THE IMPACT OF TEACHING COHESIVE DEVICES ON L2 STUDENTS' LISTENING COMPREHENSION TEST SCORES AND LANGUAGE ACCURACY IN WRITTEN PRODUCTION

MOHAMMAD NASIM TAHSILDAR

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UNIVERSITI MALAYSIA PAHANG

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ABSTRACT

The study deals with the integration of grammatical prior knowledge in facilitating L2 students' listening comprehension. The objective of the current study is to examine the effect of teaching academic text cohesive devices on L2 students' listening comprehension test scores and to investigate its influence on language accuracy in students' written production. Based on a pre-post-test research design, 40 students enrolled in English for Academic Purposes course at a university in Malaysia were engaged as participants of the current study. A listening comprehension test was conducted prior to and post-intervention. The intervention consisted of lessons on academic text cohesive devices. The data were analysed and reported using descriptive statistics and paired sample t-tests. From the findings, it is clear that there is an increase in the minimum and maximum scores as well as in the mean scores between the pre- and post-test scores. More importantly, there is evidently a significant improvement in the participants' post-test listening comprehension scores as well as in the language accuracy and use of cohesive devices of the L2 students' written production as compared to the pre-test statistics. In sum, the findings on L2 listening comprehension test scores, language accuracy and noticing confirm that the teaching of academic text cohesive devices to activate prior knowledge does result in significant improvement in L2 listening comprehension, language accuracy and noticing in the written production of the listening text. From these findings two recommendations can be made for the teaching of listening to L2 learners: one; is to recognize the place of grammatical prior knowledge, in this case knowledge of cohesive devices, in enhancing comprehension and language accuracy, and two; listening comprehension can be facilitated through appropriate pre-, while- and post-listening activities.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Listening comprehension is one of the most challenging skills for second language or foreign language (L2/FL) learners to master since it is probably the least explicit skill among the language skills (Field, 2002; Lynch, 2002; Rost, 2002 and Vandergrift, 2004). Anderson and Lynch (2000) claim that an effective listening comprehension occurs when the listeners' prior knowledge is activated. Construction of meaning occurs when listeners match what they hear with their prior knowledge (Rost, 2002).

The role of prior knowledge in L2/FL listening comprehension has been the subject of recent research (Slahshuri, 2011 and Samian and Dastjerdi, 2012). A number of studies have been conducted on the impact of activation of prior knowledge on L2/FL listening texts (Kawai, 2000 and Sara, 2009), for instance on the effect of prior knowledge on listening comprehension (Sadighi and Zare, 2002 and Samian and Dastjerdi, 2012), topic familiarity and its influence on listening comprehension (Othman and Vanathas, 2004) grammar as a predictor of listening ability (Liao, 2007), the effect of explicit listening comprehension strategy instruction on listening comprehension strategy use (Sheshgelani and Assadiaidinlou, 2013) and text features of task input and difficulty in L2 listening comprehension (Revesz and Brunfaut, 2013). All these studies show positive effects of prior knowledge on listening comprehension.

There are several researches on the effects of prior knowledge which claim that grammar knowledge affects listening comprehension (Anderson and Lynch, 2000; Kostin, 2004; Yanagawa and Green, 2008 and Ying-Hui, 2006). However, the research is still very scarce and there is even lesser on the effect of teaching specific grammatical structures as a pre-listening activity on listening comprehension. So, the current study investigates the impact of teaching academic text cohesive devices on L2 students' academic listening comprehension test scores and language accuracy of their written production.

1.1 Listening in the L2 Classroom

Of the four language skills, listening is a fundamental one without which the learners will not be able to communicate well (Morley, 1999 and Nunan, 1998). Nunan adds that L2 learners spend more than fifty percent of their time learning listening and almost ninety per cent of the information at school is received through listening. In addition, Rost (2001) and Vandergrift (2007) point out that listening is a crucial language skill to develop in terms of L2 acquisition. Rost (1994) further points out that listening is fundamental in the language classroom since it offers input for the learners, and no learning can easily happen without taking the input at the right level. Hence, in daily ESL classrooms teaching, teachers are becoming increasingly aware of the important role of listening in language acquisition (Rost, 1994). In communicative English classes, students are surrounded by the spoken language from the teacher, from their peers, and from audio and video media. Thus, listening comprehension is crucial to language learners' language development.

Despite the importance of listening to language learning, L2 students usually believe that listening is the most complicated language skill to learn (Hasan, 2000). Vandergrift (2007) states that the reason for this complexity might be lack of effective listening skills. Anderson and Lynch (2000) also explore that one of the reasons that the listeners can not process spoken language is that the language contains words or phrases that the listeners can hear adequately but are unable to understand due to the various syntactic as well as semantic problems of the language. This is seen as a usual problem of L2 learners since the topics that they should listen to might include new or unfamiliar

words. Other problems they consider as problematic are lack of prior knowledge which includes socio-cultural, factual and contextual knowledge of the target language that can also present as obstacles to comprehension. Although comprehension can fail at any stages of the listening process, Goh (2000) notes that 80% of L2 listeners' problems are associated with decoding and word segmentation. Transferring the phonetic representations of input into words can be difficult for L2 students, because unlike written text, speech does not provide spaces between words. To further complicate this issue, native speakers often reduce speech, blend words, eliminate words, use slang, and hesitate (Stetson, 2010). Overcoming these challenges may seem problematic, however; a review of research in pronunciation instruction, discourse cues, speech rate, repetition, vocabulary instruction, and strategy use can provide useful insights on the factors that affect L2 listening comprehension and may offer potential solutions (Goh, 2000).

As research into listening and listening comprehension specifically in L2 acquisition increases, the view of teaching L2 listening is also changing (Nunan, 2002). It was considered to be a passive activity at one time however; it is now recognized as an active process, which is worth a systematic development as a skill in its own right (Richard, 2008; Vandergrift, 2004). The approach to teaching listening has also evolved from a focus on the product of listening which is "listening to learn" to comprise a focus on the process that is "learning to listen" (Vandergrift, 2004). Richard (2008) explains this saying that listening can be viewed from two perspectives: listening as comprehension and listening as acquisition. He states that the view of listening as comprehension in second language learning is the traditional way of thinking about the nature of listening and is based on the assumption that the main function of listening is to facilitate understanding of spoken discourse, while the latter view considers how listening can provide input which triggers further development of second language proficiency. These are fundamental considerations for the teaching of listening.

A very essential idea for teaching listening is that teachers must use students' prior knowledge to facilitate listening comprehension (Brown, 2006). The idea of prior knowledge is part of the cognitive model of language processing which elaborates that when people listen or read, they process the information they hear using top-down and/or bottom-up processes (Brown, 2006 and Vandergrift, 2004). In the top-down

process, learners will use their prior knowledge and experiences to comprehend what they are listening to, while in bottom-up process, they use the information they have about sounds, words and phrases to comprehend a listening text. It is believed that through the activation of students' prior knowledge; for example teaching them the words that are useful for the listening task, training them in different types of listening such as how to listen for details or listening and making inferences and telling them the purpose of their listening, teachers can help students better understand what they are hearing (Brown, 2006).

Nunan (2002) explores certain features that could characterize an effective listening class. He states that the materials should be in accordance with an extensive range of reliable texts, comprising both monologues and dialogues. Tasks which activate prior knowledge should precede the listening and strategies for effective listening should be incorporated into the materials. Furthermore, learners should be given opportunities to continuously construct their listening by repeating the listening texts and by working through increasingly interesting listening activities. They should also know what they are listening for and why. Most importantly, the task should involve opportunities for learners to play an active role in their own learning and the content should be personalized to the learners' needs.

Recently, much of research has focused on teaching strategies that can facilitate listeners' comprehension process. For example, studies have examined the impact of advanced organisers (Jafari & Hashim, 2012), vocabulary and grammar knowledge (Liao, 2007; McCarty, 2000), visual support (Ginther, 2002), DVD with caption (Markham, Peter & MeCarthy, 2001) strategy instruction (Vandergrift, 2002), text familiarity (Gilakjani, 2011) and pre- listening supports (Farrokhi, 2012 and Kang, 2009) on listening comprehension and most have found significant correlations and impact of the different mentioned variables on L2 listening comprehension.

Thus, the current body of research has shown that listening plays a crucial role in language learning although it is a challenging skill. Research also shows that teaching listening that can facilitate comprehension requires teachers: to activate students' prior

knowledge, to use authentic texts, to use pre-listening activities, to train students in different types of listening and to teach them listening strategies.

1.2 Prior Knowledge, Schema Theory, Cohesive Devices and Noticing

Prior knowledge is defined in different ways such as religious, technical, cultural knowledge and topic familiarity (Slahshuri, 2011). Gebhard (2000) relates prior knowledge to our real world experiences and expectations. He adds that prior knowledge is essential especially when the language processing challenges that the learners face are rather considered. Activating prior knowledge and applying this knowledge to new input could highly assist language processing and understanding (Grave and Cook, 1980 and Hayes and Tierney, 1982). Lack of prior knowledge can create variety of difficulties such as failing to comprehend even simple listening texts and hindering to obtain accurate comprehension (Xiaoli, 2011).

Rumelhart (1980) believes that the function of prior knowledge in understanding language has been officialised as schema theory. Research shows that the British psychologist Frederick Bartlett (1932) is the one that first utilised the term schema to refer to an active organization of our past experience. Brown and Yule (1983) also define schemata as "organized prior knowledge, which leads us to expect or predict aspects in our interpretation of discourse" (p. 248). According to the schema theory, activating learners' schemata to enhance comprehension and helping them create new schemata are much more essential than instructing the learners on new knowledge of the language system (Zhang, 2012). John (2004) and Xiaoli (2011) state that basically there are three parts of schema: Linguistic schema which comprises linguistic knowledge, formal schemata which includes the knowledge of organizational forms and rhetorical structures of a text and content schema which is concerned with the knowledge relative to the content domain of the text. The role of schema theory to facilitate language learning has been addressed by many researchers (Change and Read, 2006; John, 2004; Sadighi and Zari, 2006; Sara, 2009 and Zen, 2007).

Research suggests that schema theory can significantly facilitate listening comprehension. Sadeghi (2006) in his study on two ESL classes explores strong

indications in support of the impact of linguistic schemata on listening comprehension. He concludes that activation of schemata clearly helps with comprehending aural input. In addition, Zeng (2007) conducting a research on his L2 undergraduates explores that activation and extending of schemata in L2 listening comprehension can remove major obstacles in the listening comprehension process and help university students to better progress in listening ability. Furthermore, Hayati (2009) examining the effect of cultural schemata on L2 learners' listening comprehension finds that familiarity with culturally oriented language material enhances the L2 learners' listening comprehension performance.

Thus, research on the impact of schema theory on listening shows that activation and application of schema can help ESL students achieve better comprehension in listening. However, Xiaoli (2011) asserts that it is not that perfect because it cannot specify the explanation of the entire phenomenon related to listening comprehension process. For instance, it is not clear why one schema rather than another is chosen to guide comprehension and inference. Therefore, much wider research in this regard is required to be conducted. The current study investigates the impact of cohesive devices as a type of linguistic schema on L2 students' listening comprehension test score as well as written language accuracy.

Connor (1984) describes cohesion as the appropriate use of explicit cohesive devices which indicate relationships among sentences and parts of a text. Halliday and Hasan (1976) divide textual cohesive devices into reference, substitution, ellipsis, lexical cohesion, and conjunction or conjunctive devices. The cohesion used in the current study is based on conjunctive devices which intend to explicitly conjoin ideas and sentences (Quirk, et.al, 1983). Halliday and Hasan divide conjunctive devices as additive, adversative, casual, temporal, and continuative. These devices can enhance connectivity of ideas in texts (Hinkel 2001). The current study uses the term "cohesive device" throughout. The accurate use of cohesive devices helps readers and listeners to capture the relations between what comes first and what comes next in a text (Zuhair, 2013). A number of researchers have come to the conclusion that textual cohesive devices can facilitate listening comprehension (Hron et al, 1999; Thompson, 2003 and Zhang, 2012).

Noticing which is also called conscious attention is a key concept in the field of second language learning (Liming, 2011). According to Schmidt (1990), "noticing is the necessary and sufficient condition for converting input to intake" (p.129). Adding that the learners who notice more learn more, Schmidt also states that subconscious language learning is not possible and that intake is what learners consciously notice. Research has investigated role of noticing in promoting second language acquisition (Izumi, 2002 and Leow, 2000). However, only few studies claim how noticing facilitates learners' writing development within the context of L2 writing (Liming, 2011). Recent studies by Rahim and Riasati (2011) and Soleinmani (2008) show that language related noticing can significantly contribute to second language learners' writing performance. Thus, research implies the fact of that how noticing can facilitate L2 learners' writing development is not fully explored. The current study uses the term "noticing" to refer to the appropriate use of cohesive devices in L2 students' written production and investigates how the conscious awareness of these devices affects L2 learners' written production from the listening text.

1.3 Listening Comprehension and Prior Knowledge

Research shows that teaching linguistic features concerned with phonology, lexis, syntax, semantics and text structure contributes to L2 students' listening comprehension (Buck, 2001). When listening, linguistic knowledge either implicit or explicit is used as linguistic guides to understand spoken language (Anderson, 2009). As a comparison, lexical knowledge is more explicit, while syntactic or grammatical knowledge might be rather implicit. That is, grammatical knowledge has been less researched. Related to this, a top-down process teaching method is applied if the classes involve activities or lessons which require top-down processing to improve the learners' ability to use key phrases in order to construct the schema of a discourse. On the other hand, in classes that practice bottom-up method, the activities and tasks are intended to enhance bottom-up processing, which assists the learners to identify word and clause types as well as key words and key transitions in a discourse (Richards, 2008). In addition, Richards (2005) highlights that it is important for teachers to understand the distinction between comprehension and acquisition in listening because the two views

of listening lead in different directions for classroom pedagogy. Rost (2001) also points out that especially for adult learners, the processes of learning to listen, that is learning to understand spoken messages and listening to learn, that is learning the grammar and lexis of the language through listening do not coincide. Learning to listen involves enhancing comprehension abilities in understanding the language process. On the other hand, listening to learn involves creating new meaning and forming links and then repeating the meaning and forming links, which help the learners to be ready to pay more attention to the grammar and lexis of the language through listening. It seems significant that teachers view developing listening skills as one of the most important approaches to enhancing language acquisition.

Teaching grammar to L2 students could facilitate listening comprehension. (Anderson, 2009; Ellis 2002; Hassan, 2000; Kostin, 2004; Mecartty, 2000; Vandergrift, 2004 and Wingfield, 2003). Research also shows that academic text cohesive devices play a basic role in the organization and comprehension of L2 texts (Sanders and Spooren 2001 and Shea, 2009). However, the correlation between teaching academic text cohesive devices and listening comprehension has not been investigated excessively. A number of studies have been carried out on uses and functions of academic text cohesive devices with reading, writing and speaking. For example, Degand, Liesbeth and Sanders (2002), investigate the impact of causal cohesive devices on the comprehension of expository texts. In addition, Heino (2010) observes EFL learners' connector usage and comparing it to that of native speakers and Pimsarn (2013) examines the correlation between cohesive devices knowledge and the reading comprehension. Studies show that knowledge of academic text cohesive devices could help L2 learners understand the organization of L2 texts and comprehend the texts better. However, no clear evidence has extensively shown the relationship between knowledge of academic text cohesive devices and listening comprehension. The current study investigates the effect of teaching academic lecture text organization specifically focusing on academic text cohesive devices on L2 students' listening comprehension scores and language accuracy.

In addition, an evident factor that could affect listening comprehension is listeners' background or prior knowledge associated with the listening text (Chang and

Read, 2006 and Goh, 2000). Vandergrift (2007) notes that in their long-term memory, L2 listeners apply prior knowledge, which comprises the topic, genre, culture, and other schemas in order to structure a conceptual framework against which they interpret what they hear. Bodie, Imhof and Cooper (2008) report that some other factors that could affect the listening comprehension process are factors related to certain listeners, such as world knowledge, specific knowledge about the listening text and listening aptitude which interact with characteristics of the speaker such as status, power, role, and the passage objectives. Furthermore, it has been recommended that knowledge of grammatical structure may also be a factor which affects listening comprehension (Anderson, 2009; Ellis 2002; Hassan, 2000; Kostin, 2004; MeCarty, 2000; Vandergrift, 2004; Wingfield, 2003 and Yanagawa and Green, 2008). However, Grabe (2004) asserts that the importance of grammar knowledge for listening has not been thoroughly investigated even though ranges of research argue that there might be a strong relation between grammar knowledge and listening comprehension.

It is clear that there is little research about how knowledge of grammar affects L2 students' listening comprehension. Thus, this is an area which is significant to investigate further.

1.5 Statement of Problem

L2 listening comprehension is a complicated process which involves prior knowledge bases like linguistic, contextual, general and co-text knowledge (Buck, 2001). Gebhard (2000) states that prior knowledge relates to our real world experiences. When listening, listeners not only try to distinguish the linguistic components of a text but also attempt to match the speech with their prior knowledge. In addition, Anderson and Lynch (2000) assert that due to the fact that language is a tool of expressing culture, lack of prior knowledge especially on socio-cultural, factual and textual knowledge of the target language could create challenges to listening comprehension process. So, this indicates that prior knowledge has an essential role in understanding of new information through listening.

One of the areas concerning prior knowledge that warrants a more thorough study is on the impact of grammar knowledge, specifically academic text cohesive devices which facilitates text organization, on listening comprehension (Anderson, 2009; Kostin, 2004; Vandergrift, 2004 and Yanagawa and Green, 2008). Fluent text organization shows direction to readers and listeners and leads them to where the text is going (Shea, 2009). Academic text cohesive devices show the important relationships between ideas in the text and consequently assist in text comprehension (Brown, 1999). In addition, Smit (2006) asserts that to have a coherent interpretation of a listening text, an active listeners considers linguistic elements such as cohesive devices that indicate structural changes in the organization of the text and shows when a new direction is taken or when the speaker returns to a previous topic. It is also claimed that lack of explicit cohesive devices in a text would raise difficulties in the comprehension process.

Research investigating the relationship between knowledge of elements which facilitates text cohesion and L2 listening comprehension is sparse, and the findings are mixed. Ying-hui (2006) examines the impact of cohesive devices on L2 listening comprehension test and finds that better cohesion in a text is concerned with learners' understanding of the questions as easier test elements. Nissan, et al (1996), however, does not find similar effects in his study. However, Dunkel and Davis (1994) testing the effect of the presence or absence of cohesive devices in L2 learners comprehension of academic lectures find that the use of cohesive devices does not necessarily contribute to listening comprehension. Some studies indicate that text organization cohesive devices could facilitate listening comprehension. However, others disagree about the extent to which different types of cohesive devices could be effective (Bloomfield, Wayland, Rhoades, Blodgett, Linck and Ross, 2011). Revesz (2013) and Zhang (2012; 2014) also assert that given the small number of studies exploring the effects of text organization cohesive devices on listening comprehension, further research is required in this area.

Thus, the current study aims to fill this gap by examining the effects of teaching academic text cohesive devices as a way of activating prior knowledge, on L2 students' listening comprehension test scores and language accuracy in their written production.

1.6 Research Objectives

The purposes of the current study are:

1. To examine the effect of teaching academic text cohesive devices on L2 students' listening comprehension test scores and

2. To investigate the influence of teaching academic text cohesive devices on L2 students' language accuracy and noticing in written production.

1.7 Research Questions

The following research questions are formed to assist in achieving the research objectives:

1. Does the input on academic text cohesive devices affect L2 students' listening comprehension test scores?

2. Does the input on academic text cohesive devices influence L2 students' language accuracy of their written production?

3. Does the teaching of academic text cohesive devices as a pre-listening activity lead to noticing?

1.8 Definition of Terms

1. Listening comprehension:

Listening comprehension is as a process of receiving actual spoken language, constructing, representing, negotiating meaning and responding to the speaker (Rost, 2002).

2. Schemata:

Schemata refer to background or prior knowledge that leads us to expect or predict features in our understanding of a discourse (Brown and Goerge, 1983, p. 248).

3. Academic text cohesive devices:

"A single instant of cohesion between a pair of semantically related items" (Innajih, 2007, p. 14) or cohesive devices (Heino, 2010, p. 3) or adverbial connectors (Quirk et

al. 1985, p. 631–632) are connective devices that conjoin linguistic units, such as sentences, paragraphs and even larger parts of a text.

4. Language Accuracy:

Accuracy is the ability to produce error-free language production (Housen and Kuiken, 2009).

1.9 Significance of the Current Study

Studies have shown that there are many factors which affect L2 students' listening comprehension process. However, little research has been done to clearly show the relationship between grammatical prior knowledge and listening comprehension. The current study which aims to investigate the impact of teaching academic text cohesive devices on L2 students' listening comprehension test scores and language accuracy could help L2 instructors to know the exact role of explicit teaching of grammatical features in order to improve their students' listening comprehension. It will provide listening instructors an insight of which activities will be beneficial to scaffold listening. These activities should not only focus on improving listening comprehension but also language accuracy specifically when the output of listening is a written production. Perhaps other grammatical input prior to listening can be manipulated to see the effects on both listening comprehension and language accuracy.

Furthermore, the outcome of the current study would specifically help L2 learners understand the role of academic text cohesive devices in academic text organization. In turn it may enhance their listening comprehension.

1.10 Summary of the chapter

This chapter has provided a background to the study in terms of issues regarding the importance of listening comprehension to L2 learners as well as strategies that could improve listening comprehension. More specifically this chapter focused on factors which could facilitate L2 students' listening comprehension performance. It has also highlighted the purpose of the current study which is to study how teaching academic text cohesive devices as a pre-listening activity impacts L2 students' listening comprehension test score and language accuracy. Research objectives and questions for the study have also been presented in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter discusses L2 listening comprehension theories mainly indicating the recent theories, role of listening in language learning, the process of L2 listening comprehension, teaching L2 listening, listening strategies and activities. In particular this chapter describes the effect of prior knowledge on L2 listening comprehension.

2.1 Listening Comprehension Process

Richard (2008) considers listening from two different perspectives: listening as comprehension and listening as acquisition. He states that in most methodology manuals listening and listening comprehension are synonymous and the main function of listening comprehension is to facilitate understanding of spoken discourse while listening as acquisition considers how listening can provide input, which causes further development of second language proficiency.

Listening comprehension is an active mental process in which the listeners try to construct meaning out of the information that they receive from the speakers (Buck, 2001). Anderson (1995, p. 379) states that L2 listening comprehension process consists of three phases showing different levels of comprehension process. The phases are as follows:

1. The first phase is perception or perceptual processing which is the encoding of sound signals. In this process the listener hears and recognises sounds as words. The aural information is stored for a very short time in the working memory. If it is not processed further, it will be permanently displaced by other incoming sounds.

2. The next phase is parsing and it is a process by which an utterance is divided based on syntactic structures or semantic meaning cues to create a mental representation of the combined meaning of the words.

3. The final phase is utilisation and it happens when listener relates mental representations of the input to existing knowledge stored in long-term memory. The listener also makes inference or uses the mental representation to respond to the speaker.

Listening comprehension process in one's first language is different than in L2 due to the extent that learners are constrained by linguistic and sociolinguistic factors. Due to these constraints, language learners usually show less capacity in their working memory (Goh, 2002). Brown (2006) adds that by applying strategies like activating learners' prior knowledge, listening in L2 can be made easier. The use of strategies in language learning has shown positive impact on students' listening achievement (Flaitz and Feiten, 1996).

Numerous studies have shown that learner proficiency is one of the main factors, which determines the choice of strategies used in the listening process (Chamot, 1990). O'Malley and Chamot (1990) divide learner strategies into three categories based on the type of processing involved in listening comprehension process: cognitive, metacognitive, and social or affective. Cognitive strategies involve mental transformation of input and aim to improve listening comprehension, acquisition, or retention, while metacognitive strategy involves thinking about the learning process, planning for learning and monitoring learning. Social or affective strategies include cooperative learning, asking questions, and self-talk (O'Malley and Chamot, 1990). Vandergrift (2003) finds that skilled listeners use twice as many metacognitive strategies as their less-skilled equivalents.

Studies on strategy training recommend that both the metacognitive and cognitive strategies are important for improvement of learners (Goh, 2008). Goh (2008) also explores that language learners use cognitive strategies to assist them process, store and recall new information. The two general types of cognitive strategies which have been the subjects of L2 listening research are bottom-up and top-down strategies. These are described below.

2.1.1 Bottom-up and Top-down Strategies

Bottom-up strategy refers to a process by which sounds are used to build up increasingly larger units of information, such as words, phrases, clauses and sentences before the aural input is understood (Brown, 2006; Goh, 2002 and Nunan, 1998). In listening, learners use bottom-up strategy when they construct meaning by forming and combining larger units of meaning from phonemes and develop this strategy through practice in word segmentation skills (Vandergrift, 2007). Flowerdew and Miller (2005) also postulate that listening comprehension process from the perspective of bottom-up strategy, for example, involves the ability to identify phonemes, which are then combined into words, which, in turn, together make up phrases, clauses, and sentences. Similarly, Buck (2001) describes bottom-up model as a process including the L2 learners' language knowledge such as word, syntax, and grammar during text processing and outlines four stages of bottom-up oral input processing. During the first stage, listeners decode phonemes; in the second stage, they identify words; during the third stage, the syntactic level and analysis of the semantic content occur and listeners reach to a literal understanding of the basic linguistic meaning and in the fourth stage, they interpret the literal meaning embedded in the input depending on the communicative situation that helps them understand the speaker's message (Buck, 2001).

A number of studies have investigated the impact of bottom-up strategy on teaching L2 listening. Kiany and Shiramiry (2002) provide an empirical evidence from an experimental research for the use of frequent dictation to improve L2 listening comprehension. For one semester, consisting of 20 sessions, the students in the control group are given the listening exercises in their textbook. The experimental group, in

addition to the listening exercises in the textbook is given dictation for 11 times during the term. To test both groups' listening comprehension, each group is given a post-test, which is the same as their pre-test. The result of the study demonstrates that dictation has a considerable impact on the listening comprehension of the treatment group and their score is significantly higher than those of the control group. In addition, Jensen and Vintner (2003) examine the effects of exact repetition and reduced speech rate. In the current study there are four groups of participants including three treatment groups and one control group. They use videotaped dialogues in different modes on, Fast (F) or Slow (S), all three treatment groups outperform the control group in comprehension of the listening text in acquisition of phonological decoding strategies.

On the other hand, top-down strategy means to use our schemata which are experiences and knowledge about certain topics and situations to comprehend a text. This type of process starts with prior knowledge, which can be content schema that is, general knowledge and content which are used in a particular situation (Lynch, 2006; Miller, 2005; Morely, 2001 and Nunan, 1998). Listeners utilise top-down strategy to know context and prior knowledge such as topic, genre, culture and other schema knowledge stored in long-term memory in order to build a conceptual framework for comprehension. This process is developed through practice in the use of compensatory strategies (Vandergrift, 2007). Vandergrift (2007) further adds that L2 listeners in order to compensate for their inadequate knowledge of the target language use compensatory mechanisms such as contextual, visual information, world knowledge, cultural information and common sense strategically to enhance their listening comprehension. However, the way that listeners use these information sources while listening defines the degree of their listening success

2.2 Schema theory

The British psychologist Frederick Bartlett (1932) first used the term schema to indicate an active organization of past experiences called the schema theory (Xiaoli, 2012). Based on the theory, activating students' prior knowledge (schemata) to enhance comprehension and facilitating leaners to create new schemata are far more important than imparting new knowledge of the language system (Zhang, 2012). According to

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INTRODUCTION

1.0 Introduction

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The role of prior knowledge in L2/FL listening comprehension has been the subject of recent research (Slahshuri, 2011 and Samian and Dastjerdi, 2012). A number of studies have been conducted on the impact of activation of prior knowledge on L2/FL listening texts (Kawai, 2000 and Sara, 2009), for instance on the effect of prior knowledge on listening comprehension (Sadighi and Zare, 2002 and Samian and Dastjerdi, 2012), topic familiarity and its influence on listening comprehension (Othman and Vanathas, 2004) grammar as a predictor of listening ability (Liao, 2007), the effect of explicit listening comprehension strategy instruction on listening comprehension strategy use (Sheshgelani and Assadiaidinlou, 2013) and text features of task input and difficulty in L2 listening comprehension (Revesz and Brunfaut, 2013). All these studies show positive effects of prior knowledge on listening comprehension.

There are several researches on the effects of prior knowledge which claim that grammar knowledge affects listening comprehension (Anderson and Lynch, 2000; Kostin, 2004; Yanagawa and Green, 2008 and Ying-Hui, 2006). However, the research is still very scarce and there is even lesser on the effect of teaching specific grammatical structures as a pre-listening activity on listening comprehension. So, the current study investigates the impact of teaching academic text cohesive devices on L2 students' academic listening comprehension test scores and language accuracy of their written production.

1.1 Listening in the L2 Classroom

Of the four language skills, listening is a fundamental one without which the learners will not be able to communicate well (Morley, 1999 and Nunan, 1998). Nunan adds that L2 learners spend more than fifty percent of their time learning listening and almost ninety per cent of the information at school is received through listening. In addition, Rost (2001) and Vandergrift (2007) point out that listening is a crucial language skill to develop in terms of L2 acquisition. Rost (1994) further points out that listening is fundamental in the language classroom since it offers input for the learners, and no learning can easily happen without taking the input at the right level. Hence, in daily ESL classrooms teaching, teachers are becoming increasingly aware of the important role of listening in language acquisition (Rost, 1994). In communicative English classes, students are surrounded by the spoken language from the teacher, from their peers, and from audio and video media. Thus, listening comprehension is crucial to language learners' language development.

Despite the importance of listening to language learning, L2 students usually believe that listening is the most complicated language skill to learn (Hasan, 2000). Vandergrift (2007) states that the reason for this complexity might be lack of effective listening skills. Anderson and Lynch (2000) also explore that one of the reasons that the listeners can not process spoken language is that the language contains words or phrases that the listeners can hear adequately but are unable to understand due to the various syntactic as well as semantic problems of the language. This is seen as a usual problem of L2 learners since the topics that they should listen to might include new or unfamiliar

words. Other problems they consider as problematic are lack of prior knowledge which includes socio-cultural, factual and contextual knowledge of the target language that can also present as obstacles to comprehension. Although comprehension can fail at any stages of the listening process, Goh (2000) notes that 80% of L2 listeners' problems are associated with decoding and word segmentation. Transferring the phonetic representations of input into words can be difficult for L2 students, because unlike written text, speech does not provide spaces between words. To further complicate this issue, native speakers often reduce speech, blend words, eliminate words, use slang, and hesitate (Stetson, 2010). Overcoming these challenges may seem problematic, however; a review of research in pronunciation instruction, discourse cues, speech rate, repetition, vocabulary instruction, and strategy use can provide useful insights on the factors that affect L2 listening comprehension and may offer potential solutions (Goh, 2000).

As research into listening and listening comprehension specifically in L2 acquisition increases, the view of teaching L2 listening is also changing (Nunan, 2002). It was considered to be a passive activity at one time however; it is now recognized as an active process, which is worth a systematic development as a skill in its own right (Richard, 2008; Vandergrift, 2004). The approach to teaching listening has also evolved from a focus on the product of listening which is "listening to learn" to comprise a focus on the process that is "learning to listen" (Vandergrift, 2004). Richard (2008) explains this saying that listening can be viewed from two perspectives: listening as comprehension and listening as acquisition. He states that the view of listening as comprehension in second language learning is the traditional way of thinking about the nature of listening and is based on the assumption that the main function of listening is to facilitate understanding of spoken discourse, while the latter view considers how listening can provide input which triggers further development of second language proficiency. These are fundamental considerations for the teaching of listening.

A very essential idea for teaching listening is that teachers must use students' prior knowledge to facilitate listening comprehension (Brown, 2006). The idea of prior knowledge is part of the cognitive model of language processing which elaborates that when people listen or read, they process the information they hear using top-down and/or bottom-up processes (Brown, 2006 and Vandergrift, 2004). In the top-down

CHAPTER 3

METHODOLOGY

3.0   Introduction

The main purpose of the current study was to explore how teaching academic text cohesive devices affect L2 students' listening comprehension test scores and language accuracy. This chapter explains how the current study was conducted. It mainly elaborates on the context, participants, data collection instruments and data analysis in regards to the procedure and the methods used in the statistical analysis of the data.

3.1 Research Design

The main research design used in the current experimental study was one group pre-test and post-test design. This design tries to use the subjects as their own controls and to avoid the demand for a control group design (Bell, 2010). Seliger and Shohamy (1989) claim that the positive thing about this design is that it controls a number of inessential variables that can influence the homogeneity of subjects when more than one group is used. This design also somehow controls for loss of subjects. Because the same group is used for both pre-test and post-test, there is no need to match it to another group.

The participants in the current study sat for a pre-test to ensure comparability of the learner groups before their treatment, and a post-test to measure the effects of treatment. It is a process that includes a special treatment and researchers could define the instant impact of treatment through the pre-test and post-test results (Mackey and Gass, 2005). The comparability of the tests is an important issue of this design. The pre and post-test in this design must be of the same level and there are varieties of ways to address comparability of pre-test and post-tests in this design. For example, to test grammatical improvement after a treatment, the researcher could keep the grammatical structure the same but change the lexical items (Dimiter and Phillip, 2003).

3.1.1 Research Design of the Current Study

The data of the current study was taken from one intact group through a pre-test post-test design. The listening tests' objective was to investigate the effect of treatment, which was the teaching of academic text cohesive devices as a pre-listening activity. The same test was given to the participants as pre and post-tests. The pre and post-tests were then compared using measurements of comprehension and accuracy. Table 3.1 illustrates the study's research design.

Table 3.1 Research Design of the Current Study

Groups	Pre-test	Treatment	Post-test
One group (n= 40)	0	X	0

3.1.2 Reliability and Validity of the Study

Threats to reliability and validity include maturation and testing. In the current study, these threats were minimized through ensuring a lapse of five weeks between pre and post-tests. In addition, the same test format was used as the pre and post-tests (Bell, 2010).

In the first session of the first week, the participants sat for their pre-test. The lapse started from the second session of the first week and continued to the first session

of the fifth week. In the second session of the fifth week, the participants sat for their post-test. The study used the same test as the pre-test and post-test.

3.1.3 Triangulation in the Study

Triangulation refers to using several research techniques and sources of gathering data (Mackey and Gass, 2005). It is mainly to ensure validity, credibility, transferability, confirmability and dependability of the study (Griffee, 2012). The value of triangulation is that it does not only decrease the researcher's bias, but it also helps researchers gather data through multiple means and methods since one method by itself cannot provide enough support (Mackey and Gass, 2005). Denzin (1970) distinguishes four forms of triangulations, which are: theoretical, investigator, methodological and data. Theoretical triangulation refers to using more than one theoretical position to analyse the same set of data. Investigator triangulation then refers to using multiple observers or interviewers to collect data. Next, methodological triangulation refers to using different measures or research methods to investigate a particular phenomenon. Finally, data triangulation entails collecting data through multiple sampling strategies in different times and different social situations.

In order to improve the validity and reliability of the data, the current study used methodological triangulation because this triangulation analyses data through different measures (Denzin, 1970). The three different measures taken to analyse the data in the current study were firstly the use of a marking scheme to show listening comprehension scores. Secondly, error-free T-units were used to measure the participants' language accuracy in written production. Thirdly, the number of cohesive devices used by the participants were analysed to show the level of noticing in their written production.

3.2 Context of the Current Study

The study was carried out over a five-week period at University Malaysia Pahang (UMP). UMP is a technical university specializing in engineering and technology. This university was established by the government of Malaysia on 16 February 2002 and has two campuses. UMP provides a wide variety of campus facilities for its academic staff and students. For example, it is equipped with wireless Internet