergrift, 2006). Development in these aspects of metacognitive knowledge can help learners to select appropriate strategies for enhancing their performance.

There is a general consensus among L2 learning researchers that metacognition has a major role in enhancing thinking and comprehension (Byrnes, 1996; Costa, 2001; Garner, 1997; Sternberg, 1998; Weinstein, Goetz, & Alexander, 1988; Wenden, 1998).

Marzano et al. (1998) explained that metacognition is part of cognitive development, and it is both a product and producer of the cognitive development. It helps learners to actively take part in regulating and managing their own learning, gives a personal attitude about one's learning styles and abilities, and is manageable to classroom instruction. Research results have also shown that learners with higher degrees of metacognitive awareness are much better able to process and store new information.

The importance of metacognitive knowledge in learning has been documented in cognitive psychology (e.g., Zimmerman & Schunk, 2001; Fernandez-Duque, Baird, & Posner 2003b) and second language learning (e.g., Bolitho et al. 2003; Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Mokhtari and Reichard, 2002; Schoonen et al, 1998, 2003). Early research into L2 listening comprehension has mainly focused on the use of strategies for listening comprehension (Rubin, 1994). The self- management dimension of learner thinking while listening was of great interest to L2 listening research. This was examined through an investigation of L2 listeners' use of metacognitive strategies for dealing with difficulties and facilitating comprehension (Bacon, 1992; Goh, 1998; Mareschal, 2002; O'Malley & Chamot, 1990; Vandergrift, 1997, 2003a).

L2 listening research has recently expanded to cover learners' cognitive appraisal or their metacognitive knowledge. In these studies, learners are asked to report their attitudes about themselves, their understanding of listening demands, their cognitive target goals, and their approach and strategies to the task. There have also been studies conducted to investigate the effect of raising metacognitive awareness on L2 listeners' performance and motivation (e.g., O'Malley & Chamot, 1990; Vandergrift, 2002, 2003b,

2005a). A great variety of procedures have been used to elicit L2 listeners' metacognitive knowledge. Some of these procedures are diaries (Goh, 1997), interview (Goh, 2002a), and questionnaire (Goh, 2002b; Vandergrift, 2002, 2005a; Zhang, 2001). The results of these studies have demonstrated that despite the varying degrees of knowledge possession, all learners appeared to have knowledge about the listening process, and that this knowledge is linked to listening abilities.

Despite the fact that raising learners' metacognitive awareness about listening has been now advocated for some time (e.g., Mendelsohn, 1994), research that aims to elicit learners' metacognitive knowledge is relatively recent. Goh (1997), in her diary study, found that Chinese-speaking English as a second language (ESL) students had a high degree of metacognitive awareness. Then, Goh (2000) investigated the learners' strategy knowledge through a questionnaire, and she found that the more proficient listeners had a higher degree of awareness of their listening process.

Vandergrift (2002) investigated whether listening tasks that guide students through listening- by involving them in using prediction, monitoring, evaluating, and problem-solving can help learners develop the metacognitive knowledge necessary to the development of self-regulated listening. Using this kind of tasks with beginner-level elementary school students, Vandergrift found that students were motivated to learn to understand rapid, authentic texts. This kind of task was also adopted for teaching tertiary-level Chinese English as a second language (ESL) students; they also reported increased motivation and strategy knowledge (Liu & Goh, 2006).

The current research aims to find whether proficient and less-proficient Arabic-speaking ESL learners have metacognitive knowledge and use metacognitive strategies to

regulate and monitor their listening comprehension. This research also attempts to find whether there are differences in the metacognitive strategy use between advanced and intermediate learners.

Rationale and Applications

As has been discussed throughout chapter II, this review of L2 listening literature revealed that no study to date has investigated the listening comprehension studies employed by English Arabic-speaking learners. The listening comprehension studies that have been conducted have mainly focused on English learners whose native languages are cognates of English including Spanish and French. In addition, most of studies that have explored listening comprehension strategies were qualitative in nature using a think-aloud procedure, a recall protocol, or a structured interview to collect data.

The present study attempts to make clear the relationship between the listening comprehension strategies and listening comprehension. The intent of this study is to add to our understanding of listening comprehension strategies in general and listening comprehension strategies used in a one-way listening context (i.e., lectures) in particular. The data for this study is quantitatively collected to make clear the differences and similarities in strategy use by the advanced and intermediate ESL learners. Chapter III discusses the procedures used in the current study to collect data for the purpose of achieving the goals of this study.

CHAPTER III

Methodology

An Overview of the Chapter

This chapter will describe the participants and the procedure for their selection, the instruments and the procedure for selecting the oral texts, the research procedure, the data collection, and how the data will be analyzed. Given the complexity of this field of research, a pilot study was conducted to test and confirm these procedures.

An Overview of the Research Design

Having explored the L2 listening literature, I found that most of the previous published studies were qualitative in nature as they mainly used think-aloud procedures to reveal the perceived strategy use by learners, and it was also found that none of the previous published studies had focused on the listening strategies used by Arabic-speaking learners of English, and that all of the studies have been focused on ELLs whose native languages were cognates of English such as French and Spanish. The present study, therefore, aimed to contribute to our understanding of listening comprehension strategies in general, and listening comprehension strategies used by Arabic-speaking English learners in particular.

First of all, the problem was framed to deal with the strategies that ELLs from Arabic linguistic background use in the academic setting. In other words, the purpose of this research was to investigate and identify the types of strategies and the differences in strategy use by advanced and intermediate ESL learners while listening to a lecture. A total of 30 ESL learners were recruited to participate in this study. They were asked to

complete a Likert-scaled questionnaire right after listening to a pair of lectures and answering 10 comprehension questions related to the lectures. A quantitative analysis was conducted in this study. The data collected from the listening test and the Listening Comprehension Strategies Questionnaire was analyzed using three statistical tests: an independent-samples t-test, factor analysis and regression through SPSS version 19.

Instruments

Listening Test

Although the ESL learners who participated in this study were enrolled at two different language proficiency levels, namely advanced and intermediate, a listening test was used to find whether there was really a significant difference in their listening achievement (See Appendix A). The listening test also served as a listening input on which participants could reflect with regard to their mental strategies while completing the questionnaire items. Since this study is concerned with the listening strategies learners use in the academic setting, the listening test constructed for this study was comprised of two lectures to measure listening comprehension.

The two lectures varied immensely in length and topics discussed. One of the lectures is only three minutes long. It is a listening passage about an environmental issue, namely *Cookstoves* (See Appendix B). It was made sure that the lecture did not contain any technical terminology that could make the comprehension of the lecture overly challenging to the participants. The comprehension of this lecture was measured using a test, in which the subtests were comprised of four items with four potential choices, and an essay question that was focused on the recognition of the main idea of the lecture.

The other lecture, which was selected from an ESL listening book, namely Lecture Ready, is about 9: 35 minutes long, and it is about *Children's Media Use* (See Appendix C). The comprehension of this lecture was measured using five inferential essay questions that centered around the recognition of the main ideas and key supporting details in the lecture.

Likert-Scale Questionnaire

The perceived use of strategies was measured using a listening comprehension strategies questionnaire (See Appendix D). The questionnaire was adapted from a combination of questions gathered from two previous studies, one of which is “Teaching L2 Learners How to Listen Does Make a Difference: An Empirical Study” by Vandergrift and Tafaghodtari (2010), and the other “L2 Learners’ Strategic Mental Processes during a Listening Test” by Taguchi (2001). I have made some adjustments to the wording of a few items to make them fit the language and application of the questionnaire, for example “French” was replaced with “English” in one of the questions.

The first part of the survey questionnaire elicits basic demographic information, including gender, number of years of English study, study of other foreign languages. The second part of the questionnaire is comprised of 20 items related to listening comprehension. A four-point Likert-Scale ranging from (strongly disagree) to (strongly agree) was used to indicate students’ preferences. The items measure the perceived use of the strategies and processes underlying three factors related to the monitoring and regulating of L2 listening comprehension. These three factors include cognitive strategies (i.e. linguistic inferencing, and problem solving), metacognitive strategies (i.e.

planning, and monitoring listening comprehension), and affective strategies (i.e. motivation, and anxiety).

The data collected from the listening test and participants responses gathered through the listening comprehension strategies questionnaire were used to investigate the following hypotheses:

1. Both advanced and intermediate learners use cognitive, metacognitive and affective strategies
2. Advanced listeners use more metacognitive strategies than intermediate listeners.
3. Advanced listeners use more top-down (i.e. inferencing and elaboration) strategies than intermediate listeners.

Pilot Study

A small-scale pilot study was conducted to test and confirm the procedures to be used in the main study. The purpose of the pilot study was basically to make sure that the level of the texts difficulty is not too far beyond or below the comprehension level of the listeners and to address the reliability of the listening questionnaire accordingly. The pilot study was conducted in the researcher's house. Two of the researcher's friends who were ESL learners participated in the pilot study. The English proficiency of the ESL learners who participated in the pilot study was very similar to the levels of proficiency of the target participants in the main study. One of the participants was at the high intermediate level at an IEP, and the other was at a high advanced level at the same IEP.

The same procedures to be followed in the main study were observed in the pilot study. The two lectures were played on a CD player as many as twice. In the first listen,

participants were asked to take notes, which they later used to help them answer the questions. Then, they were administered the questions and allotted five minutes to answer the questions. After that, they listened to the same lecture and answered the questions that they had not been able to answer using their notes from the first listen. The same procedure was followed with the second lecture. After having listened to both lectures and taken the tests, the participants completed the Listening Comprehension Strategies Questionnaire. The advanced student scored 18 out of 20, whereas the intermediate student scored 16 out of 20. On receiving the participants' feedback and the pilot study data, it was confirmed it was safe to proceed with the main study.

Research Subjects

A total of 30 male students were recruited to participate in this study. The participants were all native speakers of Arabic who had been in the US for one year more or less when the study was conducted. All the participants were enrolled in ESL classes in a city in a western state in the US. The purpose and procedure of this study and the confidentiality of data collected were explained to all the 30 participants in Arabic through a consent form approved by the Internal Review Board.

Participants came from three different Arabic countries including: Libya, Saudi Arabia, and Kuwait. Twenty-two participants were from Libya, and they helped to recruit eight more participants: Five were from Saudi Arabia, and the other three were from Kuwait. All the participants indicated that their formal education of English had started in grade 7. Before coming to the US, all the participants had been taught English by the same teaching method, namely the Grammar Translation Method. They all had

been taught English as a school subject in a 45- minute class that was held four times per week.

The participants were both graduate and undergraduate students studying in a range of majors including: mechanical engineering, electrical engineering, civil engineering, forestry, communication, mathematics, zoology, biology, geology, and business. When the study was conducted, all the participants were studying ESL in two IEPs. Fifteen participants were at an intermediate level, which was the 400 level in one IEP but the 300 level in the other. The other fifteen students were at an advanced level in two IEPs, studying at the 600 level in one IEP and the 500 level in the other.

Research Settings

The data was collected in a group setting with varied number of participants in each session. The first session, conducted at 9 pm in 11/22/2011, was at the house of the researcher's friend, and there were 12 participants in this session. The second session was also conducted in the same house at around 3 pm in 12/02/2011. Seven students were administered the tests and the questionnaire in this session. Later on that day and in the same location, a third session was held in which six students participated. The last session was conducted five days later in the researcher's house in which five students completed the listening test and responded to the questionnaire.

Research Procedures

Although the experiment was conducted in several sessions, the same instruments and procedures were used in each session. Each session lasted for about an hour. Two recorded lectures were played on a CD player twice, and two sets of questions related to the lectures were administered in each session. *Children's Media Use*, the 9:35 minutes

long lecture, was played first, and then, the other lecture, *Cookstoves: An Environmental Issue* was played afterwards. After having listened to both lectures as many as twice and answered the comprehension questions, participants were administered the Likert-Scaled Listening Strategies Questionnaire.

In the first listen, participants were asked to take notes which they were later allowed to use to answer the questions. Upon finishing the first listen, students were administered the comprehension questions related to the first lecture, and they were allocated five minutes to go over the questions and answer them using the collected notes. Participants were then asked to listen to the same lecture for the second time and answer the questions they had not been able to answer using their notes from the first listen. The same procedure was followed with the second lecture. Finally, the participants were administered the Listening Comprehension Strategies Questionnaire.

Data Analysis

An independent-samples t-test was conducted to see whether there was a significant difference in the listening comprehension of the advanced and intermediate groups. Then, the questionnaire data was run through a factor analysis to reduce the collected twenty-variable data into three main factors. After that, the test scores and questionnaire data was run through a regression analysis to see how much of the comprehension variance is accounted for by the questionnaire factors. Finally, the responses to the Likert-Scaled items were compared between the advanced and intermediate groups by using an independent samples t-test.

As noted earlier, the data collected from the listening test and participants

responses gathered through the listening comprehension strategies questionnaire were used to investigate the following hypotheses:

1. Both advanced and intermediate learners use cognitive, metacognitive and affective strategies
2. Advanced listeners use more metacognitive strategies than intermediate listeners.
3. Advanced listeners use more top-down (i.e. inferencing and elaboration) strategies than intermediate listeners.

CHAPTER IV

RESULTS

Chapter IV includes the statistical analysis of the data collected through the research procedures described in Chapter III. Since this study seeks to compare and identify the listening comprehension strategies used by advanced and intermediate ESL learners, the two participant groups completed a listening comprehension test and a listening comprehension strategy use questionnaire. In order to determine the relationship between the listening achievement of the advanced and intermediate groups and the three types of listening comprehension strategies (cognitive, metacognitive, and socio-affective), the data was run through several statistical procedures. This chapter is divided into 4 subsections, and the results of the first research hypothesis will be presented in the first three subsections. The last two research hypotheses are tested separately in the last two subsections. The findings provide insights into the three hypotheses of this research:

1. Both advanced and intermediate learners use cognitive, metacognitive and affective strategies
2. Advanced listeners use more metacognitive strategies than intermediate listeners.
3. Advanced listeners use more top-down (i.e. inferencing and elaboration) strategies than intermediate listeners.

The standard deviations, means of the listening comprehension scores from the advanced and intermediate groups, the dependent variable in the study, were first calculated.

TABLE 4.1: Means and standard deviation for listening achievement of the advanced and intermediate groups

Group	N	Mean	Std. Deviation	Min.	Max.
Advanced	15	17.06	2.54	11	20
Intermediate	15	13.93	3.01	9	20

Table 4.1 shows the descriptive statistics of the two groups including the number of participants in each group, the standard deviations, means, and the range of minimum and maximum scores of listening comprehension for the advanced and intermediate groups.

Listening Comprehension Test Data

Our first assumption was that the advanced group would significantly outperform the intermediate group on the listening test. Therefore, as a first step, the scores of the listening test for both the advanced and intermediate groups were run through a two-sided independent- samples t-test to see whether there was a statistically significant difference in the listening achievement of the two groups. First, an examination of Levene’s test of equality of error variance showed that the data collected from the listening comprehension test of both groups had homogeneity of variance; therefore, the error of variance of the listening achievement was equal across groups ($F = .060$; $p = .809$). It is noteworthy that for all analyses reported below, the alpha level for significance was set at .05.

As shown in Tables 4.2, 4.3, and 4.4, the t-test results revealed that the advanced group had significantly outperformed the intermediate group on the listening

comprehension test, with a mean difference of 3.13, t value = 3.07, and p-value = .005. However, the t-test used to analyze this data was two-sided, so the p-value was divided by two to get a one-sided p-value: $.005 \div 2 = .0025$. Therefore, based upon these test results, a conclusion can be drawn that there is a statistically significant difference between the listening achievement of the advanced and intermediate groups, suggesting that our assumption was confirmed.

TABLE 4.2 displays the number of participants in each group, the means and standard deviations of the listening comprehension test for the advanced and intermediate groups

Group	N	Mean	Std. deviation	Std. Error Mean
Advanced	15	17.06	2.54	.66
Intermediate	15	13.93	3.01	.77

TABLES 4.3 and 4.4 show the t-test statistics including t-value, p-value, mean difference and confidence interval

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
VAR00001	Equal variances assumed	3.07	28	.005	3.13
	Equal variances not assumed	3.07	27.25	.005	3.13

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
VAR00001	Equal variances assumed	1.01	1.04	5.21
	Equal variances not assumed	1.01	1.04	5.22

Questionnaire Data

The next step was to analyze the questionnaire data in order to answer the first question that guided this research, which is:

What are the strategies that ESL learners use while listening to an authentic text in English in an academic setting (i.e. lecture)?

Our first hypothesis was that both advanced and intermediate learners would use cognitive, metacognitive and affective strategies. In order to test this hypothesis and answer this question, a questionnaire consisting of listening comprehension strategies that have been identified by previous L2 listening research was used. The Listening Comprehension Strategies Questionnaire was subjected to a factor analysis with varimax rotation to determine the component structure that most adequately represented the constructs of the listening comprehension strategies. Correlation coefficients revealed the associations among the listening comprehension strategies and their subcomponents, such that highly correlated dimensions of the strategies could be identified.

Using the principle component extraction method, factor analysis with varimax rotation for the listening comprehension strategies questionnaire yielded three components (factors): cognitive, metacognitive, and affective. The three components (factors) accounted for 49.41% of the total variance.

The first factor, cognitive, which accounted for 24.24% of the total variance, was indexed by 8 items in the present study. All the items loaded positively with the first factor, except item 1, which had a high negative correlation. The loadings in Table 4.5 indicate that each item was highly correlated with this factor, with coefficients ranging

from $-.757$ to $.821$. This finding suggests that the cognitive factor is an important subcomponent of the listening comprehension strategies questionnaire.

TABLE 4.5: Varimax Rotated Loadings for Factor Analysis of the Listening Comprehension Strategies Scale ($N = 20$)

Questionnaire Items	Factor 1
1. I focus on the meaning of every word to understand the whole text.	$-.757$
2. I try to picture the setting of the conversation to understand what the speakers are talking about.	$.793$
4. I use the words I understand to help me guess the meaning of the words I don't understand.	$.679$
5. I use the main idea of the text to help me guess the meaning of the words that I don't know.	$.724$
6. I use my knowledge and personal experience to help me understand the topic.	$.821$
7. As I listen, I compare what I understand with what I already know about the topic.	$.678$
9. While listening, I translate in my head.	$.488$
10. As I listen, I adjust my interpretation if I realize that it is not correct.	$.526$

The second factor, metacognitive, was represented by 8 items and accounted for 13.41% of the total variance. Table 4.6 shows the loadings of the questionnaire items that were highly correlated with this factor, with a range in coefficient of $-.763$ to $.722$.

TABLE 4.6: Varimax Rotated Loadings for Factor Analysis of the Listening Comprehension Strategies Scale ($N = 20$)

Questionnaire Items	Factor 2
3. Before listening, I think of similar texts that I may have listened to.	$.722$

8. Before I start to listen, I have a plan in my head for how I am going to listen.	.530
11. As I listen, I occasionally ask myself if I am satisfied with the level of my comprehension.	-.752
14. As I listen, I have a goal in my head.	-.470
16. 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.	-.763
18. After listening, I think back to how I listened and about what I might do differently next time.	-.185
19. I focus harder on the text when I have trouble understanding.	.502
20. I feel that listening in English is a challenge.	.663

It is noteworthy that, unlike factor 1 with which only one item had a high negative correlation, three items had high negative correlations with factor 2 suggesting that the participants reported they do not use these strategies. These strategies are:

1. As I listen, I occasionally ask myself if I am satisfied with the level of my comprehension.
2. 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.
3. As I listen, I have a goal in my head.

The last factor, socioaffective, was represented by 4 items, and accounted for 11.25% of the total variance. Four variables loaded on factor 3, and they all correlated positively with factor 3, with a coefficient ranging from .601-.704. It is interesting that all the strategies had such high correlations, and this indicates that the majority of participants reported using these strategies. The variables were related to lowering

anxiety and increasing motivation. Table 4.7 shows the items that had strong correlations with factor 3.

TABLE 4.7: Varimax Rotated Loadings for Factor Analysis of the Listening Comprehension Strategies Scale ($N = 20$)

Questionnaire Items	Factor 3
12. While listening, I try to relax.	.635
13. I try not to feel nervous as I listen to English.	.621
15. When I don't understand something, I try not to worry so much about it	.704
17. I always try to enjoy listening.	.601

To sum up, the results related to our first hypothesis demonstrated that both advanced and intermediate learners use three types of listening comprehension strategies: cognitive, metacognitive, and socioaffective, suggesting that our first hypothesis has been confirmed. As shown early, each type of strategies was represented by a number of items in the Listening Comprehension Strategies as follows:

There were 8 items (1, 2, 4, 5, 6, 7, 9, and 10) indexing the first type of Listening Comprehension Strategies, the cognitive. All items made reference to the cognitive strategies that ESL learners use, and whether ESL learners rely on their personal knowledge when they listen to a new text. These 8 items accounted for 24.24% of the total variance. Eight items (3, 8, 11, 14, 16, 18, 19, and 20) reflected the second type of listening comprehension questionnaire, metacognitive strategies, and whether ESL advanced and intermediate listeners plan and monitor their listening comprehension. These strategies accounted for 13.41% of the total variance. Finally, four items (12, 13,

15, and 17) comprised the third listening comprehension questionnaire component, socioaffective strategies, which were related to feelings about L2 listening and accounted for 11.25 % of the total variance.

Multiple-Regression Analysis

The next step was to explain the relationship between the scores and our three factors, and to find which of the factors contributed the most to the listening achievement of the advanced and intermediate groups. Thus, the data was run through a multiple regression in which a stepwise method was applied in forming the regression models. The listening scores were set as the dependent variable, whereas the three factors (cognitive, metacognitive, and socioaffective strategies) were set as the independent predictor variables.

TABLE 4.8 Model Summary

Model	R	R Square	Adjusted R Square
1	.53	.28	.25
2	.67	.45	.41
3	.73	.54	.48

As shown in Table 4.8, 45% of the listening achievement (dependent variable) is accounted for by the three independent variables (cognitive, metacognitive, and socioaffective strategies) in our model as indicated by the R squared.

TABLE 4.9 Regression Coefficients and Significance

Factor	B	T	Sig
Cognitive	.53	3.31	.003
Metacognitive	-.41	-2.90	.007
Socioaffective	.29	2.24	.004

As shown in Table 4.9, three measured variables (factors) were included in the regression model that related to the listening achievement by the advanced and intermediate groups. Among these variables, the Cognitive was the most powerful predictor of the students' achievement on the listening test ($B = .531$, $t = 3.316$, $p = .003$), followed by the Socioaffective ($B = .298$, $t = 2.246$, $p = .004$), and finally the Metacognitive ($B = -.414$, $t = -2.906$, $p = .007$). It is noteworthy that the metacognitive factor accounted the least for listening achievement although the mean of the advanced and intermediate students who reported using metacognitive strategies was 22.73 out of 24.

In sum, regarding our first hypothesis, the result of the analysis showed that both advanced and intermediate listeners used three types of listening comprehension strategies including cognitive, metacognitive, and socioaffective strategies, suggestion that our first hypothesis has been confirmed.

Metacognitive Strategies Data

The second question that guided this research asked whether there were differences between the advanced and intermediate listeners in their perceived use of metacognitive strategies. Based on the previous L2 listening research, it was hypothesized that the advanced listeners would use more metacognitive strategies than the intermediate listeners.

Hypothesis: Advanced listeners use more metacognitive strategies than intermediate listeners.

Null Hypothesis: There is no difference between advanced and intermediate listeners in the metacognitive strategy use.

In order to answer this question and test this hypothesis, metacognitive strategies were represented by the following items in the Likert-scaled Listening Comprehension Strategies Questionnaire:

- 3. Before listening, I think of similar texts that I may have listened to.
- 8. Before I start to listen, I have a plan in my head for how I am going to listen.
- 11. As I listen, I occasionally ask myself if I am satisfied with the level of my comprehension.
- 14. As I listen, I have a goal in my head.
- 16. 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.
- 18. After listening, I think back to how I listened and about what I might do differently next time.

Having met the underlying statistical assumptions, the responses to the Likert-scaled items were compared between the advanced and intermediate groups using an independent- samples t-test.

The t-test results showed that there is no significant difference in the overall use of metacognitive strategies between the advanced and intermediate listeners, with a small mean difference of .93, $t = 1.03$, and $p \text{ value} = .308$.

Table 4.10 shows the number of participants in each group, means, and standard deviations of the t test for the metacognitive strategy use by advanced and intermediate listeners.

Group	N	Mean	Max	Std. deviation	Std. Error Mean
Advanced	15	22.73	24	2.34	.60
Intermediate	15	21.80	24	2.56	.66

TABLES 4.11 and 4.12 show the t-test statistics including t-value, p-value, mean difference and confidence interval

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
VAR00001	Equal variances assumed	1.03	28	.308	.93
	Equal variances not assumed	1.03	27.76	.308	.93

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
VAR00001	Equal variances assumed	.89	-.90	2.77
	Equal variances not assumed	.89	-.90	2.77

In sum, our findings do not give support to our hypothesis, indicating that our hypothesis was not confirmed, and therefore, we cannot reject the null hypothesis.

Cognitive Strategies Data

The last, but not the least, question in this research asked whether there were differences between advanced and intermediate listeners in their perceived use of cognitive strategies. It was hypothesized that advanced listeners use more top-down strategies than intermediate listeners.

Hypothesis: Advanced listeners use more top-down (i.e. inferencing and elaboration) strategies than intermediate listeners.

Null Hypothesis: There is no difference in the top-down strategy use between advanced and intermediate listeners.

To test this hypothesis, top-down strategies were represented by the following 5 items in the Listening comprehension strategies:

2. I try to picture the setting of the conversation to understand what the speakers are talking about.
4. I use the words I understand to help me guess the meaning of the words I don't understand.
5. I use the main idea of the text to help me guess the meaning of the words that I don't know.
6. I use my knowledge and personal experience to help me understand the topic.
7. As I listen, I compare what I understand with what I already know about the topic.

The responses to the 8 Likert-scaled items by the advanced and intermediate listeners were compared using a two-tailed independent-samples t-test for two independent samples. First, an examination of Levene's test of equality of error variance showed that the data collected from the responses to the Likert-scaled items of both groups had homogeneity of variance; therefore, the error of variance of the listening achievement was equal across groups ($F = 4.71$; $p = .038$). As shown in Tables 4.13 and 4.14, the t test results showed that significantly advanced listeners used more top-down strategies than intermediate listeners with a significant mean difference of 2.40, $t = 2.32$ and $p\text{-value} = .027$.

TABLES 4.13 and 4.14 show the t-test statistics including t-value, p-value, mean difference and confidence interval

Group	N	Mean	Max	Std. deviation	Std. Error Mean
Advanced	15	20.00	20	1.97	.50
Intermediate	15	17.60	20	3.85	.99

		t-test for Equality of Means			
		t	df	Sig. (2-tailed)	Mean Difference
VAR00001	Equal variances assumed	2.32	28	.027	2.60
	Equal variances not assumed	2.32	20.86	.027	2.60

		t-test for Equality of Means		
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
VAR00001	Equal variances assumed	1.11	.31	4.88
	Equal variances not assumed	1.11	.27	4.92

In sum, the results of the analyses related to our third hypothesis demonstrate that the advanced listeners use more top-down strategies than their intermediate counterparts, suggesting that our third hypothesis has been confirmed, and the null hypothesis was rejected.

CHAPTER V

DISCUSSION

This chapter is a consideration of the results of the study. This chapter begins with interpretation of the significant results reported in Chapter IV and proceeds with a discussion of the practical implications of these findings to ESL and EFL teachers. Next, the limitations of this research are presented. This Chapter concludes by giving suggestions for further research.

Discussion and Interpretation of Findings

This study investigated the types of listening comprehension strategies used by advanced and intermediate Arabic-speaking ESL learners. The study was motivated by previous findings showing that proficient listeners use more strategies than less proficient listeners. The study was, therefore, an attempt to find out whether such findings could be confirmed in a different listening situation such as a lecture with ESL learners from an Arabic linguistic background.

While listening to texts in English academic setting, the L2 learners in this study appeared to use an extensive array of listening strategies, and there are some differences in the listening strategy use between advanced and intermediate listeners. I will examine these differences in strategy use as I discuss each of the research questions.

The first research question addressed the overall use of listening comprehension strategies by advanced and intermediate ESL listeners. In order to answer this question, a factor analysis was applied to explore the structure of listening strategies. The sample of 15 advanced listeners and 15 intermediate listeners were included to be analyzed. A varimax rotation was employed. As a result, 20 items were clustered into three factors,

which accounted for 49.41% of the original listening strategy items. These three factors were named as: (1) cognitive strategies, (2) metacognitive strategies, and (3) socioaffective strategies.

The data analyses presented in Chapter IV demonstrate that advanced and intermediate listeners use a variety of listening comprehension strategies including cognitive, metacognitive, and socioaffective strategies. These results supported our first hypothesis and were congruent with previous findings that suggest ESL listeners use listening strategies related to these three broad categories (e.g., O'Malley, Chamot, and Kupper, 1989; Chamot and Kupper, 1989; Vandergrift, 1996).

The results also revealed that advanced and intermediate ESL listeners use more cognitive strategies than metacognitive strategies. These findings concur with the findings of other studies that investigated listening comprehension strategy use (e.g., Bacon, 1992a; 1992b). The results of this study also showed that advanced and intermediate ESL listeners use a great deal of socioaffective strategies. However, this finding does not concur with studies such as Vandergrift's 1996.

In order to explain the relationship between the listening achievement of the advanced and intermediate listeners and the listening strategy use, a multiple-regression analysis was applied. The three factors (metacognitive, cognitive, and socioaffective strategies) were set as the independent variables, whereas the listening achievement of the advanced and intermediate groups (listening test scores) was set as the independent variable. The multiple regression scores showed that 54% of the listening achievement was accounted for by the three independent variables. The results also showed that cognitive strategies were the factor that contributed the most to listening comprehension,

followed by socioaffective strategies, whereas metacognitive strategies contributed the least to listening comprehension.

The second research question was related to the perceived use of metacognitive strategies by advanced and intermediate ESL listeners and whether there were significant differences between the advanced and intermediate listeners in their use of metacognitive strategies. In order to answer this question, the responses of the advanced and intermediate listeners to the Likert-scaled metacognitive strategies were compared using an independent-samples t-test. The t-test results showed that as far as the overall use of metacognitive strategies was concerned, there were no distinct differences found between advanced and intermediate ESL learners. Therefore, our hypothesis was not supported by the findings of this study. These findings give support to previous studies (e.g., DeFilippis, 1980). These findings were, however, inconsistent with previous findings that suggest that proficient listeners use more metacognitive strategies than less proficient listeners (e.g., Murphy, 1985; Henner Stanchina, 1987; O'Malley, Chamot, and Kupper, 1989).

The last question of this research was concerned with the use of cognitive strategies by advanced and intermediate ESL learners. Cognitive strategies are problem-solving techniques that learners use to handle the learning tasks and facilitate the acquisition of knowledge or skill. This handling of learning tasks and acquisition of knowledge, manifested in behaviors such as guessing the overall meaning of the text using the main idea or elaborating on new information using one's personal knowledge and experience appears to lead to greater success in listening comprehension as suggested by the results in this study.

The results pertinent to this question showed that cognitive strategies were the most frequently used by both advanced and intermediate ESL listeners. The results analyses also revealed that cognitive strategies are the factor that contributed the most to listening comprehension. These findings are inconsistent with previous findings that suggest metacognitive strategies are the primary factor that accounts for most of listening comprehension (e.g., Henner Stanchina, 1987).

The present study also revealed that advanced listeners use significantly more top-down strategies (i.e. guessing the meaning from the context, and using the main idea to guess the meaning of the new words) than intermediate listeners, lending support to our hypothesis. However, these results are consistent with previous findings (e.g., Vandergrift, 1996; Taguchi, 2001).

Pedagogical Implications of the study

This study offers a number of implications for classroom teaching and ESL/ EFL teachers. First, the factor analysis showed that advanced and intermediate listeners use cognitive, metacognitive, and socioaffective strategies. The metacognitive strategies that were explored in this study include planning and monitoring comprehension. There were no distinct differences in the overall use of the metacognitive strategies between advanced and intermediate learners. However, since the listening achievement of both advanced and intermediate listeners was very good in this study, this finding suggests that ESL/ EFL learners at beginning levels should be made aware of these strategies and instructed to make use of them to improve their listening comprehension.

ESL/EFL teachers should teach their students how to listen, to reflect on the process of listening and focus on using the metacognitive strategies of planning and

monitoring. Teachers can teach students planning strategies by preparing them for what they will hear and what they are expected to do. To help students plan for listening, teachers should provide a purpose for listening so that students become aware of the specific information they need to listen for. Students can then anticipate what they might hear. Students also need to monitor their comprehension as they listen; teachers therefore, should allow students listen to the text for several times, and allow them to work in pairs or in groups so that the students can compare notes between each listening and verify selected details of the text.

Also, the results of this study revealed that advanced listeners reported using more top-down strategies than intermediate listeners. Advanced listeners appeared to be able to elaborate on new information, using their personal experience or knowledge more than intermediate listeners. This finding suggests that ESL/ EFL teachers should incorporate more top-down cognitive processing skills in their listening comprehension class. Teachers, therefore, should always provide background knowledge about the topic of listening and activate the students' schemata so that students can make connection between the topic of listening and their personal experience.

Advanced listeners also appeared to significantly grasp the overall meaning of the text more than intermediate listeners. Therefore, ESL/EFL teachers should always encourage students to actively participate in the listening text and make inferences from the listening text. Also, ESL/ EFL teachers should pay less attention to practice at the word level or grammatical structure (bottom-up skills) in listening practice.

Limitations of the Study

This study had several limitations that could have contributed to the fairly few

significant results found. The sample size is the first limitation to be pointed out in this study. The number of subjects may have been insufficient for factor analysis in research question # 1. For further study, in order to obtain a more reliable model, increasing the number of participants by 5 for each item might yield better and more reliable results.

Second, the listening comprehension strategies used to collect the data for this study is based on the findings of previous studies by Taguchi (2001) and Vandergrift and Tafaghodtari (2010). Thus, the strategies included in this questionnaire are selective. Perhaps, there are better strategies that were not included in this questionnaire. For further study, the questionnaire should be modified to include new findings of specific behaviors of listening comprehension in order to have a more thorough list of listening strategies.

Third, this study investigated the listening comprehension strategy use by advanced and intermediate listeners. Advanced and intermediate learners have similar command of the language, and as a result, there may not be a lot of variation in terms of their strategy use. For further study, there should be a greater distribution in proficiency levels in order to obtain more reliable results with regard to the relationship between listening strategy use and language proficiency.

Finally, this study examined the listening strategy use by Arabic-speaking ESL learners only. As known, L2 learners from the same L1 linguistic background tend to follow the same patterns in learning an L2. This is perhaps why the findings of this study did not indicate a lot of variation in the listening strategies advanced and intermediate Arabic-speaking learners had used. Therefore, for future study, the listening strategies

used by Arabic-speaking ESL learners should be compared to the listening strategies by ESL learners from different linguistic backgrounds (i.e., Chinese, Japanese, or Korean).

Suggestions for Future Research

The primary goal of this study was to investigate the strategy use of Arabic-speaking ESL learners in an academic context. The initial motivation for this study was derived from the lack of research that had been carried out to investigate the listening comprehension strategy by Arabic-speaking ESL learners. Furthermore, this study was aimed to explore the listening strategy use quantitatively because the overwhelming majority of Listening comprehension strategy was qualitative in nature.

Therefore, this study added to the meager body of listening comprehension strategy research that had been conducted in second language acquisition literature. This study examined listening comprehension strategy use in relation to language proficiency. Exploration of listening comprehension strategy use in relation to gender, background knowledge, ELL's native language, or age offers an array of possibilities for future research.

Chapter II shed light on some of the controversies surrounding the relationship between overall language proficiency and listening comprehension strategy use evident in language acquisition literature. This study did not accomplish all of its goals to provide evidence to clarify this ambiguous relationship. This is an area in which more research is needed. Any follow up study to the current research should consider the limitations of this study and improve the procedures employed to collect data for this study.

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Appendix A

Listening Test

Part I: Answer the following questions while listening to the lecture.

1. Smoke and gases from cooking fires contribute to more deaths than
 - a. Malaria.
 - b. HIV/ AIDS.
 - c. Tuberculosis.
 - d. Cholera.

2. How many people are affected by this problem?
 - a. 3 million.
 - b. 3 billion.
 - c. 3 thousand.
 - d. 3 hundred.

3. The has promised 50\$ million to fund research into safe cookstoves.
 - a. United Nations.
 - b. United States.
 - c. Global Alliance for Clean Stoves.
 - d. National Institute of Health.

4. The speaker has said that cookstoves are a health hazard because
 - a. They cause fires.
 - b. Children can easily burn themselves on the stoves.

c. The smoke and gas from the stoves are dangerous.

d. If ingested, the fuel from the stoves is toxic.

5. Who is most at risk from the health problems caused by cookstoves?

.....

Part II: Answer the following questions while listening to the lecture.

1. Write two types of media that people had in the middle of the 20th century?

.....

2. Give two examples of how technology today is different from technology in the past?

.....

.....

3. According to the 2004 Keizer Family study, how many hours do children spend doing media-related activities a day?

.....

4. For how long do children usually watch TV when they have TVs in their bedrooms?

.....

5. What are some of the negative effects of children's media-use?

.....

Appendix B

Lecture 1: Cookstoves as an Environmental Issue

Today we are going to address an environmental issue that is not well known.

Environmental problems harm or kill millions of people all over the world – for example, soot or smog in the air, or pollutants in drinking water. But according to the World Health Organization, the most dangerous areas are where the food is made – in people’s kitchens. The smoke and gases from cooking fires in the world’s poorest countries contribute to nearly two million deaths a year – that’s more than malaria. Burning wood, crop waste, charcoal or dung does the damage. Filling the homes with smoke and blackening walls. It’s women and children who suffer the most because they are the ones tending the fires, but it’s not that easy a problem to fix.

Several scientists from the National Institutes of Health in Maryland are calling attention to the Global Alliance for Clean Stoves. It brings in celebrities, chefs, and politicians to help create awareness for the need for cleaner fuels and better cookstoves. The technology is easy, but getting the stoves and cleaner fuels to impoverished millions is not. It’s not as simple as telling people that if they buy something cleaner their lives will improve. There are social and economic barriers to solving this problem. These barriers include a limited amount of research into the health risks, a lack of cheap clean stoves and fuel, the lack of awareness about the problem, and the challenges of solving a problem that affects almost 3 billion of the poorest people of the planet.

There are two initiatives that give hope to this big problem. Last year, the Global Alliance for Clean Stoves and the cookstoves industry announced that they would work together to create a market for better cookstoves. This will help bring affordable clean stoves and fuel to the people who need it. Also, the U.S. government has said that they

will give the National Institutes of Health 50\$ million to research the creation of better cookstoves and fuel. These actions are a good start on solving one of the biggest health concerns of the developing world.

Appendix C

Lecture 2: Trends in Children's Media Use

Hi good morning! Good to see you all here so bright and early. I think you'll enjoy today's lecture because it's on a topic most of you know about and are part of. It's new trends in children's media use, and why is it an important topic to discuss? You may be asking yourselves. Well, let's start by thinking about your day so far. What media have you used in your day since waking up and coming to this class? Did you check your email? Did you turn on the television as you're getting dressed or getting breakfast? As you were traveling here, did you have some kind of music playing in your car? Um, or did you use your iPod on the bus? Did you read a newspaper? How many different types of media have you used already today? Ok, so now let's think. How is your experience different from, say, 50 years ago. What are some of the key changes? Well, in the middle of the 20th century, people in the US had only TV, radio, recorders, movies, and printed media.

Today early in the 21st century, we have many more options. Let's see, there is both the larger variety of technology available, that's the number of the different types and devices we use is greater. We use DVRs, DVD's, CDs, DVDs, computers, and we also have online activities now, email, gaming, music streaming, just a name of a few, and it's also constantly changing, and the rate of change is getting faster. Ok, and technology is getting cheaper too. It is less expensive now, so more people can own it. It's also getting more portable, Ok, so you can carry it around and have access to it, use it in more places, and lastly, with the internet and cable satellite technology, people now have more sources, ok, more places you can get entertainment and information from. Overall, media use is just getting more convenient. Just look at this list, it is amazing,

isn't it? How our lives are becoming increasingly full of media; that means that today's children are growing up in an increasingly media-rich environment.

So today, we are going to look at some trends in media use and talk about some of the more surprising results of this. Let's start by looking at the overall amount of media exposure and use today. Now a 2004 study by the Keizer Family Foundation found that on average, a child, kids between the ages of 8 and 18 spend nearly 6.5 hours a day outside of school doing media-related activities using media. Think about that. That is more than what most adults spend in a full-time job. What is more interesting is that children have exposure to 8.5 hours to media per day. Ok, I can see the wheel is turning, you're thinking, wait. How can they have 6.5 hours of exposure if they only spend 6.5 hours a day with media? Well, what we can conclude from those numbers is that children are using several types of media concurrently. They're using different types of media at the same time. This is one of the new trends in media use, multitasking. So, for example, while they are listening to music, they may also be playing a video game, or reading, or they may be surfing the internet and watching television at the same time. So we can infer that today's youth are becoming more skilled at paying attention to more than one thing at a time, ok, and doing more than a task at a time, or is the opposite true? Maybe all this media is just making it harder for them to focus on one thing. They get bored more easily if there isn't a lot of stimulation from different sources. The truth is we're not sure, we're not sure exactly what the positive and negative impacts will be at this point. What is interesting is that even though children are using many more types of media, they are spending about the same amount of time with media as children 5 years ago. This means that children can't really fit any more media time into their average day.

They've hit a media-time ceiling, but they can use media more intensely by increasing their multitasking.

Now as it turns out, that's exactly what they're doing, for example, one recent study suggests that 26% of the media-time spent using one or more types of media concurrently on multitasking. Another interesting trend is the number of children who have access to media in their bedrooms, ok, so let me back this up with some findings; the number of children in the US who have a VCR or DVD player in their bedrooms in 1999 was only 36%. In 2004, 54%, ok, that was a dramatic increase as you can imagine children who have TVs in their bedrooms spend more time watching TV. They watch about three and a half hours a day, but children who don't have TVs in their bedrooms watch about 2 hours a day; that's a big difference, ok, that's 1.5 hours more in a typical day. 10.5 hours more in a week, that's significant and TVs are not alone, other media is also used more when it's located in the child's bedroom. So what can be concluded about the increased intensity of media use by children, well, not everyone agrees, so research suggests lower test scores and shorter attention spans which make some people worry that increased media use only has a harmful effect on kids, and some people worry that today's kids are too dependent on visual media that they don't have the patience to read long texts which could hurt them in school and colleges, but other people don't have such negative opinions. They believe that so much exposure to all kinds of media is just preparing them for real life, and life today is filled with media and images. They eventually have to live and work in that world, so their media use is just preparing them for that. These children are really good at shifting their attention from one thing to another, at focusing their attention on what interest them. Some experts say this skill of

monitoring and coordinating more than one task at a time, but ignoring what isn't important may actually be useful, a benefit. After all, managers, CEOs often supervise many people, many different projects at a time. So this could be a useful ability, combine their multitasking skills with confidence with different media tools, and these kids may actually have essential skills for the workplace of tomorrow. So, let wrap up now, and I want to leave you with a thought, we need to continue to study the changes in children's media-use, but we shouldn't immediately infer that the changes are negative, that's they're bad for kids, but we have to consider how new technology and exposure to it and different ways of using media may actually help our kids in the long run. Ok, that's it for today. Bye!

Appendix D

Listening Strategies Questionnaire

Background Information

Please provide us with some basic background information on you and your study of English.

1. What is your gender? Male Female

2. What is your first language? _____

3. Do you speak any additional language(s) other than your first language and English?

Yes No

If so, what other language(s) do you speak? _____

4. How long have you been studying English? _____

Listening Strategies 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.

Please circle only ONE number for each statement.

For example:

	strongly			strongly
	disagree	disagree	agree	agree
I enjoy listening to music.	1	2	3	4

1. I focus on the meaning of every word to understand the whole text.	1	2	3	4
---	---	---	---	---

2. I try to picture the setting of the conversation to understand what the speakers are talking about.	1	2	3	4
--	---	---	---	---

3. Before listening, I think of similar texts that I may have listened to.	1	2	3	4
4. I use the words I understand to help me guess the meaning of the words I don't understand.	1	2	3	4
5. I use the main idea of the text to help me guess the meaning of the words that I don't know.	1	2	3	4
6. I use my knowledge and personal experience to help me understand the topic.	1	2	3	4
7. As I listen, I compare what I understand with what I already know about the topic.	1	2	3	4
8. Before I start to listen, I have a plan in my head for how I am going to listen.	1	2	3	4
9. While listening, I translate in my head.	1	2	3	4
10. As I listen, I adjust my interpretation if I realize that it is not correct.	1	2	3	4
11. As I listen, I occasionally ask myself if I am satisfied with my level of comprehension.	1	2	3	4
12. While listening, I try to relax.	1	2	3	4
13. I try not to feel nervous as I listen to English.	1	2	3	4
14. As I listen, I have a goal in my head.	1	2	3	4
15. When I don't understand something, I try not to worry so much about it.	1	2	3	4
16. 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

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| 17. I always try to enjoy listening. | 1 | 2 | 3 | 4 |
| 18. After listening, I think back to how I listened,
and about what I might do differently next time. | 1 | 2 | 3 | 4 |
| 19. I focus harder on the text when I have
trouble understanding. | 1 | 2 | 3 | 4 |
| 20. I feel that listening in English is a challenge
for me. | 1 | 2 | 3 | 4 |