Universidad de Chile

Facultad de Filosofía y Humanidades

Escuela de pregrado

Licenciatura en Lengua y Literatura Inglesas

Departamento de Lingüística

# Metacognitive Listening Strategies: Exploring the effects of implicit metacognitive instruction on intermediate second/foreign English language learners at Universidad de Chile.

Seminario de grado para optar al grado de Licenciatura en Lengua y Literatura Inglesas

Alumnos participantes:

Gonzalo Aguilera

Constanza Illesca

Camila Montecinos

Valentina Sandoval

Constanza Navarro

Katherine Whipple

Profesor guía: Alfonsina Doddis

Santiago, 2016

Acknowledgements

Agradecemos:

*A nuestra profesora guía Alfonsina Doddis, por su dedicación, paciencia y esfuerzo.*

*A la profesora Ximena Tabilo por su buena voluntad y ayuda en nuestra investigación.*

*A Aníbal Barriga Tabilo por su ayuda con el procesamiento estadístico.*

*Y a la Universidad de Chile por su formación académica.*

Gonzalo Aguilera:

Me gustaría agradecer a todas las personas que de una u otra manera me ayudaron durante el proceso de escribir esta tesis, profesores, amigos y familia. Sin su ayuda esto no podría haber sido posible. A mis compañeras de seminario, Camila, Kathy, Constanza I, Constanza N, y Valentina por su tremendo trabajo y hacer de este proceso una experiencia inolvidable y de la cual guardaré hermosos momentos en mi corazón.
Quisiera agradecer a mi madre que durante toda su vida tuvo que luchar sola por sus hijos, a mi abuelo por ser mi padre cada vez que lo necesité y especialmente, me gustaría agradecer a mi abuela por todo lo que me enseñó, todos los valores que me transmitió y el infinito amor que me dio cada día de mi vida. Todo lo que soy y lo que algún día seré se lo debo en gran medida a ella.

Constanza Illesca:

Gracias a todo aquel que me ha aguantado a lo largo de mi vida, particularmente este último año.

Camila Montecinos:

Primero, le agradezco a la vida por darme la oportunidad de conocer y trabajar con tan lindas personas durante todos los años de esta licenciatura. A lo largo de este camino, aprendí que no hay trabajo más reconfortante que aquel que se hace con amor.
Principalmente, no puedo dejar de agradecer a toda mi familia, en particular mi madre, mi abuela y mi tía, quienes han sido testigos y han apoyado cada uno de los pasos de este largo proceso, brindándome el amor y apoyo necesario; sin su amor incondicional no lo habría podido lograr. Las amo por eso y todo lo demás. También quisiera agradecer a todos aquellos que fueron parte de mi aprendizaje: familiares, amigos y cercanos que aportaron con su grano de arena para lograr este gran desafío.

Constanza Navarro:

Quisiera agradecer a todas las personas que me han acompañado a lo largo de estos años, incluido a aquellos que ya no forman parte de mi vida. Han sido cinco largos años, con altos y bajos, que llegan a su fin. Agradecerle especialmente a mi familia por ser el pilar

fundamental de mi vida, mis padres, por su amor incondicional en cada decisión que he tomado y a mis hermanos por su cariño y compañía. A mis amigos, y a todo aquel que me soportó en mis peores momentos y/o me dio palabras de aliento. Por último agradecerle a mis compañeros de tesis, por los gratos momentos compartidos, a pesar de ser un grupo tan ligeramente homogéneo.

Valentina Sandoval:

Quiero agradecer a mi mami y a mi hermana, por su amor y paciencia a lo largo de estos años, las amo más que al manjar. Agradezco a miss Pascuala, a miss Rosa y a mi profe Irina por todo su apoyo incondicional. A las 'Pulgas de Nasus' por todas las risas que me regalaron cuando más las necesité. Gracias a todos los mencionados anteriormente por haber creído en mí, incluso cuando yo había dejado de hacerlo.

Katherine Whipple:

Agradezco a todos mis seres queridos que estuvieron conmigo durante este duro proceso de aprendizaje, quienes me soportaron y apoyaron incondicionalmente de principio a fin.
Y a todos los profesores que me motivaron a superarme a lo largo de estos cinco años.

Table of contents

Abstract

The present study attempted to establish relationships between second or foreign language learners' metacognitive awareness and the level of listening comprehension proficiency. Metacognition is defined as the awareness of the knowledge an individual has or does not have and to the ability to monitor and control cognitive activities in learning processes (Flavell, 1979; Maichenbaum, 1985). According to Vandergrift & Goh (2012), listening is the most commonly used, important, and active skill in oral communication; and yet, it is the skill which is least likely to be taught effectively and the most underresearched one. Vandergrift (2004, 2007) and Vandergrift and Goh (2012) proposed a Metacognitive Pedagogical Sequence that intends to improve students' use of metacognitive strategies when performing listening comprehension tasks.

The present research is a quantitative quasi-experimental study which intends to explore the effects of an implicit metacognitive listening strategy intervention on the students' listening comprehension level of proficiency. In order to conduct this research, two groups were selected as the experimental and control groups. The participants were 12 second year students from the English Linguistics and Literature program offered at Universidad de Chile. On the one hand, an implicit metacognitive intervention based on the Pedagogical Sequence was designed for the experimental group and, on the other hand, the control group continued with their regular listening classes. The students in the experimental group attended six 45-minute listening instruction sessions given by the teacher of the Listening subcomponent of the English Language II course.

Two sample versions of the First Certificate in English (FCE) listening comprehension test were given in order to assess the students' listening comprehension proficiency. The first version was used as a pre-test whereas the second version was used as a post-test. The questionnaire chosen to elicit the data about the students' level of metacognitive listening awareness was the Metacognitive Awareness Listening Questionnaire designed by Vandergrift, Goh, Mareschal, & Tafaghodtari (2006).

Concerning the results of the study, the general averages of the experimental group listening comprehension tests and of the Metacognitive Awareness Listening Questionnaires increased. In turn, the metacognitive instruction intervention was

moderately successful. Therefore, it can be claimed that there was a slight improvement on the students' listening performance and their metacognitive listening awareness.

## 1. Introduction

The present study attempted to establish relationships between metacognitive awareness and the level of listening comprehension proficiency in second or foreign language learners. This object of study has been on the rise over the last decade. The research spike is due to the recent interest surrounding metacognition, a long standing term for 'thinking about thinking', or the awareness of the knowledge an individual has or does not have and to the ability to monitor and control cognitive activities in learning processes (Flavell, 1979; Maichenbaum, 1985). Therefore, metacognition refers to the conscious knowledge and ability to manipulate the learning process in order to positively curb it (Flavell, 1979). This type of self-knowledge and the strategies associated with it can have an important impact on education, particularly for the second/foreign language acquisition classroom (Cohen & Macaro, 2007). Moreover, the concept of metacognitive strategies derives from the Adaptive Control of Thought Model proposed by Anderson (1983-1985), and developed in the field of cognitive psychology. It has been claimed that metacognitive strategies lead students to think about their learning process by means of using their knowledge about their cognitive activities (O'Malley & Chamot, 1990).

Out of the four core language skills, according to Vandergrift and Goh (2012), listening is the most commonly used, important and active skill in oral communication; and yet, it is the skill which is least likely to be taught effectively and the most underresearched one (Vandergrift & Goh, 2012). It has been pointed out by applied linguists that the majority of teachers have taken on the instruction of the listening skill as an activity centered on the listening product, rather than on the listening process the students go through. Thus, students as listeners have not been taught how to listen, yet they have been expected to learn this skill by being tested repeatedly. It has been stated that there is a "lack of guidance on how learners can self-direct and evaluate their efforts to improve their listening" (Vandergrift and Goh, 2012, p.5).

This grim scene has recently changed due to the effort of dedicated researchers who have attempted to consistently vindicate the relevance of the listening skill and its much needed suitable instruction. (Rahimi & Katal, 2012; Chang, 2013; Li, 2013; Goh & Hu,

2014). Therefore, according to Goh (2008), metacognitive instruction is one effective manner to help students to successfully deal with the listening comprehension complexity.

After many years of research, Vandergrift (2004, 2007) and Vandergrift and Goh (2012), proposed a metacognitive pedagogical sequence that intends to improve students' use of metacognitive strategies when performing listening comprehension tasks. The metacognitive pedagogical sequence is defined as "a sequence of learning activities that integrates metacognitive awareness raising with listening input and comprehension activities" (Vandergrift & Goh, 2012, p.127). This sequence contributes to the learners' understanding of the content of the text and, at the same time, the metacognitive aspects that are involved in the listening process. Its main purpose is to motivate students to become self-regulated learners when carrying out a listening comprehension task. In general terms, the pedagogical sequence involves pre-listening, listening and post-listening activities. The pre-listening activity includes planning and predicting the content based on the listening task topic. In turn, listening activities involve monitoring, evaluation, and problem solving, and post-listening includes reflection and goal-setting for future listening comprehension task performance.

The present study reports on the effects of metacognitive listening instruction on upper-intermediate second/foreign language learners at university level, which involved a comparison of the progress of an experimental and a control group of students. The research study explored this relationship and the possibilities of improvement through the conduction of a short intervention focusing on metacognitive listening learning strategies. Consequently, the present research is a quantitative quasi-experimental study designed to investigate listening comprehension strategy instruction. The main objective of the study was to explore the effects of metacognitive strategy intervention on the listening comprehension skills of students of English as a second/foreign language and on their listening metacognitive awareness.

Concerning the organization of the present research report, the first section addresses the theoretical and descriptive framework of the study which includes the definition of metacognition, learning strategies, listening comprehension and listening instruction. The second section addresses the methodology, including general and specific

objectives, the research questions, participants, data collection instruments, data collection procedures, the intervention in listening metacognitive strategies, description of the materials used and data processing. The third section reports on the results and discusses the statistical analysis. The fourth and final section addresses the conclusions, limitations and suggestions for further research.

# 2. Theoretical descriptive framework

## 2.1. Metacognition

### 2.1.1. Definition

Metacognition refers to the awareness of the knowledge an individual has or does not have and to the ability to monitor and control cognitive activities in learning processes (Flavell, 1979; Meichenbaum, 1985). In other words, metacognition allows the individual to manipulate his/her conscious mental activities such as reading, thinking, remembering, and reasoning.

### 2.1.2. Cognitive monitoring

Flavell (1979) postulated a model of cognitive monitoring prompted by the observation and results of studies on preschool and elementary school children's cognitive development. Through the formulation of this model, he attempted to answer the question, "What adult like knowledge and behaviour might constitute the developmental target here toward which the child gradually progresses?" (p. 906). Thus, he suggests that cognitive monitoring "is assumed to proceed via the interplay among our metacognitive knowledge, metacognitive experiences, goals or tasks and actions or strategies" (p. 906). In these terms, it is fundamental to highlight that each of these factors interact with the others; therefore, they do not occur in isolation. A description and examples of the four factors are included below.

#### 2.1.2.1. Metacognitive knowledge

Firstly, metacognitive knowledge refers to knowledge or beliefs about oneself and other people as cognitive beings, which "interact to affect the outcomes of any sort of intellectual enterprise" (p. 905), such as the awareness of learning strategies suitable for accomplishing specific tasks, the belief that someone is better at maths than at languages and that someone learns more efficiently by auditory means than by being exposed to visual sources. Moreover, this knowledge is present in the mind and may be accessed during a cognitive process. Finally, metacognitive knowledge does not differ from other types of

knowledge “stored in long-term memory” (p. 907) and may be activated on purpose or unintentionally. When activation occurs, it affects the learner’s cognitive enterprise even without his/her being conscious, and when it is conscious it may lead to a metacognitive experience. (p. 908)

2.1.2.2. Metacognitive experience

Secondly, metacognitive experiences are the sensations, feelings and reactions the learner has when performing a cognitive task. These experiences may vary in length and complexity. Flavell (1979) estimates that metacognitive experiences are more likely to occur while carrying out a particularly complex cognitive task which requires more critical thinking than a simple one. Metacognitive experiences also influence how the task at hand will be managed; for instance, whether it would be appropriate to modify the original plan for the completion of the task or to let go the current goal and take up a new one. Moreover, the metacognitive knowledge base can be adjusted by metacognitive experiences through addition, deletion and revision. Finally, metacognitive experiences can help the learner to decide on the appropriate kinds of strategies to achieve certain types of goals.

2.1.2.3. Metacognitive goals and strategies

Thirdly, goals refer to the purpose of cognitive activities. These aims can vary from recognizing the difficulty of a task to activating “cognitive or metacognitive strategies” (p. 908) in order to reach your goal. Setting objectives serves the purpose of activating the necessary knowledge to successfully carry out a task. In addition, concerning strategies, Flavell states that there are two types of strategies: cognitive and metacognitive. Cognitive strategies are related to the progress of the task, while metacognitive strategies address the monitoring of the process.

## 2.2. Learning strategies

### 2.2.1. Definition of language learning strategies

According to O’Malley and Chamot’s proposals (1990), learning strategies are complex procedures that students use when performing a language task. They claim that these strategies might be learnt through cognitive, associative, and autonomous stages of learning, which will be described below. O’Malley and Chamot’s (1990) conception and

model of language learning strategy are based on the Adaptive Control of Thought Model proposed by Anderson (1983, 1985), and developed in the field of cognitive psychology.

From the perspective of the cognitive theory of mind, the information and humans' thoughts and actions received by learners are processed in their brains. This idea is supported by the assumption that the reality perceived by human beings is better explained through the perception and interpretation of people's experience; besides, the manner in which human beings process information is similar to the way computers work. (O'Malley and Chamot, 1990). In the cognitive model proposed by Anderson, he made a distinction between two types of knowledge, declarative and procedural. Anderson stated that declarative knowledge is "what we know *about*, or "static" information in memory" and that procedural knowledge is "what we know *how to do*, or "dynamic" information in memory." (Anderson, 1983, 1985, in O' Malley and Chamot, 1990, p.20). Based on this distinction, Anderson proposed that the process of acquiring a cognitive skill involves the transition from declarative to procedural knowledge. This transition consists of three stages: declarative, associative, and autonomous stages. At the first stage, learners are trained in order to learn how to perform a task, involving conscious activity on the learners' part, who can report this new knowledge verbally. Afterwards, in the associative stage, learners are able to identify errors in their declarative knowledge and gradually correct them. Besides, links between various components of the skill become stronger. Consequently, declarative turns into procedural at this stage. However, part of the declarative knowledge remains as such. Finally, at 1the autonomous stage, learners' performance of the skill becomes practically automatic. (Anderson, 1983, 1985, in O'Malley & Chamot, 1990, pp. 25, 26). Considering the model proposed by Anderson, O'Malley and Chamot (1990) pointed out that learning strategies are complex cognitive procedures that begin as declarative knowledge and that, after practice, turn into procedural knowledge.

2.2.1.1 Taxonomy of learning strategies

On the basis of extensive research on the subject, O'Malley and Chamot (1990) distinguish three categories of strategies: metacognitive, cognitive, and social affective, which will be briefly explained below.

2.2.1.2. Metacognitive strategies

Metacognitive strategies can regulate language learning by means of the use of knowledge about cognitive processes. O'Malley and Chamot (1990) stated that "metacognitive strategies involve thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learned" (p. 137). Therefore, these strategies have an executive function. They proposed the following categories of metacognitive strategies that can be used to carry out receptive or productive language learning tasks:

a) Planning: Organizing concept or principle of an anticipated learning task (advance organization); proposing strategies for handling an upcoming task; generating a plan for the parts, sequence, main ideas, or language functions to be used in handling a task (organizational planning).

b) Directed attention: Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors; maintaining attention during task execution.

c) Selective attention: Deciding in advance to attend to specific aspects of language input or situational details that assist in performance of a task; attending to specific aspects of language input during task execution.

d) Self-management: Understanding the conditions that help one successfully accomplish language tasks and arranging for the presence of those conditions; controlling one's language performance to maximize use of what is already known.

e) Self-monitoring: Checking, verifying, or correcting one's comprehension or performance in the course of a language task. This has been coded in the think-alouds in the following ways:

1. Comprehension monitoring: Checking, verifying, or correcting one's understanding.
2. Production monitoring: Checking, verifying, or correcting one's language production.
3. Auditory monitoring: Using one's "ear" for the language (how something sounds) to make decisions.
4. Visual monitoring: Using one's "eye" for the language (how something looks) to make decisions.
5. Style monitoring: Checking, verifying, or correcting based upon an internal stylistic register.
6. Strategy monitoring: Tracking use of how well a strategy is working.
7. Plan monitoring: Tracking how well a plan is working.
8. Double-check monitoring: Tracking, across the task, previously undertaken acts or possibilities considered.

f) Problem Identification: Explicitly identifying the central point needing resolution in a task or identifying an aspect of the task that hinders its successful completion.

g) Self-evaluation: Checking the outcomes of one's own language performance against an internal measure of completeness and accuracy; checking one's language repertoire, strategy use, or ability to perform the task at hand. This has been coded in the think-alouds as:

h) Production evaluation: Checking one's work when the task is finished.

i) Performance evaluation: Judging one's overall execution of the task.

j) Ability evaluation: Judging one's ability to perform the task.

k) Strategy evaluation: Judging one's strategy use when the task is completed.

l) Language repertoire evaluation: Judging how much one knows of the L2, at the word, phrase, sentence, or concept level.

(O'Malley and Chamot, 1990, p. 137, 138).

2.2.1.3. Cognitive strategies

Cognitive strategies refer to the processes involved in problem solving. Thus, in problem solving analysis, transformation and synthesis of learning materials are required. Therefore, cognitive strategies have an operative or cognitive-processing function.

2.2.1.4. Social affective strategies

Finally, social affective strategies refer to the ways in which learners may interact with their peers and teachers.

2.2.2. Language learner strategy use

The following section is based on the responses to a survey questionnaire concerned with language learner strategy use, designed and conducted by Cohen (2007). Well-known strategy experts from different countries filled in this survey questionnaire with the purpose of determining the concepts and the terminology used in the learner strategy research field. The International Project on Language Learner Strategies (IPOLLS) was in charge of this investigation (Cohen, 2007). In the following section, the concepts related to the learners' use of strategies are presented:

a) Level of consciousness: According to the majority of the experts, strategies have to have a metacognitive constituent. In other words, the learner has to consciously be able to control, manage, monitor, and evaluate his/her own learning process taking into account the nature of the task.

b) Extent of attention: The majority of the responses in the questionnaire pointed out that attention can vary from the action of fully focusing on the strategy to paying minimal attention to it.

c) Explicitness regarding 'action': Experts had to answer how they felt about the suggestion that certain learning contexts are necessary to make explicit the strategy that learners use. The general opinion was that it would be better if learners are instructed in the use of strategies first, and practice their use later.

d) Degree of goal orientation: The majority of experts agreed that "strategies have a goal" (Cohen, 2007, p. 34) In addition, one person pointed out that maybe very general goals are related to less successful learners, who "may not have a clear goal for specific tasks" (p. 34) because clear purposes would motivate learners to achieve their goals.

e) Strategy size: A significant amount of respondents did not establish a difference between macro and micro-strategies.

f) Amount of strategy clustering: Depending on the nature of the task, learners will have to perform certain types of strategic actions. On one side, in a simple task, the use of one strategy will be enough to perform it. On the other side, in complex tasks, the use of different strategies will be required, "a cluster of strategies" (Cohen, 2007, p. 35). In order to be effective in improving learning, the strategies should be combined with others, either simultaneously (strategy clauses) or in a progression (strategy chains).

g) Potential for leading to learning: If a strategy is described (even though at the level of a hypothesis), it can potentially lead to learning. With the combination of other strategies and the cognitive action, long term-memory and also certain skills can be developed through time.

2.2.3. Purpose of language learner strategies

It is important to highlight that the effectiveness of learner strategies depends on the learner himself or herself. Learner strategies have different purposes that will be described below.

a) To enhance learning: The majority of respondents agreed that the aim of learning strategies is the enhancement of learning. Other respondents pointed out that awareness of learning cannot be possible without strategy use.

b) To perform specified tasks: According to the vast majority of the respondents, the function of learner strategies is to successfully perform certain language tasks. Many respondents agreed that the selection of the strategies is based on the nature of the activity. In other words, some strategies would be more appropriate than others depending on the task. However, one respondent mentioned that the use of learner strategies is not predetermined; thus, the individual learner has to determine which strategies work best for him/her.

c) To solve specific problems: Learner strategies are used in order to solve specific problems faced by learners when performing tasks. A learner can try different strategies if the first strategy does not help him/her to achieve the task goals.

d) To make learning easier, faster, and more enjoyable: The respondents stated that learner strategies also help learning in order to make it "easier, faster, and more enjoyable" (Cohen, 2007, p. 39). On a positive note, learners were helped to develop more knowledge of their language learning and of themselves. Learning strategies enriched their learning process and made it more gratifying. On the other side, the overuse of strategies or the use of strategies without a purpose can "end up making learning more tedious, more complex, and slower" (Cohen, 2007, p. 39); in other words, learner strategies can also have a negative impact on the language learning.

e) To compensate for a deficit in learning: One question in the survey asked the experts' opinions concerning the role of learning strategies in compensating for a deficit in learning. One respondent pointed out that it was necessary to define 'deficit' in order to provide an answer. Another respondent stated that the use of strategies was not "a stopgap measure" (Cohen 2007, p.39), because learners are constantly improving their strategy use in order to develop their language learning experience.

### 2.2.4. Concepts related to the learners' use of strategies

#### 2.2.4.1. Autonomous language learning

The objective of this type of learning is to "produce self-motivated students" (Cohen, 2007, p. 40), who can manage their language learning without the presence of a teacher. Autonomy can be seen at three different levels: 'Autonomy of language competence' is related to the abilities of learners' ability to say or write what they want to express. 'Autonomy of language learning competence' is the level at which learners become aware of their ability to use cognitive and metacognitive strategies in order to carry out a task, instead of using teachers' suggestions. Finally, the level of 'Autonomy of choice' refers to the learners' capacity to set personal language goals and objectives related to their learning.

#### 2.2.4.2. Self-regulation

In this case, the majority of the respondents stated using the term 'self-regulation'. Nevertheless, the term is frequently confused with "self-management" and "autonomy"; this is why this concept is not clearly defined in the relevant literature. Some experts view the term as synonymous with "self-management", as used in the educational socio-cultural approach. Moreover, there is a psychological perspective concerning self-regulation which views self-regulated learners as those who use learning strategies (O'Malley & Chamot, 1990).

#### 2.2.4.3. Self-management

The experts' responses can be classified into three different types of answers. The first one is that 'self-management' is "the combination of procedures and knowledge" (Cohen, 2007, p. 41). Another use of the term refers to those learners who use metacognitive strategies in order to control their use of learning strategies. Furthermore, self-management is related to the capacity that learners have to manage their own learning, and to find and resolve problems. The third approximation to self-management defines it as a metacognitive strategy that can be used in a learning task. It establishes that four processes are related to 'self-management': learners need to be aware of what strategies suit them better; learners have to find certain conditions that could be useful to their learning

process; learners try to find opportunities where they can practice strategy use; and, finally, they should pay attention to the language task.

2.2.4.4. Independent language learning

This term focuses on the responsibility that a learner assumes for his/her learning process. This independence has to be supported by his/her knowledge of his/her skills and abilities in order to be successful in completing a task.

2.2.4.5. Individual language learning

The majority of the respondents stated that they did not use the term 'individual language learning'. However, a couple of them reported using it, but as synonymous with 'independent language learning'. According to one of the respondents, this confusion was related to a lack of clarity in the comparison of concepts like 'independent' and 'autonomous' language learning. Another respondent proposed a new definition of individual language learning by suggesting that it could refer to personal language learning, and to learners being reluctant to share their strategies with others, because they believed their strategies were highly personalized and only suitable for them.

2.2.5. A review of listening strategies: focus on sources of knowledge and success

The considerable amount of research that has been done in the last 30 years reveals the great importance of the listening comprehension skill. These studies have been inclining more and more towards cooperative learning rather than unidirectional listening, which means that the former field of research has been explored to a greater extent. The following review will be focused on four different listening approaches in an attempt to provide a comprehensive account of the studies done in this field (Macaro, Graham & Vanderplank, 2007).

2.2.5.1. Methods used in the elicitation of learning strategies.

Although think-aloud methods have been the most commonly used method for learners to describe their use of strategies when being part of an investigation, there have also been different ways to elicit the strategies that they use. Firstly, O'Malley, Chamot and Kupper (1989) made a significant attempt at trying to identify each stage of the listening processing by applying think-aloud elicitation techniques and they stated that

indeed there were several processing stages. Murphy (1985) and Long (1991) used the same method to describe the strategies used by learners when encountering a listening comprehension activity.

Another version of think-aloud techniques that have been used along the years is closely related to the learners' volition to communicate the strategy that they are using. One of the approaches used by Murphy in 1985 and later on by Laviosa in 2000 was to stimulate the students to verbalize their strategy use at any moment they felt the need to. Along the same lines, Vandergrift, on two different occasions (1997, 2003), used the "natural discourse boundaries" (Macaro et al, 2007), which consists in eliciting strategy use whenever learners felt it was appropriate. On the contrary, Goh (1998, 1999, 2002) used different elicitation techniques along the years to investigate listening comprehension strategies such as the use of diaries, interviews, and retrospective reports.

Conclusively, it can be stated that the preferred elicitation tool used by researchers is, in fact, the think-aloud protocol. Despite its limitations, it seems to be the most useful and insightful, although it mainly depends on the learners' awareness of their own cognitive processes.

#### 2.2.5.2. The relationship between strategy and other variables

In the following section, different variables will be explored and analysed to determine which of them may have an influence on learners' levels of proficiency.

##### 2.2.5.2.1. Strategy use and successful listening comprehension

Although the relationship between strategy use and successful listening comprehension has been the most discussed one by applied linguists, it also has several theoretical problems that need to be addressed. The dilemma arises from the unclear conceptualisation of the term 'successful listener': this concept has no clear boundaries or definitions. Therefore, sometimes the term is used idiosyncratically; and thus, differently across studies, which, consequently, makes the findings of studies difficult to compare and contrast. On the other hand, the studies in this area have used different methodologies to

assess the learners' level of proficiency. For instance, a group of researchers applied standardised tests to evaluate the students' proficiency. Among them, Murphy (1989) used a reading comprehension test and also two listening evaluations; and Goh (1998) and Peters (1999) chose national and multiple choice types of tests, respectively. On the contrary, another approach was applied to assess 'successful listeners', which can be characterised as a qualitative methodology design. This approach led to biased interpretations of the research results (O'Malley, Chamot & Küpper, 1989; Young, 1996).

Even though the theoretical and methodological problems can be solved, it should be borne in mind that the relation between strategy and success is not enough to determine whether a learner is proficient or not. There are other variables that interact in the students' learning process that cannot be neglected. One of these variables is linguistic knowledge (Macaro et al, 2007), which should be considered as important when attempting to establish a relationship between strategies and success. Thus, linguistic knowledge can determine the strategies a learner is going to use; besides, it can make up for the learners' lack of strategy knowledge in some cases and can help students use different strategies. In turn, Vandergrift (1997) recognised linguistic knowledge and strategy as two independent variables; however, he acknowledged that "limited linguistic knowledge may be the underlying reason for different strategy use" (in Macaro et al, 2007, p.170). In addition, Goh (1998) found differences in strategy use: less successful listeners failed to use certain strategies whereas successful ones used them. Furthermore, Peters (1999) discovered that although there were no differences regarding the quantity of strategies used by students, there was indeed a difference concerning the knowledge about how to use them.

2.2.5.2.2. Strategy use, gender and cultural background

Another variable that has been studied regarding strategy use is gender, which may be considered to be under-studied. Nevertheless, some studies can be mentioned: on the one hand, Bacon (1992) found a slight difference between the strategies used by males and females, the latter using more strategies than the former; and, on the other hand, Vandergrift (1997) did not find any significant dissimilarity between genders.

Another under-investigated variable is ‘cultural background’. In relation to this factor, Braxton (1999) proved that cultural background influenced listening strategies because each cultural group prefers different strategies and learning styles.

2.2.5.2.3. Strategy use, awareness and attitudes

Learners’ beliefs about listening strategies and about what it means to be a ‘good listener’ have been studied by Vogely (1995), who found that there was a systematic idealisation concerning what means to be a successful listener. However, the researcher also found that there was a “discrepancy between what students believed and the strategies that they actually used” (Macaro et al, 2007, p. 173), which proves that awareness and attitudes towards listening do affect students’ performance.

2.2.5.3. Using prior knowledge as a strategy

Researchers have mainly focused their studies on whether prior knowledge can influence students’ listening comprehension positively or negatively. Results show that prior knowledge is mainly used as a compensatory strategy to overcome lexical or syntactic problems encountered in listening comprehension tasks.

O’ Malley, Chamot and Küpper (1989) distinguished two types of prior knowledge: world knowledge and personal knowledge; the former is general and the latter is limited to our experience. He found that prior knowledge can act as positive reinforcement and, thus, it can help the student to keep on going with the task and not giving up. However, according to O’Malley et al, prior knowledge can also lead to important mistakes because students may remember what they previously knew about the topic instead of keeping in mind the listening task contents when asked to perform a recall task.

2.2.5.3.1. Focusing on the familiar and the unfamiliar

Other pieces of research have focused on the use of familiar topics that may be considered as positive input to explore if students’ prior knowledge influenced the

strategies that they employed as well as the strategy general efficacy. A clear example of prior knowledge used as a strategy is Young's research (1996, 1997), which consisted in triggering students' personal knowledge to make conceptual connections between their personal information about the topic and the subject matter of the text. The more successful listeners tended to use more metacognitive strategies if the contents were not familiar and the less successful listeners failed to make connections between the information and the text.

2.2.5.3.2. Processes involving prior knowledge at different levels of proficiency

Vanderplank (1988) carried out a study in which native and non-native participants were included and whose aim was to differentiate levels of proficiency in terms of balance of processes: 'following' and 'understanding' a listening text. 'Following' a text means that one can repeat, while 'understanding' a text means that a student can assimilate the new linguistic knowledge. The study showed that native speakers, i.e., those with higher proficiency levels tended to understand a text whereas non-native speakers, i.e., those with lower proficiency levels were inclined to follow the text rather than understand it.

2.2.5.3.3. Matching prior knowledge to text and task

Chiang and Dunkel (1992) ventured on the question on whether prior knowledge was useful to successfully perform a task and found out that this was only true when the information in the texts was an accurate reflection of what the learners thought the text was about. In turn, Field (2004) tried another approach to study these variables and conducted research on "how listeners deal with top-down and bottom-up information" (Macaro et al, 2007, p. 177), in order to see which process the students felt more inclined to use. The researcher found that top-down processes are more common than bottom-up processes and that learners did not normally use any strategy to overcome the issue of not knowing a word; instead, they tended to infer the meaning of words on the basis of the context in which the lexical item was immersed; or they associated the word with some other word which is approximately similar.

2.2.5.4. Activating prior knowledge as an advance organizer

Many pieces of research have been undertaken on whether activating prior knowledge through the use of advance organizers can in fact influence the students' performance. Advance organizers are techniques used by teachers before the listening activity to activate learners' schemata concerning the topic of the text. These may include graphics, pictures, illustrations, brainstorming and questions about the subject matter. Among these studies, it can be mentioned one by Teichert (1996), in which students were given the opportunity to "brainstorm vocabulary and cultural background" (Macaro et al, 2007, p. 178). Besides, Ruhe (1996) handed out mind maps that would help the students organize their knowledge. Later, Kawai (2000) conducted a study in which students were provided with words related to their L1 culture and background.

Whatever methodology is used in research studies, it can be stated that providing students with a general context of what they are about to hear can make a difference in the students' performance of the listening activity; and, thus, students may have a better comprehension of the subject matter.

2.2.5.5. Training students to use strategies effectively

The positive outcomes of carrying out a listening task by paying attention to certain linguistic cues in the audio have been studied by several researchers. Firstly, O'Malley, Chamot, Stewner-Manzanares, Russo and Küpper (1985) investigated the effects of teaching metacognitive strategies by separating their participants into four sections: three of them were given instruction on metacognitive, cognitive and cooperation learning strategies and the other one was the control group. The results of this intervention were mixed and not necessarily conclusive. Although this early study did not succeed in finding any improvements on the use of strategies in the intervened groups, other early studies such as those of Henner-Stanchina (1986, 1987), and Thompson and Rubin (1996) found that the groups who had had metacognitive instruction outperformed the control groups.

2.2.5.6. Strategy intervention

Strategy based instruction refers to the teaching of the language learner strategies within the context of a class. Its purpose is to enable students to improve their learning, to generate awareness about their own processes and to encourage self-regulation (Rubin, Chamot, Harris & Anderson, 2007) in an integrative manner. In order to do this, metacognitive instruction plays a fundamental role.

2.2.5.7. A model of strategy based instruction

Although there are several studies regarding an ideal design of strategy instruction that may be applied to both young and older learners, four fundamental procedures have been isolated from previous research, as summarized by Chamot, Barnhardt, El-Dinary, and Robbins (1999):

a) Creating consciousness about the strategies that the learners are using.

b) Teacher's presentation of strategies so students can become aware of their own learning processes.

c) Several instances of strategy practice in order for learners to become acquainted with the strategies and "move towards an autonomous use of strategies" (Rubin et al, 2007, p. 142).

d) Self-evaluation of the strategies that the students are using.

2.2.5.7.1. Making strategy instruction accessible to adults

In this section, some factors and procedures to carry out effective strategy instruction to adults will be described.

2.2.5.7.1.1 Context

The learning context in which adults learn English as a second language varies more than those of children and adolescents who study English as a subject at school. Considering this, Rubin et al (2007) identified three different settings:

a) The academic experience that the language learner has had before the strategy instruction. The two sides of the experience scale show people who

have had schooling and training, and learners who have never encountered any type of language class.

b) The goal that the adult learner has related to the purpose of learning a language, whether it is for work or for other reasons.

c) If the strategy instructor is a teacher or a counsellor.

Firstly, it is important to acknowledge the difference between those learners that have an academic background and those who do not have one. The most important difference, regarding strategies, lies in the fact that experienced learners may have certain knowledge about strategies, while the others will have to gain awareness of the learning strategies.

Secondly, adults usually have a clear purpose when starting a language course; thus, they have a high level of motivation, which plays a very important role in the learning process. Based on this idea, it has been suggested that individuals who are motivated will be inclined to learn how to use strategies.

Thirdly, it is the teacher's concern to choose the appropriate methodology to deliver the knowledge and develop the ability to use learner strategies. The teacher not only should instruct learners as a whole group but also should focus on individual students.

2.2.5.7.1.2. Ways to create language learner strategy awareness

The process of raising language learner strategy awareness consists in making learners conscious of the strategies that they are already using (Cohen, 1998; Chamot et al, 1999; Grenfell & Harris, 1999; Macaro, 2001; Chamot, 2004) with the purpose of promoting the understanding of their own cognitive processes. This process is closely related to the activation of prior knowledge in order to elicit information about strategies from the students to later apply them to different language tasks. The most common method for identifying which strategies learners are using is to ask them what they are doing and how they are doing it. Alongside this, other methods used for raising adult awareness of their strategies are: "questionnaires, focus groups, 'ask a question', journals

and reading about the learning process" (Rubin et al, 2007, p. 151). They will be briefly described below.

a) Questionnaires: These should be carefully designed to elicit information from adults or younger learners. In any case, the information regarding strategies should be related to the actual execution of a task concerning a specific language skill.

b) Focus groups: In this case, the learners are divided into groups to concentrate on a particular goal and skill with the purpose of solving problems regarding the process of achieving certain goals.

c) Ask a question: The learners provide the teacher with an answer on how they obtained the goals of certain task at hand.

d) Journals: Learners reflect on their cognitive processes and strategies via writing about their learning experiences.

e) Reading about the learning process: By reading material related to strategies, learners are encouraged to be autonomous regarding their learning process.

2.2.5.7.1.3. Ways to present and practice strategies

Due to the diversity of students in the adult learning context, this can pose different challenges and advantages. On the one hand, the variety of goals and knowledge among students can be very difficult to overcome because it demands that students learn how to be independent and self-reliable learners. On the other hand, since students are in fact adults, it is easier for them to become aware of their mental processes and thoughts, and it is also easier for them to work in an autonomous manner. Thus, in order to present strategies for learners to learn how to use them, they need to be presented with an appropriate context; for example, socio-affective strategies should always be presented in a context in which the learner is encouraged to identify their errors and problems. By doing this, learners would be able to self-evaluate whenever they need a correction. The methods that might be helpful in this process are journals, think-aloud and focus groups.

Conclusively, it is very important to establish that there "is no 'right' or 'wrong' strategy, but rather one that works for the particular learner for the particular task and goal" (Rubin et al, 2007, p. 153). For this reason as well, there are different

approaches used by teachers to teach these strategies; for example, think-aloud techniques in which the teacher narrates step by step what he/she is doing. In return, when a student is using this method, the teacher can also gain great insight into what the learner is doing and into whether he/she needs help with the task or not.

2.2.5.7.1.4. Ways to promote self-evaluation of strategy use

Considering that the ultimate goal regarding strategy based instruction is to make students develop consciousness about their learning processes, and therefore, to make them expand their knowledge about strategies, it is very important to encourage learners to evaluate the strategies that work for them and those that do not. In particular, a method that has been used to promote self-evaluation is to ask learners to set a goal for the task that they are going to carry out and then to explore the repertoire of strategies that they have at hand to, finally, after the task has been finished, discover which one was more helpful. By doing this exercise, teachers are encouraging students to self-reflect on what they are doing.

2.2.5.7.2. Issues in strategy based instruction

Two main issues arise regarding strategy based instruction: one of them is related to the lack of a common L1 among language learners. Therefore, the instruction of strategies has to be conducted in the target language, which makes the intervention difficult to carry out if learners have not achieved an adequate proficiency level. The second problem that arises directly from the previous issue is the lack of linguistic knowledge of the second language. A solution proposed is to make more advanced learners work with learners who have lower language level skills so they can help each other to overcome language problems.

## 2.3. Listening comprehension

In the following section there will be a brief explanation of the descriptive theoretical models chosen for the present research study.

### 2.3.1. Neurological and linguistic processing in listening

The following section accounts for the neurological processing in listening according to Rost (2011).

#### 2.3.1.1. Neurological processing in listening

##### 2.3.1.1.1. Hearing

Hearing refers exclusively to the physiological aspect of the listening process. Thus, hearing is a "neurological circuitry, part of the vestibular system of the brain" (Rost, 2011, p. 12), in which the sound waves are perceived and transmitted from the outer ear, through the inner ear to finally reach the auditory cortex situated in the temporal lobe of the brain. Once the cortical area is stimulated, it relies on different neural areas, such as Wernicke's and Broca's areas, to take over different language-related activities. The activation of different neural areas in the processing of an auditory signal implies that the brain is constantly engaged in parallel processing of information.

Hearing is only a stage in the listening process, despite its physical importance. The feature that differentiates hearing from listening is intention. Intention occurs when an individual perceives external input that he could be willing to pay attention to. However, the most important aspect of hearing is excitation patterns. Without these, "the auditory stimuli will not reach the brain" (p.15). Furthermore, excitation patterns are related to the manner in which the hearer will interpret and respond to input; interpreting and responding depend on several other factors apart from excitation patterns such as age, language and background.

##### 2.3.1.1.2. Consciousness

Consciousness is a non-physical aspect of hearing and it is directly related to the listener's intention to communicate and understand what is communicated to him or her. Therefore, consciousness is the process that "initiates attention, meaning construction, memory and learning" (p. 17); it is a subjective, experienced-based concept that is activated by two different cognitive processes: the identification of external input with its own independent properties and the centralisation of a willingness on the part of the listener to acknowledge this event.

Furthermore, consciousness is closely related to context. Thus, context activates the listener's self-referential model that is built on external events and subjective experience to perceive reality and help the listener to be aware of the environment that he/she is currently in. For this reason, consciousness is especially important for communication; it guides the listener's intentions and constructs meaning from the outer experience.

2.3.1.1.3. Attention

Attention is a particular feature of consciousness that allows an individual to focus on a certain object or idea. This operational process is activated by specific areas of the brain and it allows the listener to pay attention to a certain signal or not. Thus, attention promotes involvement and this feature is another concept that differentiates hearing from listening.

To understand how attention influences listening, it is necessary to describe two notions: limited capacity and selective attention. The former allows the listener to engage in one source of information at a time, but with the efficiency of switching the individual's attention from one source to another. And the latter implies the conscious decision to focus on one source of information only. Selective attention, however, does not always depend on linguistic aspects; and, therefore, it is not always carefully controlled. For example, human beings unconsciously respond to other aural signals that disturb the focus of attention that has been set.

2.3.1.1.4. Individual differences in neurological processes

Individual differences play a major part in neurological hearing-related processes. These can affect which parts of the brains are activated to perceive and process language, as every human being does it differently. Six fundamental individual differences are described below.

a) Local processing: Individuals have different rates of speed concerning neurological transmission, the activation of the transmitters and neuronal connectivity. Local processing also acknowledges the difference between individuals regarding their memory capacity and attention, and involvement of the thalamus and hippocampus.

b) Commitment and plasticity: Neural commitment refers to the brain's refinement of the neural areas that are concerned with automatic language processing and speed

of processing. However, the refinement of the neural areas directly relates to the loss of brain plasticity.

c) Integrative circuits: Integrative local circuits assist certain areas of the brain that are concerned with the sensory and conceptual aspects of utterances. This means that integrative circuits are closely related to the creation of new grammatical forms and they help to differentiate between unprocessed linguistic material and the retained processed linguistic material.

d) Functional neural circuits: These types of circuits function under the interplay of episodic memory and other neural circuits. Phonologically speaking, these circuits help to "store and repeat a series of words or to speed the learning of new words" (p.23). The difference in the ability of the learners to store words relates to the difference of proficiency in the second language.

e) Strategic control: It refers to the listener's ability to control high-level processes such as attentional control, mood control, learning strategies, and motivational control. Strategic control determines learners' rate of success or failure.

f) Level of attention: This concept refers to the manner in which listeners usually process information, that is, bottom-up or top-down processes.

#### 2.3.1.2. Linguistic processing

##### 2.3.1.2.1. Perceiving speech

The most important principle connected to perceiving speech is the efficiency principle. This means that in order to perceive speech, the hearer must try to process language as efficiently as possible to maintain an ongoing communication with a speaker. Thus, two heuristics are needed to process input efficiently.

a) Maximisation of recognition: The listener will make an effort to understand the speaker; therefore, he will use available acoustic information to reconstruct meaning.

b) Minimisation of categorisation: The listener must handle different types of ambiguity produced by speech differences between speakers to be able to perceptually group acoustic information.

2.3.1.2.2. Identifying units of spoken language

In order for the listener to handle real time communication, he/she must "group the speech into a small number of constituents" (p. 27) that can be easily processed within short-term memory.

2.3.1.2.3. Recognising words

The process of speech recognition involves organising aural input. Word recognition is the most important feature in spoken communication and comprehension; moreover, it is a fundamental aspect of L2 acquisition. In order to recognise words, the listener will mainly focus on lexical information. Thus, he will carry out two tasks: identifying lexical phrases and words, and activating knowledge related to the identified words and phrases.

Listening is described as having greater difficulties than reading: there are no clear cues or marks that show when a word has started or ended. For this reason, word recognition is a complex task marked by uncertainty and approximation. Because of the lack of clear cues, word recognition does not happen in a constant manner, but rather in an on and off way. In spite of ambiguities, communication can go on successfully if the listener is able to make inferences.

2.3.1.3. Semantic processing.

2.3.1.3.1. Comprehension: the role of knowledge structures

Many theorists consider comprehension to be the most important purpose of listening. Rost (2011) defines comprehension as Sanders and Gernbacher (2004) propose. Thus, it is defined as the process of structure building in which the listener relates language to previously stored knowledge in his/her brain with the aim of seeking

coherence and relevance. Therefore, comprehension refers to the experience of understanding whether the aural input refers to the listener's experience or to the outside world, while perceiving any chunks of language that might support or alter what the listener has understood of the information heard. Moreover, comprehension involves understanding every reference that the aural input is providing. That is to say, comprehension involves building accurate mental representations of different concepts.

Integration of information is the central process in comprehension. This process allows listeners to incorporate new and old information. Therefore, comprehension works as a system of rearrangement of the listener's internal model of the discourse. Without this modification and integration of new and old information, comprehension would not occur. "The listener has to store a mental representation of the discourse and continuously update the representation with new information" (p.57).

2.3.1.3.2. Cognitive understanding: the role of schemata

In order to get to a clear understanding of the aural information that is being heard, it is necessary for the listener to successfully and efficiently activate mental schemata. Schemata refer to modules of knowledge that are available in the memory that allow the listener to access different types of world knowledge. Schemata are constantly being updated and created every time a person reads or listens to something. Therefore, comprehension consists in activating the proper schemata that will enable the listener to understand the text.

2.3.1.3.3. Comprehension and learning

The activation of schemata plays an important role in learning. Schemata are activated when the learner has heard new information that needs to be integrated into memory. This activation can help the learner to update the information already stored in the brain and to create new schemata that could be helpful in the learning process. There are several factors that influence this learning process such as emotional and individual differences; however, the most important aspect of learning is the activation of schemata in order to store new information.

2.3.1.3.4 Social understanding: common ground and inferencing

The listener has to activate social structures in order to assess the relevance of the speaker's utterances. Apart from building a cognitive map of the meanings changed by the speaker, social frameworks and affective elements are important for the listening process. The listener has to have common ground with the speaker such as shared concepts, routines and behaviour. In addition to this, semantic processing involves the listener's conventional inferencing and enrichment of the aural input. Conventional inferencing refers to the recollection of cohesive elements of language.

2.3.1.4. Pragmatic processing

2.3.1.4.1. Listening from a pragmatic perspective

Apart from the decoding and semantic processing (described in the previous subsections), listening involves pragmatic competence. This competence is crucial to the social dimension of listening. It includes pragmatic comprehension (Kasper, 2006; Taguchi, 2009), interactional competence (Hymes, 2001) and symbolic competence (Kramsch & Whiteside, 2008). The listener needs to be able to understand speakers' intentions in a specific context of situation. When listening is viewed from a pragmatic perspective, language is considered from the point of view of the speaker and the listener involved in interaction.

2.3.1.4.2. Inferring speaker intention

Pragmatic processing involves deriving and constructing contextual meaning, i.e., meaning that includes the interactional and interpersonal relationship between speaker and listener. From a pragmatic perspective of listening, it is assumed that speaker and listener have intentions in any situation and these goals are important to achieve full understanding of a piece of discourse. With relation to inferring speaker intention, speech acts performed should be identified by the listener (Austin, 1962). In

addition, listeners become aware of intentions in terms of observation and violation of the cooperative principle maxims. (Grice, 1975).

2.3.1.4.3. Invoking social expectations

In order to understand a text, the listener needs to see language utterances as issued in a certain context of situation. Therefore, the listener should be aware of speakers, purposes, setting, norms of interaction, etc., which are components of the situational and cultural context in which language occurs.

2.3.2. A model of listening comprehension proposed by Vandergrift and Goh (2012)

The following section will explain the comprehension skill in terms of the processes involved in it, the types of knowledge used, and how these are interrelated when designing a model of this skill. This description is based on Vandergrift and Goh's proposals (2012).

2.3.2.1. Cognitive processes in listening

The present section describes the cognitive processes that occur in the course of L2 listening comprehension. These are (1) top-down and bottom-up processing; (2) controlled and automatic processing; (3) perception, parsing, and utilization processing; and (4) metacognition.

2.3.2.1.1. Top-down and bottom-up processing

Bottom-up processes deal primarily with the minimal phonological units and build meaning upwards. Listeners divide the received message into segments and suprasegments of the target language and build meaning from them at this level before processing more complex units such as words, clauses, sentences or discourse chunks. This type of decoding process depends mainly on specific linguistic knowledge instead of prior, pragmatic or discourse knowledge. It is a very exhaustive procedure that can become straining for the listener very quickly if messages are too lengthy; therefore, it is not optimal for the L2 listener to depend exclusively on bottom-up processing.

In contrast, top-down processes make use of prior knowledge and context cues in order to activate a conceptual framework which enables the understanding of the message. Additionally, listeners may draw from discourse knowledge, world

knowledge (another term for prior knowledge), pragmatic knowledge, and cultural knowledge they may have of the target language. All these sources are present in listeners' long-term memory in the form of schemata, which are activated by the listener when the topic becomes explicit and predictions are made. Top-down processing by itself can cause miscomprehension if listeners' prior knowledge is insufficient to interpret the message or if they are unable to understand the speaker's views.

As mentioned above, these processes are often closely connected, and the specific use of one over the other is the result of listeners' specific purposes for listening. For example, the metacognitive strategy of selective listening heavily draws on bottom-up processes once the top-down ones have already been used.

2.3.2.1.2. Controlled and automatic processing

Fluent listening makes the cognitive processing of the two prior processing categories, top-down and bottom-up, and the perception, parsing, and utilization processes a continuous and nearly flawless one; a prime example of this fluent listening is L1 listening. This fluency depends on overall L2 proficiency, or the real language knowledge the listener has, and any prior knowledge the listener may have on the topic. If L2 listening is ever expected to match this L1 fluency, the listener must be able to exert some control over processes that are not automatic as they may be in his/her L1.

Controlled processing is related to "conscious attention to and processing of elements in the speech stream" (Vandergrift & Goh, 2012, p. 19). With enough practice, listening eventually becomes automatic; yet, relying solely on controlled processing is not a feasible way of listening as input speed and working memory constraints make it difficult for a listener to keep up with incoming input. Communication ultimately breaks down if the listener stops paying attention.

Memory plays a key role in the comprehension process. The notion of memory has a clear dual distinction: long-term memory and working (previously short-term) memory. The long-term memory is the information storage that is accessed by listeners when interpreting and understanding what they hear. This information storage or bank is composed of all the listener's prior knowledge and life experiences, organised in

the form of schemata, which are activated while listening. Conversely, working memory affects the efficacy of cognitive processing when listening and, in the case of interactive listening, it is actively used when formulating an adequate response. Listeners are able to retain information units in the form of phonological loops at first, which henceforth get segmented into words, clauses and larger meaningful discourse chunks. This type of memory has a limited capacity for all users; yet, its capacity is determined by L2 proficiency in the case of L2 listening.

Working memory and the cognitive activity performed by it are managed and controlled "by an executive control responsible for high-level activities such as planning, coordinating flow of information, and retrieving knowledge from long-term memory" (Vandergrift & Goh, 2012, p.20). As units become more familiar to the listener, they become easier to process and access in the information storage within the long-term memory. A clear example is the difficulty one might have had to process or recall a new phone number in contrast to a new sentence; digits have no inherent relations amongst themselves as words in a sentence do. Once the listener has become acquainted with the phone number and it has been stored in long-term memory, it will be easier for him/her to recall it.

Ultimately, the association between controlled and automatic processes can be reduced to working memory use; better L2 proficiency implies less controlled processes and more automatic ones; therefore, more working memory is available for active and attentive listening instead of meticulous and slow chunking.

2.3.2.1.3. Perception, parsing, and utilization

A different outlook regarding cognitive processes in listening is synthesised by Anderson's (1995) classification of listening comprehension into three interrelated stages: perception, parsing, and utilization. Figure 1 shows what seems to be a sequential process; yet, it would be more appropriate to point out the two-way relationship also pictured, which closely resembles the cohesive nature of the previously mentioned top-down and bottom-up processes.

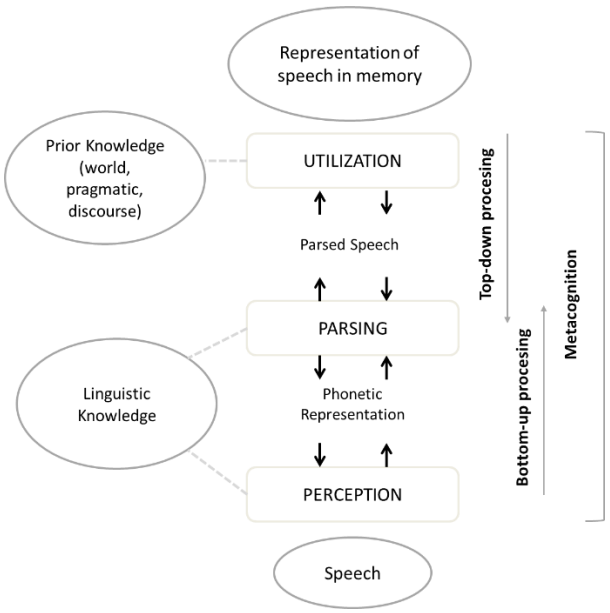



Figure 1. Cognitive Processes and Knowledge Sources in Listening Comprehension
Source: Vandergrift & Goh (2012)

The perception phase is characterised by the use of bottom-up processing in order to recognise segments (phonemes) and suprasegments and hold them in the working memory. Listeners are able to decode incoming speech by (1) "attending to the text, to the exclusion of sounds in the environment" (Vandergrift & Goh, 2012, p. 21); (2) observing similarities, pauses, and acoustic stresses relevant to a given language; and then (3) categorizing these according to the classifications of the specific language. This is the first stage of what is known as the word segmentation process. The results of this process are then used during the parsing phase.

L2 learners may struggle when listening if they do not develop word segmentation skills, as oral speech lacks the visual spacing present in reading and writing. Suprasegmental features such as stress patterns, elisions, and reduced forms make the task of finding the elusive word boundaries all the more difficult. In fact, prior knowledge and familiarity with words in isolation do not ensure full understanding in connected speech. Goh (2000) reports difficulties listeners face when word segmentation fails. Some of these are: (1) not identifying words; (2) overlooking portions of speech that follow; (3) not

chunking the stream of speech; (4) missing the opening of the message; and (5) concentration problems.

The following phase is involved with parsing the previously heard information, which is currently stored as a phonetic stream in the working memory. Once the speech is parsed, listeners retrieve possible word candidates from long-term memory, using cues such as "word onset, perceptual salience, or phonotactic conventions (rules that apply to the sequencing of phonemes)" (Vandergrift & Goh, 2012, p. 22). With these cues in mind, listeners create propositions, or "abstract representations of an idea"( Vandergrift & Goh, 2012, p. 22) to grasp a meaning-based representation of these freshly segmented words in working memory, as new input is processed simultaneously. Meaning also plays a major role in segmentation. As L2 proficiency improves, so does the automatization of the parsing process, becoming faster, more efficient and more precise. The large role that meaning plays in the parsing phase is made evident by the success rate favouring content words over functional words. Some difficulties listeners may encounter at this point are: (1) quickly failing to recall what was just heard; (2) being unable to form a proposition from the words heard; and (3) not understanding following parts because of what was overlooked earlier (Goh, 2000).

Finally, the utilization phase consists in connecting the meaningful units that have been previously perceived and parsed with information stored in long-term memory, in order to interpret secondary or implied meanings. Top-down processing dominates most of this phase. This phase is the most fluctuating one, as most of the processing is constantly checked and rechecked against the long-term memory schemata, context information, and newly added input.

During this phase, listeners create conceptual frameworks which serve the purpose of being contrasted with the message and consequent interpretation, as the meaning of the message may go far beyond the literal sense of the input. Fluent listeners are particularly adept at this task. If the automatized process breaks down because of comprehension issues, listening becomes a complex problem-solving task. The difficulties that a listener may encounter at this point are: (1) identifying the words with no

understanding of the message, and (2) feeling puzzled because of apparent inconsistencies in the message (Goh, 2000).

As mentioned above, the phases described are not linear, but parallel processes that overlap continually in a constant back-and-forth motion.

2.3.2.2. Knowledge sources in listening

During the cognitive processes of listening, listeners deal with different knowledge sources that direct the cognitive processing by providing information. These sources are: linguistic knowledge, pragmatic knowledge, prior knowledge and discourse knowledge. The next section explains each one of them and their role in the listening process.

2.3.2.2.1. Linguistic knowledge

Linguistic knowledge is formed by other sub-categories such as vocabulary or semantic knowledge, phonological knowledge (phonemes, stress, intonation, and speech modifications such as assimilation and elision), and syntactic knowledge of the target language. These three kinds of knowledge are fundamental for the listening comprehension and determine the understanding of words at discourse level. The first type of knowledge, vocabulary or semantic knowledge, normally works at the first stages of listening processing; later on, phonological knowledge allows listeners to analyse the sounds and identify meaningful units of language, and syntactic knowledge is responsible for the designation of "semantic roles to words". (Vandergrift & Goh, 2012, p. 24).

One significant consideration about linguistic knowledge is how important it is to know how to use it in real time. In normal conversation the speech pace can cause difficulties to listeners, because it is fast and some words that are understood in isolation may not be recognized in such contexts. As Vandergrift and Goh state, "This is the real challenge of listening comprehension: L2 listeners need to be able to rapidly parse words out from a stream of sound." (p. 24). Cognates, for instance, are words that are more easily mapped into long-term memory, because of similarities between the language systems.

2.3.2.2.2. Pragmatic knowledge

Pragmatic knowledge is related to the understanding not only of words and their literal meaning but also of the words in certain contexts or messages, as well as the interpretation of the speaker's intentions. This type of knowledge is used in the utilization phase of the comprehension process. Listeners relate the semantic meaning of an utterance to the contextual meaning and then develop their interpretation.

2.3.2.2.3. Prior knowledge

Just like the knowledge presented above, prior knowledge is linked to the utilization phase of the comprehension process. It is actually an intrinsic part of it. Vandergrift and Goh (2012) explain this by comparing listening comprehension to a problem-solving activity. In this case, there are two fundamental components: what the listeners hear, which represents new information or the linguistic input; and what they already know from their knowledge and perception of the world, which is known as prior knowledge. In L2 listening comprehension, if listeners have information about the topic that they are going to be working on in the listening activity, they can take this information and develop a context of information by activating their prior knowledge. It is important, then, to provide listeners with the context of the listening text before the actual listening process. For instance, a classroom discussion about applying for a job would facilitate the listening comprehension of an interview between a recruitment agent and a possible employee.

The use of prior knowledge should be flexible and facilitate comprehension; therefore, listeners' expectations need to adapt to new interpretations while listening.

2.3.2.2.4 Discourse knowledge

Discourse knowledge, also known as textual or script knowledge, deals with textual comprehension and how the information presented is organized. Listeners use discourse knowledge together with the knowledge of discourse markers that can signal the beginning (e.g., *firstly*) conclusion (e.g., *in conclusion*) of a set of arguments, an opposing argument (e.g., *on the contrary*) or a hypothesis (e.g., *if*). (p. 26). These markers present an

idea of the information that the listeners may expect to hear in the text, being an important and proactive category of knowledge in the process of anticipating information, especially if it is used together with prior knowledge. The processing of listening and responding to what has been heard can be facilitated by this category of knowledge. In this way, discourse knowledge is a relevant aspect of interactive listening and turn-taking in conversation.

The interaction of knowledge sources and cognitive processes allows listeners' meaningful interpretation of a listening task. The ability to access and use them would be determined by the level of proficiency and language experience that L2 learners have. Prior knowledge, for instance, can be transferred from L1; however, in the case of pragmatics, discourse, and linguistic knowledge, transfer is determined by similarities and differences between L1 and L2. As L2 learners acquire more language experience, these knowledge sources can be accessed more rapidly and effectively.

2.3.2.3 Interactive listening

Interactive listening consists in the ability to interact with others using the target language. The main purposes of this kind of listening are described by Vandergrift and Goh (2012) as "transactional, interactional, or purely social" (p. 27). Although most listening classrooms apply a non-participatory one-way listening instruction, learners of a second language require the development of their competence in interactive listening to be able to interact in social situations such as natural conversations.

Interactive listening and one-way listening are both processes in which the cognitive processes described above are present. In both cases there are bottom-up and top-down processes and phases of perception, parsing and utilization; however, they remain different. One of the main differences between the two is that interactive listeners have a dual role: they are both the speaker and the listener in the act of communication. This situation provides the listener with the opportunity to clarify meaning by asking the interlocutor to repeat what was said or to ask him/her to slow down during the conversation. Clarification, verification and repetition are skills that can be further developed by providing listeners with specific strategies on how to become good listeners by asking the speaker for

clarification, verification and repetition, thus, the use of these resources becomes one of the main benefits for listeners.

In turn, interactive listening is less demanding than one-way listening, because there is a number of reception strategies available for listeners in this interaction. However, in this type of interaction, there are other factors that can make it equally demanding. For instance, listeners are also speakers, and they are expected to reply, while they are also processing the message given by their interlocutor.

An important component in this type of interaction is the relationship between listener and speaker which will define the social and affective demands of the listening task. This is described by Vandergrift and Goh (2012) as the 'Contextual Nature of Interactive Listening', which refers to how relevant the context is in interactive listening. Commonly, in interactive situations listeners have a common communicative goal that facilitates the process of interpretation; then, the context will provide the basic background in which predictions can be made about what has been heard, while interpretations are being monitored. In this way, listeners are able to use their metacognitive knowledge to guide them during the interaction.

#### 2.3.2.4. A model of listening comprehension

The following section takes the previously reviewed descriptions of the cognitive processing and knowledge sources that the listening comprehension skill involves. These processes and knowledge sources are illustrated in Figure 2.

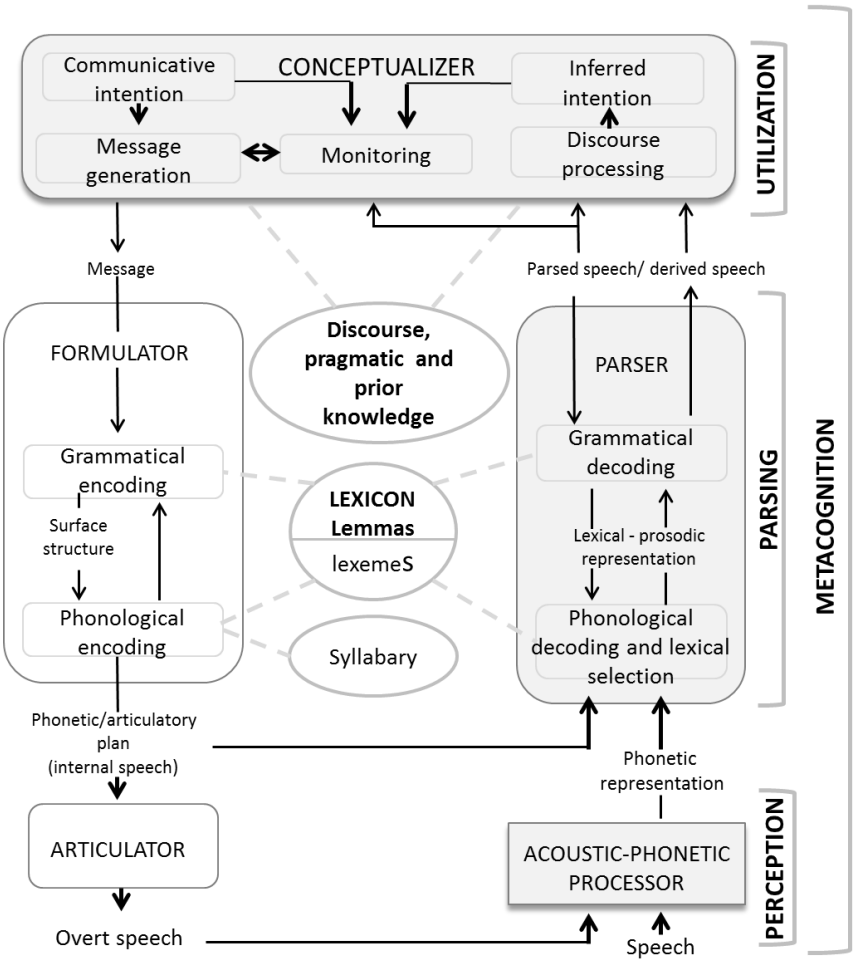



Figure 2. Schematic Representation of the Processing Components involved in Speech Production and Comprehension. Based on Levelt, 1993
Source: Vandergrift & Goh (2012)

Vandergrift and Goh (2012) have proposed a model of listening comprehension in which the processes and the knowledge sources have been included. The model is proposed as a solution to the noticeable lack of a definitive model of listening comprehension, a situation that other language skills such as reading do not face. This model is also markedly descriptive in its nature as it attempts to synthesise the currently known information regarding cognitive processes in the simplest manner possible. This fact makes the use and understanding of this model available to everyone, but particularly to teachers, who may use the information provided in order to properly teach listening to their students.

The model is partially based on Levelt's model of L1 speech production, to which a comprehension dimension has been added to account for the speaking skill. The phases outlined by this model describe the different steps communicative intent has to go through in order to become actual articulated speech; and, similarly, what steps are taken in order to process and fully comprehend the incoming speech. A brief review of the model follows.

2.3.2.4.1. Producing speech

Three processing components make up the production side of the diagram in Figure 2. These are: (1) the conceptualizer, where thoughts draw from world and discourse knowledge in order to take the shape and order the speaker wants; (2) the formulator, where linguistic knowledge decodes the parsed thoughts into appropriate words, clauses and sentences; and (3) the articulator, in which the planned out phrases are orally expressed by means of the phonological apparatus. A step prior to actual verbalization is the monitoring loop that Figure 2 suggests, as the "internal speech" present just before the articulator is inspected by the parser, a processing component belonging to the listening side of the diagram. This monitoring process is what is commonly known as "thinking before speaking".

2.3.2.4.2. Monitoring Speech

The monitoring portion of the model can be directly attributed to Levelt's original conceptualization, as it takes parts from both sides of the model and makes them collaborate for monitoring purposes. According to Figure 2, the speakers will have at least two instances for speech monitoring: when their inner thoughts have not been verbalized and when they have been made overt. This double check-up aids speakers a great deal when they are L2 learners.

According to Vandergrift and Goh (2012), if we were to only take into account what Levelt intended with his original model, the right side of Figure 2, composed by the acoustic-phonetic processor, the parser and once again, the conceptualizer, would solely serve as a monitoring tool for speech. In fact, the diagram highlights speakers' reflective nature as they share most knowledge sources. By adding the cognitive processing dimension suggested by Anderson (1995), which was reviewed in previous sections, the

model acquires a processing component that Levelt's original model lacked, and transforms the original model into a listening centred model.

2.3.2.4.3. Metacognition

As Figure 2 suggests, with its large bracketed line lodged on the far right of the diagram, metacognition is present in every step of the process. Metacognitive knowledge is what gives listeners some degree of conscious control over their own cognitive processes, allowing them to use strategies such as planning, monitoring, problem-solving, and evaluating. Metacognitive awareness and the overt use of strategies usually increase with improvement on the listener's L2 proficiency.

2.3.2.4.4. Parallel processing

It is important to highlight the fact that the model presented should not be read in a linear fashion as the nature of interactive listening intrinsically implies parallel processing. Figure 2 reflects this type of processing with bi-directional lines and arrows, which do not only emphasise the two-way nature of the processing, but also represents top-down and bottom-up processing.

As Vandergrift and Goh (2012) state, the continuous nature of the listener's processing takes part in the construction of the emerging meaning of the text. This results in co-text, or previously understood information, which builds up for the listener, activating appropriate lexical items quickly and making phonetic identification easier.

## 2.4. Listening instruction

### 2.4.1 Historical review.

According to Vandergrift and Goh (2012), listening instruction has become important in language teaching in the last decades. However, metacognition has not been taken into consideration; therefore, it has not played an explicit role in the classroom, even though it is a crucial aspect of the listening comprehension learning process. Furthermore, listening lessons have not been developed taking into consideration two fundamental

aspects, metacognition and the learner's point of view. Listening instruction was until a few years ago text-oriented and communication-oriented rather than learner-oriented. In fact, a new emphasis has been put on the way learners listen. However, research findings on the development of L2 learners' listening comprehension have not been exhaustive enough to improve the teaching of the L2 listening comprehension skill.

#### 2.4.1.1 Text-oriented instruction

During the 1950s and 1960s, listening instruction was influenced by writing and reading pedagogy with the ultimate goal of comprehension (Brown, 1987 in Vandergrift & Goh, 2012). Nevertheless, lessons were planned to make students discriminate sounds, answer comprehension questions based on a listening passage, or take dictation of written passages. This teaching situation has remained the same for some years. In fact, learners have not been trained in the listening skills, but they have just been tested on their comprehension of a listening text. This practice of testing rather than teaching listening is a common one even nowadays. When teaching listening, the emphasis should be placed on recognizing and understanding the different components of listening input, including individual sounds and phonological features, as well as bigger structures such as words, phrases, and sentences since listening is a process that goes from specific elements to more general ones. This view is based on cognitive psychology proposals in which meaning is considered to be constructed in a cumulative way, from sounds to words, to a string of words, phrases, clauses, sentences, and then, to an entire text. The understanding the listener builds from the message is supposed to be developed throughout every phase.

Text-oriented listening instruction is also characterized by the preponderance of the written language. The texts used in listening instruction tend to be written passages read aloud. These passages were not written considering the differences between written and spoken language. The texts were, in general, grammatically difficult and did not include speech features. These two characteristics show that these texts were not suitable for teaching listening comprehension because the spoken language differs from the written language. For example, Halliday (1985) states that written texts are tightly 'packed' with complicated structures and 'lexical density'. The CANCODE project (Carter & McCarthy,

1997; McCarthy & Carter, 1995), which involves corpus studies, has also pointed out the differences between spoken and written discourse.

#### 2.4.1.2. Communication-oriented instruction

Munby (1978) proposed a communicative syllabus design, based on the work of the Council of Europe, which presented models for every language skill. Listening is shown as a "complex set of skills and microskills" (Vandergrift & Goh, 2012, p. 8) which needs to be learned in the same manner reading and writing are learned. Later, other researchers proposed models of listening skills and subskills for a variety of communicative situations and all these directed the way listening was presented in the course texts. These models were also influenced by cognitive psychology and put the emphasis on the importance of listening comprehension as active meaning construction. For instance, a taxonomy, based on listening skills, structured in the context of conversational and academic listening was presented by Richards (1983). A five-stage framework was proposed by Rixon (1981), which included knowing objectives, understanding language, filtering for relevance, applying information, etc. In the 1970s communicative language teaching methodology emerged, which brought about discussion about innovative teaching methods, criteria for selecting material, designing tasks, and developing materials (Johnson & Morrow, 1981). As a consequence, some teachers stopped using written passages in favour of authentic materials such as movies, songs, and audio records for listening. Pre-listening activities were also introduced in order to enable students to use their background knowledge of the topic of the task during listening (Anderson & Lynch, 1988; Underwood, 1989; Ur, 1984). Nevertheless, even in lessons with a communicative purpose, learners confront situations such as a neglect of listening in favour of speaking or four-skill integrated units and the indirect assessment of comprehension. Communicative language teaching methodology encourages the development of listening, speaking, reading, and writing. And all of them have been taught in a series of lessons so that learners could practice each skill in relation to the topic. However, again listening was left behind and put to the service of speaking and writing and it was used only to prepare students to improve writing and speaking.

#### 2.4.1.3. Learner-oriented instruction

During the late 1970s and 1980s researchers focused on the reason why some language learners were more successful than others (O'Malley & Chamot, 1990; Oxford, 1990; Stern, 1983; Wenden & Rubin, 1987). This kind of study is known today as 'good language learner' research. Applied linguists examined learner strategies to later cover individual language skills, including listening. Regarding the area of listening strategies, Chamot (1995) and Mendelsohn (1994, 1998) claimed for a strategy based approach to listening instruction. Besides, O'Malley and Chamot (1990) realized that strategies have cognitive and affective bases. They developed a new model to classify learning strategies, which also includes a metacognitive or executive function to guide learning. Thus, the model incorporates metacognitive, cognitive and socio-affective strategies. Cognitive strategies involve "interacting with the material to be learned" (Vandergrift & Goh, 2012, p. 10) or using different techniques to perform language tasks. In turn, socio-affective strategies have to do with the role of social and affective variables in learning as well as learners' motivation and affective states. This strategic approach or model -based on a socio-cognitive paradigm- aims to train learners to apply strategies in order to handle the demands of listening (Mendelsohn, 1998). Experts recommended that teachers should use techniques such as modelling in order to demonstrate some of the mental processes that take place when the understanding of listening texts is constructed. In addition, the use of techniques such as thinking aloud by the teacher (Chamot, 1995) and showing the use of cognitive strategies for verifying informed guesses (Field, 1998) was recommended. Therefore, this learner-oriented approach was proposed as an answer to the problem of "testing camouflages as testing" (Vandergrift & Goh, 2012, p. 10-11) in listening instruction (Mendelsohn, 1994). The role of metacognitive processes was highlighted in order to help learners to *learn* how to listen. The techniques used were mainly modelling and scaffolding listening practices. Therefore, there was an attempt to demonstrate a perceptible mode of conducting mental processes in listening. Thus, this learner-oriented instruction focuses on the use of cognitive strategies and the development of metacognitive strategies that lead to self-regulation learning. Vandergrift (2004, 2007), Goh (1997, 2008) and Vandergrift & Goh (2012) have proposed a metacognitive approach

focused on what learners should do to assist themselves within listening classes in a holistic way.

### 2.4.2. Metacognitive instruction

#### 2.4.2.1. General description

The metacognitive instruction designed by Vandergrift & Goh (2012) can be described as the approach that teachers can apply in order to teach their students how to accomplish the listening skill challenge in the best manner. In this way, it focuses on the learners' awareness of their strengths and weaknesses when facing a listening task, of the awareness of the nature of the task and, finally, awareness of the strategies that learners should use to achieve a more effective performance of listening comprehension tasks. From this perspective, the applicability of this approach is based on the three dimensions of metacognition: students, tasks, and strategies.

According to Vandergrift & Goh (2012), the metacognitive approach in a classroom context is necessary for helping students to understand the cognitive processes that develop their listening comprehension. Thus, it is based on the guidance the teacher provides in listening comprehension lessons to make learners' "knowledge of these processes more explicit" (p.125).

##### 2.4.2.1.1. Metacognitive instructional activities

Concerning the effective application of the metacognitive approach, there are some metacognitive instructional activities that aim to achieve the objectives and goals of the instruction. Along these lines, these activities can be classified into two different types, integrated experiential listening tasks and guided reflections for listening.

###### 2.4.2.1.1.1. Integrated experiential listening tasks

The integrated experiential listening has as main purpose to provide students with activities that raise their metacognitive awareness through the contact with social-based tasks in the classroom context. In addition, it contributes to the listening comprehension practice outside the classroom. By applying these kinds of tasks, students benefit from the awareness of the different processes that involve a L2 listening task. These

tasks can be adapted for use with published materials; they can also be applied at different stages of a listening lesson sequence, pre-listening, post-listening and during listening. Hence, the integrated experiential listening tasks would allow learners "to explore their own self-concept as listener, use appropriate strategies during listening, or identify factors that influence their own performance in different listening tasks" (p. 126). Vandergrift and Goh (2012) proposed the following integrated experiential listening tasks: the metacognitive pedagogical sequence, self-directed listening or viewing, and post-listening perception activities, which will be described in the following subsections.

2.4.2.1.1.1 The Metacognitive Pedagogical Sequence

The Metacognitive Pedagogical Sequence is defined as "a sequence of learning activities that integrate metacognitive awareness raising with listening input and comprehension activities" (Vandergrift & Goh, 2012, p. 127). This sequence contributes to the learners' understanding of the content of the text and, at the same time, the metacognitive aspects that are involved in the process. Its main purpose is to motivate the students to become self-regulated learners when carrying out a listening comprehension task. Its process involve three main goals: (1) to encourage the learners to reflect on themselves as listeners, (2) to incorporate complexities related to the task demands and (3) to increase the effectiveness of listening strategies (Vandergrift & Goh, 2012).

Referring to the metacognitive processes, Vandergrift and Goh (2012) state that this strategy portrays a pedagogical method that helps the students to become familiar with the listening processes. In the end, the metacognitive pedagogical sequence is helpful for the students to improve their abilities in (1) "planning for the activity", (2) "monitoring comprehension", (3) "solving comprehension problems" and (4) "evaluating the approach and outcomes." (Vandergrift & Goh, 2012, p.105). The ability called "planning for the activity" leads learners to be prepared for the task they will be asked to perform in order to strategically decide what information should be listened to in more detail, and, thus, to avoid getting involved with the activity without previous reflection on the topic. Along the same lines, for improving the ability "monitoring comprehension", it is necessary for the students to control their listening comprehension skills on the basis of their predictions in order to make some adjustments if required. Then,

they would be able to continuously evaluate what they understand from the text, verify predictions and interpretations of the text and precisely assess their understanding of the listening process. In turn, the ability "solving comprehension problems" is related to the situation of facing problems while performing a listening task, which will need to be solved in order to improve the students' performance of the listening skill. Finally, the ability "evaluating the approach and outcomes" is closely connected with the idea of evaluating the "effectiveness" of the adjustments previously made in the ability called "solving comprehension problems". Hence, students can actually overcome weaknesses identified in the previous stages of the listening process.

The pedagogical sequence stages are named as follows: planning, predicting, monitoring, evaluation, directed attention, selective attention, and problem-solving. By going through these stages, students will be able to control their listening process; and, therefore, improve their performance. The figure below shows the specific stages as follows:

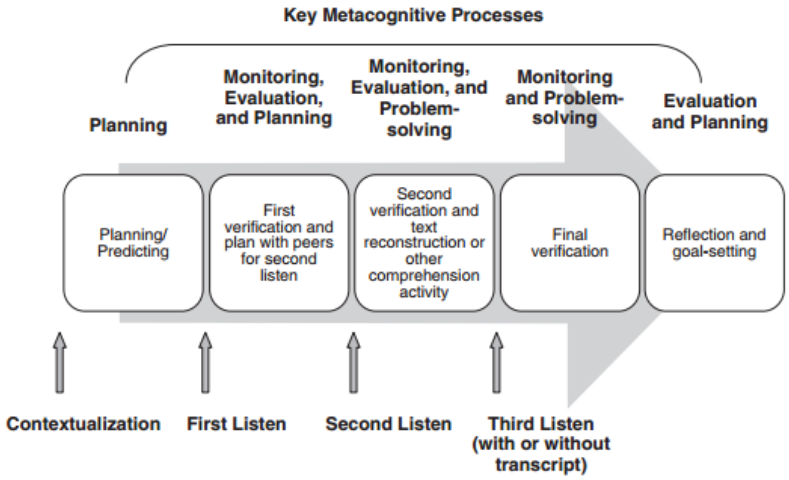



Figure 3. Stages in the Metacognitive Pedagogical Sequence for Listening Instruction. (Vandergrift & Goh, 2012, p. 109)

The stage called "planning/predicting" is led by the teacher, who provides the context of the topic of the listening task by brainstorming, one of the main activities carried out at this stage. Afterwards, the second stage "first verification and plan with peers for second listen" has as main purposes the students' verification of their

predictions after the first listening, and the addition of new information that did not come up when brainstorming during the first stage. Then, at the third stage "second verification and text reconstruction or other comprehension activity", after the second listening, learners initiate the process of reviewing the information they previously noted and, at the same time, they add new information when required. In addition, this stage includes further discussion between partners in order to revise the interpretation of the listening text. At the following stage, "final verification", learners listen to the text for the third time with the intention of finding new information they did not get in the two previous listening instances. Furthermore, the teacher may introduce part of the transcript for the students to get the information in detail. Finally, at the stage "reflection and goal setting", the students are encouraged to reflect on their approach to the listening task, as well as on their difficulties when facing the listening activity; and, at the end, the main idea is to set goals for future listening activities in order to apply all the reflections made at this last stage.

Consequently, these stages help the students to monitor their listening strategies, which, in the end, is going to lead to an improvement on their listening comprehension performance. During the stages of the pedagogical sequence, students are asked to listen to a listening text three times in order to get all the details they missed during the second and third listening stages. By being involved in the pedagogical sequence, students become more confident of their strategy use, and, at the same time, they are able to change the strategies that proved to be inappropriate to carry out the listening task. Finally, it would be interesting to highlight that the metacognitive pedagogical sequence incorporates a cooperative pedagogical approach, since the discussions with other learners facilitate the improvement on the listening skills of each individual student.

2.4.2.1.1.1.2 Self-directed listening or viewing

According to Vandergrift & Goh (2012), the most successful learning experiences do not occur in a classroom-based context. Therefore, teachers should guide their learners with different "prompts", more specifically "homework", which would help them to evaluate themselves in any future listening comprehension activity, integrating both dimensions of the metacognitive approach, "text-focused comprehension" and "metacognitive awareness". (Vandergrift & Goh, 2012, p.129). The development of these

prompts should include the three metacognitive processes: planning, monitoring and evaluation. The main purpose of the self-directed listening is to help students to evaluate their own listening performance.

2.4.2.1.1.1.3 Post-Listening Perception Activities

The post-listening perception activities are based on the sounds and pronunciation of the L2 in real speech. Thus, students are encouraged to analyse their "lexical segmentation" ability through "language-focused activities", which orchestrate their awareness of how real connected discourse functions; and, therefore, they become more proficient in listening comprehension tasks. In the end, this kind of activity leads students to successfully apply their metacognitive abilities to listening tasks.

2.4.2.1.1.2. Guided reflections for listening

The main purpose of guided reflections for listening is to encourage students to find new knowledge about their own strategies in the L2 listening comprehension. Guided reflections for listening can involve language-focused tasks, in which the linguistic aspects of the L2 are explored by the learner. In addition, these reflections are led by the teacher, who should contribute to his/her students' awareness of these activities. Moreover, one of the objectives of these guided reflections is to motivate students to apply them after the lessons on their own, as "stand alone activities". Examples of these activities are "listening diaries", "emotional temperature chart", "process-based discussions", and "self-report checklist". These will be briefly described below.

2.4.2.1.1.2.1. Listening diaries

Listening diaries are personal records that students use in order to organize their ideas, listening abilities, behaviours, problems and strengths when facing a certain listening activity. (Vandergrift & Goh, 2012). In these terms, the main idea of a diary is to answer questions directed to the three aspects of metacognition, individual, task and strategy. Some questions that could be asked and activities that could be carried out are: "What did you do to help your understanding?", which elicits the individual aspect of metacognition; "List the listening skills you have been developing during the last week", which is related to the task aspect of metacognition; finally, a question such as "What

strategies did you use during the listening task?" could be asked to get information about the strategy aspect of metacognition. (Vandergrift & Goh, 2012, p. 133).

2.4.2.1.1.2.2. Emotional temperature chart

According to Vandergrift and Goh (2012), listening comprehension tasks might cause language anxiety. Therefore, building a diagram with some notes about the students' feelings when facing a certain listening activity might provide them with an evaluation of their own listening performance. Moreover, as the emotional temperature chart belongs to the 'person' aspect of metacognition, it may help students to overcome difficulties with the listening comprehension task (Vandergrift & Goh, 2012).

2.4.2.1.1.2.3. Process-based discussions

In order to promote students' metacognitive awareness, a group discussion about their learning process may support the knowledge process. The main objective of this kind of activity is to encourage students to talk freely about their ideas concerning their learning process. These discussions can be held either in small groups or with the entire class led by the teacher, who should point out the main challenges of specific listening comprehension activities.

2.4.2.1.1.2.4 Self-report checklist

Self-report checklists are descriptions of the students' beliefs and strategies used for assessing their own learning process (Vandergrift & Goh, 2012). Their main purpose is to develop the necessary metacognitive strategies to perform a listening comprehension task. They might be used by both young and adult students and they provide a record of what the class thinks about their strategies and feelings. (Vandergrift & Goh, 2012).

# 3. Methodology

The present research is a quantitative quasi-experimental study which intends to explore the effects of an implicit metacognitive listening strategy intervention on the students' listening comprehension level of proficiency. In addition, it aims to identify relationships between listening comprehension skills and listening metacognitive awareness. The quasi-experimental nature of the study implies that the groups of students are intact classes since the use of random assignment was not possible due to administrative limitations. There were two intact classes, one of them became the experimental group, and the other one, the control group. On the one hand, an implicit metacognitive intervention was designed for the experimental group and on the other hand, the control group continued with the regular listening classes. Concerning the intervention conducted, its implicit nature meant that the metacognitive strategy training was embedded in the regular class activities.

.

## 3.1. Objectives

### 3.1.1 General objective

The general objective of this research study is to identify the effects of metacognitive strategy intervention on the listening comprehension skills and on the listening metacognitive awareness of university students of English as a foreign language.

### 3.1.2 Specific objectives

a) To identify the students' listening comprehension level of proficiency before and after the intervention.

b) To measure the students' listening metacognitive awareness before and after the intervention.

c) To design a metacognitive listening comprehension strategy intervention.

d) To perform an intervention in an experimental group of subjects in order to train them in the use of listening metacognitive strategies.

e) To compare the students' listening comprehension level of proficiency before and after the intervention.

f) To compare the students' listening metacognitive awareness before and after the intervention.

g) To identify relationships between the students' levels of listening comprehension proficiency and their listening metacognitive awareness.

## 3.2. Research questions

1. Are there any differences in the listening comprehension level of proficiency between the experimental and control groups before and after the intervention?
2. Are there any differences in the listening metacognitive awareness as measured by the five metacognitive awareness listening questionnaire subscales or strategies (directed attention, planning/evaluation, person knowledge, mental translation, problem solving) between the experimental and control groups before and after the intervention?
3. Are there any relationships between the students' listening comprehension level of proficiency and their metacognitive listening awareness before and after the intervention?

## 3.3. Participants

The research presented here took place in 2015 with students from the English Linguistics and Literature program offered at Facultad de Filosofia y Humanidades, Universidad de Chile. The participants were 12 second year students who were attending the English Language II subject. This course has been traditionally subdivided into three

sub-courses, English Practice, Applied Grammar and Listening. Taking into consideration the purposes of this study, the most appropriate sub-course for the development of the research was the Listening sub-course.

Considering object of study of the English Language subject, i.e., the acquisition of English as a second or foreign language, the Linguistics Department at the Facultad de Filosofia y Humanidades has historically separated these English Language courses into different sections of about 20 students each. Two of the four sections of the English Language II subject were chosen for the purposes of this investigation. These sections were selected because the students belonging to them had a similar level of proficiency in listening comprehension, according to the teacher of this sub-course. One of these sections was trained in the use of metacognitive listening comprehension strategies; and thus, became the experimental group, while the students in the other section became the control group. Originally, the experimental group had 25 students and the control group had 23 students. However, only 7 participants in the experimental group and 5 in the control group completed the whole data collection process involving four tests given along a period of ten weeks.

### 3.4. Data collection instruments

The data were collected by means of three instruments related to the two variables in the study:

1. A listening comprehension pre-test.
2. A listening comprehension post-test.
3. A metacognitive awareness listening questionnaire.

#### 3.4.1. Listening comprehension pre-test and post-tests

Two sample versions of the First Certificate in English (FCE) listening comprehension test (Appendix A) were given in order to assess the students' listening

comprehension proficiency. The first version (Sample 1) was used as a pre-test. The students belonging to the control and the experimental groups took the test prior to the intervention. The second version (Sample 2) was used as a post-test. It and was given to the students in both groups after the intervention for the experimental group was over. Both versions were retrieved from Cambridge English: First Certificate in English official website. It should be mentioned that two tests were examined in order to choose the most appropriate one for the participants' level of proficiency, the Preliminary English Test (PET) and the First Certificate in English exam. Finally, the First Certificate in English mock exam was chosen over mainly because the participants' English proficiency level was expected to be upper-intermediate, or B2, in accordance with the Common European Framework of Reference for Languages (CEFR), and the test chosen belongs to such a level of proficiency.

The First Certificate in English exam consists of four papers that cover the four core language skills, reading (and Use of English), writing, speaking, and listening. The listening paper, chosen for eliciting information, has 30 questions, which are distributed in four parts and the score for each question is one point (mark). Thus, the total score is 30 points. Part One consists of eight short monologues or conversations between interacting speakers. The questions are multiple-choice items; and there is one question per extract. This part tests the listener's ability to listen for feeling, attitude, opinion, purpose, function, agreement, gist, and details. In Part Two, there is a three- minute-long monologue, which gives information that the students will have provide to fill in 10 information gaps. This section tests the listener's ability to listen for specific information and opinions stated in the extract. As for Part Three, five thirty-second-long monologues with a central theme are played. The student will have to match each monologue to one of the eight options given in the question paper, five being correct and three being distractors. This part tests the listener's ability to listen for gist, attitude, opinion, purpose, feeling, main points, and details. Finally, in Part Four, a three- or four-minute-long conversation between two or more speakers is played. Once again, multiple-choice questions are asked. This part tests the listener's ability to listen for attitude, opinion, detail, gist, main idea, and specific information.

### 3.4.2. The Metacognitive Awareness Listening Questionnaire

The questionnaire chosen to elicit the data about the students' level of listening metacognitive awareness was the Metacognitive Awareness Listening Questionnaire (Appendix B) designed by Vandergrift, Goh, Mareschal, & Tafaghodtari (2006). According to Goh (2013), this questionnaire is based on research and theory about L2 listening, specifically on Flavell's (1979) proposals about metacognition. It elicits awareness of five distinct strategies: directed attention, mental translation, planning and evaluation, problem solving, and person knowledge. In other words, the questionnaire elicits information about the perception that students have of their use of strategies when engaged in a listening task and also asks for information on the person knowledge that they have with relation to how confident they feel about listening in the target language. In more specific terms, directed attention strategies refer to the students' ability to concentrate on a specific task; mental translation strategies help students to translate the information heard in the L2 into their first language; planning and evaluation strategies are meant to guide students to prepare before listening and to evaluate their performance after listening; problem solving strategies help students to make inferences when they do not understand a certain word. Finally, person knowledge elucidates students' self-confidence in L2 listening tasks.

Vandergrift et al. (2006) also validated the Metacognitive Awareness Listening Questionnaire as a way of efficiently measure the development of students' listening metacognitive awareness. The Metacognitive Awareness Listening Questionnaire was thought as an appropriate tool for the students' self-regulated use of metacognitive listening comprehension strategies. Vandergrift et al. (2006) stated that there is a correlation between listening comprehension performance and the results of the Metacognitive Awareness Listening Questionnaire.

The Metacognitive Awareness Listening Questionnaire has 21 items. Students have to respond to the 21 statements by rating their responses on a six-point Likert

scale, in which 1 stands for ‘strongly disagree’, 2 stands for ‘disagree’, 3 stands for ‘partially disagree’, 4 stands for ‘partially agree’, 5 stands for ‘agree’, and 6 stands for ‘strongly agree’. The questionnaire was translated into Spanish by the seminar group in order to facilitate the students’ understanding of the statements when eliciting the information. (Appendix B).

### 3.5. Data collection procedure

The data for the study were collected during the second semester of the academic year 2015.

#### 3.5.1. Application of the listening comprehension pre-test and post-test

Two sample versions of the First Certificate in English were applied as pre-test and post-test. The teacher in charge of the Listening component of the English Language II course gave the tests to both the experimental and the control groups in her regular classes. The teacher used different MP3 audio files in order to play the listening texts required for each of the tests. Each test was completed in approximately 40 minutes.

#### 3.5.2 Application of the Metacognitive Awareness Listening Questionnaire before and after the intervention

The Metacognitive Awareness Listening Questionnaire, translated into Spanish, was applied on two occasions, before and after the metacognitive listening strategy intervention. It was given to both the experimental and the control groups. It was applied in a class period following the listening comprehension pre-test and post-test by the seminar group. The completion of the questionnaire took about 15 minutes.

### 3.6. The intervention in listening metacognitive strategies

#### 3.6.1. General description

The students in the experimental group attended six 45-minute listening

instruction sessions given by the teacher of the Listening subcomponent of the English Language II course. The entire intervention took ten weeks to be completed: six weeks were devoted to the training sessions and four weeks involved the application of the pre-tests and the post-tests for the experimental and control groups. The goal of this intervention was to train students in an implicit manner to improve their listening abilities. The intervention design was based on the Pedagogical Sequence proposed by Vandergrift and Goh (2012), which is described in the theoretical descriptive framework of the study in the subsection regarding metacognitive instruction.

Concerning strategy instruction, there are two types of approaches: implicit and explicit instruction of learning strategies. In explicit instruction, the teacher provides a definition of the strategy that will be taught, describes its purpose, and exemplify its use. On the contrary, in implicit instruction, the teacher carries out activities that are related to the strategies without defining them, nor highlighting their relevance or purpose.

### 3.6.2. Structure of the metacognitive listening strategy training sessions

As stated above, every training session in metacognitive strategies was structured following the metacognitive Pedagogical Sequence proposed by Vandergrift and Goh (2012). The Pedagogical Sequence consists of five stages:

1. Planning/predicting: In this phase, the teacher provides the context of the topic and the students predict information related to the topic.

2. First verification stage and plan with peers for second listen: Students verify their predictions after the first listening and add new information they did not understand during the first phase.

3. Second verification stage and text reconstruction: After the second listening, students revise the information they wrote in the previous phases and add new information if necessary. This phase allows students to discuss the listening text with their

partners.

4. Final verification stage: Students listen to the audio for the last time and if required, they add new information they did not notice in the previous stages.

5. Reflection and goal setting: Learners reflect on their listening performance, the difficulties they encountered, and the way they should face listening tasks in the future.

### 3.7. Materials

The materials used in the six instruction sessions were taken from two sources: the course book *North Star 5: Listening and Speaking,* written by Sherry Preiss (2009), used in the subcomponent of Listening in the English language II course. The other materials were podcasts from *6 Minute English from the BBC Learning English* website. A detailed description of the topics and the objectives of each intervention is provided in the table below.

Table 1

Description of the intervention sessions.

| Session | Topic | Objectives | Source |
|---|---|---|---|
| 1 | *Boosting brainpower through the arts* | Listen and predict, listen for main ideas and listen for details | North Star 5: Listening and speaking. Sherry Preiss. Third Edition (2009) |
| 2 | *Boosting brainpower through the arts* | Listen and predict, and listen for global understanding | North Star 5: Listening and speaking.Sherry Preiss. Third Edition (2009) |
| 3 | *Feng Shui: ancient wisdom Travels West.* | Listen and predict, listen for details | North Star 5: Listening and speaking. Sherry Preiss. Third Edition (2009) |
| 4 | *Drinking around the world.* | Listen for details | 6 Minute English from the |

| | | | |
|---|---|---|---|
| | | | BBC Learning English. |
| 5 | *Learn a thousand foreign words* | Listen and infer, listen to the main ideas | 6 Minute English from the BBC Learning English. |
| 6 | *Coffee addiction* | Listen and predict, listen for details and listen for global understanding | 6 Minute English from the BBC Learning English |

3.7.1. Instruction lesson plan samples

The following two samples correspond to the first and second training sessions; the first one has the following objectives: listen and predict, listen for main ideas, and listen for details, and the second one, listen and predict, and listening for global understanding.

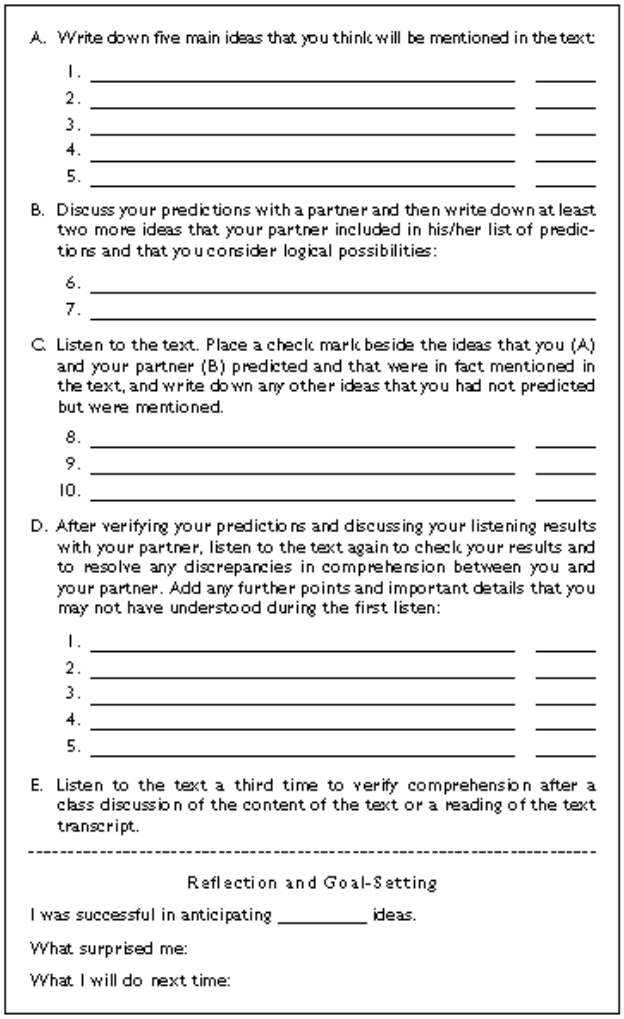
Intervention 1

*Objectives:* Listen and predict, listen for main ideas, and listen for details.

*Materials to be used*:

1. Book North Star 5: Listening and Speaking. Sherry Preiss. Third Edition (2009).
2. Paper sheet with the pedagogical sequence proposed by Vandergrift.

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.



A. Write down five main ideas that you think will be mentioned in the text:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

B. Discuss your predictions with a partner and then write down at least two more ideas that your partner included in his/her list of predictions and that you consider logical possibilities:

6. _____
7. _____

C. Listen to the text. Place a check mark beside the ideas that you (A) and your partner (B) predicted and that were in fact mentioned in the text, and write down any other ideas that you had not predicted but were mentioned.

8. _____ _____
9. _____ _____
10. _____ _____

D. After verifying your predictions and discussing your listening results with your partner, listen to the text again to check your results and to resolve any discrepancies in comprehension between you and your partner. Add any further points and important details that you may not have understood during the first listen:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

E. Listen to the text a third time to verify comprehension after a class discussion of the content of the text or a reading of the text transcript.

---

Reflection and Goal-Setting

I was successful in anticipating _____ ideas.

What surprised me:

What I will do next time:

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.

*Description:*

(1) Before listening/planning *10 minutes*: First, the teacher gives a Pedagogical Sequence handout to each student for them to fill in. Then the teacher is supposed to ask the students to write down the ideas that come to their minds when listening to the title of the activity, *Boosting brain power through the arts.*

(2) First listening *10 minutes*: Second, they will listen to the audio for the first time, and they will answer letter C from the Pedagogical Sequence. After taking notes, they will compare their answers with a partner and will add important information previously missed.

(3) Second listening *6-8 minutes*: Third, they will listen to the audio again and they will answer letter D in about 6 minutes. After that, the entire class is supposed to discuss what they listened to, what they think is interesting about it and exchange opinions in relation to the content of the listening.

(4) Third listening *6 minutes*: They will listen for the last time and will enrich their answers and opinions.

(5) Final reflection *5-7 minutes*: Finally, they will reflect on what they did and how they felt about it. Also, they will share their opinions about this last stage of the activity for about 5 minutes.

Intervention 2

*Objectives:* Listen and predict, and listen for global understanding.

*Materials to be used:*

1. Compilation of tracks 29 to 32 from North Star 5: Listening and Speaking. Sherry Preiss. Third Edition (2009).
2. Answer sheet from North Star 5: Listening and Speaking. Sherry Preiss. Third Edition (2009).
3. Unit 9 *Boosting brainpower through the arts*

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.

*Description:*

(1) Before listening/Planning *5-7 minutes*: Students are informed about the topic and are asked about what their predictions are for the listening; they share ideas out loud with the teacher and she writes them on the board.

(2) First listening *5 minutes*: After listening to the audio, students will find out whether their predictions were accurate or not, and will make notes about additional information that they missed during the planning stage.

(3) Instruction for the activity *5 minutes*: The teacher will provide a handout for the following activity: students will be asked to use the notes taken at the beginning of

the class and use the information provided by the audio to subsequently paraphrase the statements heard and will rewrite the statements in the answer sheet.

(4) Second listening *7-10 minutes*: Students will add details to enrich the paraphrased sentences written in the activity sheet. Afterwards, they will share their thoughts and paraphrased sentences with a partner to compare and contrast them.

(5) Third listening *4-5 minutes*: Students listen for specific information that they could not understand the previous times.

(6) Final reflection *5-7 minutes*: Along with the teacher, students comment on what the most difficult task was for them and what they would do differently on another occasion.

## 3.8. Data Processing

### 3.8.1. Processing the listening comprehension pre- and post-tests

The listening comprehension tests consist of 30 questions; the maximum score of the tests is 30 points when every item is answered correctly. In turn, the minimum score when every item is answered incorrectly is 0 points. Thus, each question has one point as the maximum score and zero as the minimum score.

The results of the marking of the tests of the control and experimental groups were tabulated individually and according to the total of the participants. After processing each participant's listening comprehension test results, the average and standard deviation were calculated for each test of the experimental and control groups, and afterwards, each participant's score was grouped in a general average.

### 3.8.2. Processing the Metacognitive Awareness Listening Questionnaire

In order to process the Metacognitive Awareness Listening Questionnaire (MALQ), the statements were subcategorized into the five factors or subscales of the metacognitive strategies proposed by Vandergrift and Goh (2012): planning and evaluation, directed attention, person knowledge, problem solving, and mental translation. This grouping is reflected in Table 2:

Table 2.

MALQ subscales and statements.

| MALQ subscales | MALQ statements |
|---|---|
| Planning and evaluation | 1, 10, 14, 20, 21 |
| Directed attention | 2, 6, 12, 16 |
| Person knowledge | 3, 8, 15 |
| Problem solving | 5, 7, 9, 13, 17, 19 |
| Mental translation | 4, 11, 18 |

There were six statements that had to be reverse coded in order to be processed: Three statements corresponding to directed attention (16) and person knowledge (3, 8), because of the wording of the statements, so the students would not follow a marking pattern on the rating scale. The other three belong to the mental translation subscale (4, 11, 18), because this strategy is negatively related to the other strategies. This type of processing was based on Goh & Hu (2013).

Since the Metacognitive Awareness Listening Questionnaire was processed and analysed according to the five metacognitive strategies, each strategy item has a different total score which relates to the number of statements: planning and evaluation has five statements with a total score of 30, directed attention has four statements with a total score of 24, person knowledge has three statements with a total score of 18, mental translation has three statements and a total score of 18, and problem solving has six statements with a total score of 36 points. The ideal average for each strategy item is 6, therefore, if the score is closer to 6, the more metacognitive awareness the respondents have. On the contrary, if participants answered the statements with 1 as the minimum score, the less metacognitive awareness they reflect.

Taking the reverse coding into consideration, the maximum score of the Metacognitive Awareness Listening Questionnaire is 126 points when every item is answered with ‘strongly agree’; in turn, the minimum score is 21 points when the respondents answer with ‘strongly disagree’. Thus, each statement has six points as the

maximum score and one as the minimum score. The results of the marking of the tests of the control and experimental groups were tabulated individually and later on, according to the total of the participants. Then, the average and standard deviation were calculated for each of the groups.

4. Discussion of results

The results will be discussed on the basis of the three research questions asked in the study.

4.1. Results of the pre- and post-listening comprehension tests

The results of the pre- and post-listening comprehension test will provide an answer to research question 1: Are there any differences in the listening comprehension level of proficiency between the experimental and control groups before and after the intervention?

4.1.1. Experimental group

The table and figure below show the average and standard deviation of the pre- and post- listening comprehension tests results of the experimental group.

Table 3

Pre- and post-listening comprehension tests results of the experimental group

| Pre-Test | | Post-Test | |
|---|---|---|---|
| Average | Standard Deviation | Average | Standard Deviation |
| 19.00 | 2.39 | 20.43 | 2.44 |

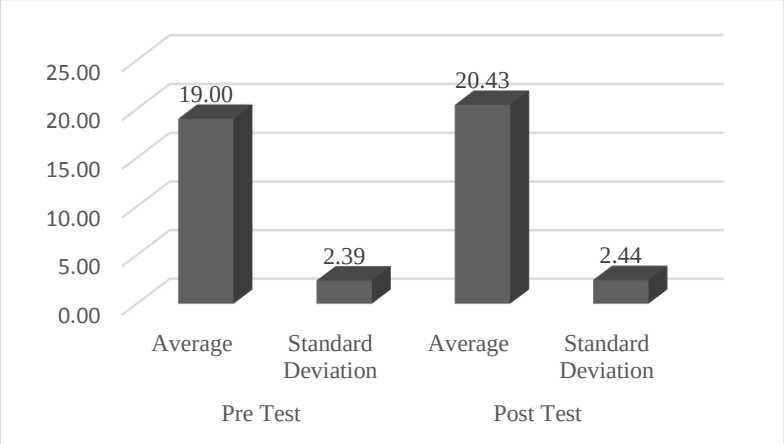



Figure 4. Pre- and post-listening comprehension tests results of the experimental group.

As can be observed in the figure and table above, the average of the post-listening comprehension test increased by 1.43 points, in turn, the standard deviation

increased by 0.05. As expected, the total average increased, which preliminarily shows that the overall experimental group was positively influenced by the intervention. Concerning the standard deviation, this number slightly increased. According to descriptive statistics, the increase shows there is slightly higher heterogeneity in the listening comprehension tests' scores.

If the individual scores are examined, it can be seen that four participants increased their scores, a single student maintained its score, and two students decreased their scores. The score increase ranges from 2 to 6 points, as opposed to the score decrease which ranges from 1 to 2 points. These score variations show that not all the participants increased their score equally, but rather some participants obtained better results than others, as shown in Table 3 in Appendix F.

4.1.2 Control group

The table and figure below show the average and standard deviation of the pre- and post-listening comprehension tests results of the control group.

Table 4

Pre- and post-listening comprehension test results of the control group

| Pre-test | | Post-test | |
|---|---|---|---|
| Average | Standard Deviation | Average | Standard Deviation |
| 22.80 | 3.37 | 20.60 | 4.36 |

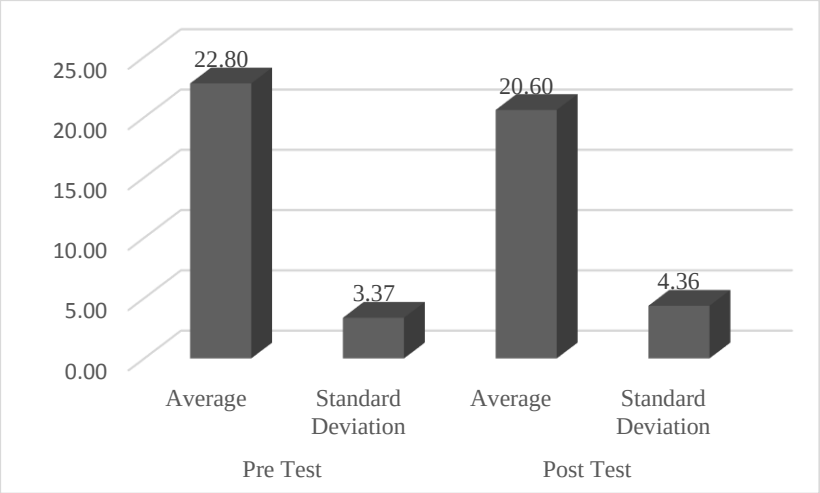



Figure 5. Pre- and post-listening comprehension test results of the control group

The average and the standard deviation of the post-listening comprehension test were calculated by the use of an outlier treatment, which consists of deleting participants' scores that modify the common pattern of general average. The control group of this study presents a student's score that was an outlier. Considering the small amount of students in the control group (5), it was appropriate to remove this participant's results.

The total average of the scores decreased by 2.2 points, which shows that the overall control group obtained lower results in the post-test. This might be explained by the fact that the control group was not trained in listening metacognitive strategies as opposed to the experimental group. The standard deviation increased by 0.99, which shows there is slightly higher heterogeneity in the listening comprehension tests' scores.

If the individual scores are examined, it can be seen that two participants increased their scores and three students decreased their scores. The score increase ranges from 1 to 3 points, as opposed to the score decrease which ranges from 1 to 5 points. These score variations show that not all the participants decreased their score equally, but rather some participants obtained poorer results than others, as shown in the table in Appendix F.

### 4.1.3. Comparison between groups

In the pre-listening comprehension test, the control group reached a higher average than the experimental group. However, the control group showed a slight decrease in the post-test, while the experimental group increased its average score. In spite of the

average increase reached by the experimental group, it cannot be stated that the metacognitive listening instruction conducted with the experimental group was a complete success, but rather partially effective.

This moderate success in the experimental group could be explained by the fact that no students attended all six sessions of the intervention, as shown in Table 5 below. The fact that the students did not attend all the sessions might have had an influence on the post-test results, since regular practice and constant use of metacognitive strategies are required to properly develop their listening comprehension skills.

Table 5

Attendance of the experimental and control groups

| Experimental group | | Control group | |
|---|---|---|---|
| Participant | Attendance | Participant | Attendance |
| Participant 1 | 3 | Participant 1 | 2 |
| Participant 2 | 2 | Participant 2 | 3 |
| Participant 3 | 2 | Participant 3 | 4 |
| Participant 4 | 3 | Participant 4 | 5 |
| Participant 5 | 3 | Participant 5 | 4 |
| Participant 6 | 4 | | |
| Participant 7 | 5 | | |

Note: The total number of sessions was six and the numbers on the table show the amount of sessions each participant attended.

### 4.2. Results of the pre- and post-Metacognitive Awareness Listening Questionnaire

The results of the pre- and post-Metacognitive Awareness Listening Questionnaire will provide an answer to research question 2: Are there any differences in the listening metacognitive awareness as measured by the five metacognitive awareness listening questionnaire subscales or strategies (directed attention, planning/evaluation, person knowledge, mental translation, problem solving) between the experimental and control groups before and after the intervention?

4.2.1. Experimental group

The table and figure below show the average and standard deviation of the pre- and post- Metacognitive Awareness Listening Questionnaire results of the experimental group.

Table 6

Experimental group pre and post Metacognitive Awareness Listening Questionnaire results

| | Pre-MALQ | | Post-MALQ | |
|---|---|---|---|---|
| MALQ Five Subscales | Average | Standard Deviation | Average | Standard Deviation |
| Planning and Evaluation | 3.97 | 1.52 | 4.23 | 1.29 |
| Directed Attention | 4.71 | 1.28 | 5.04 | 0.98 |
| Person Knowledge | 3.10 | 1.44 | 3.48 | 1.50 |
| Mental Translation | 4.00 | 1.48 | 4.38 | 1.59 |
| Problem Solving | 4.79 | 1.08 | 4.64 | 1.11 |

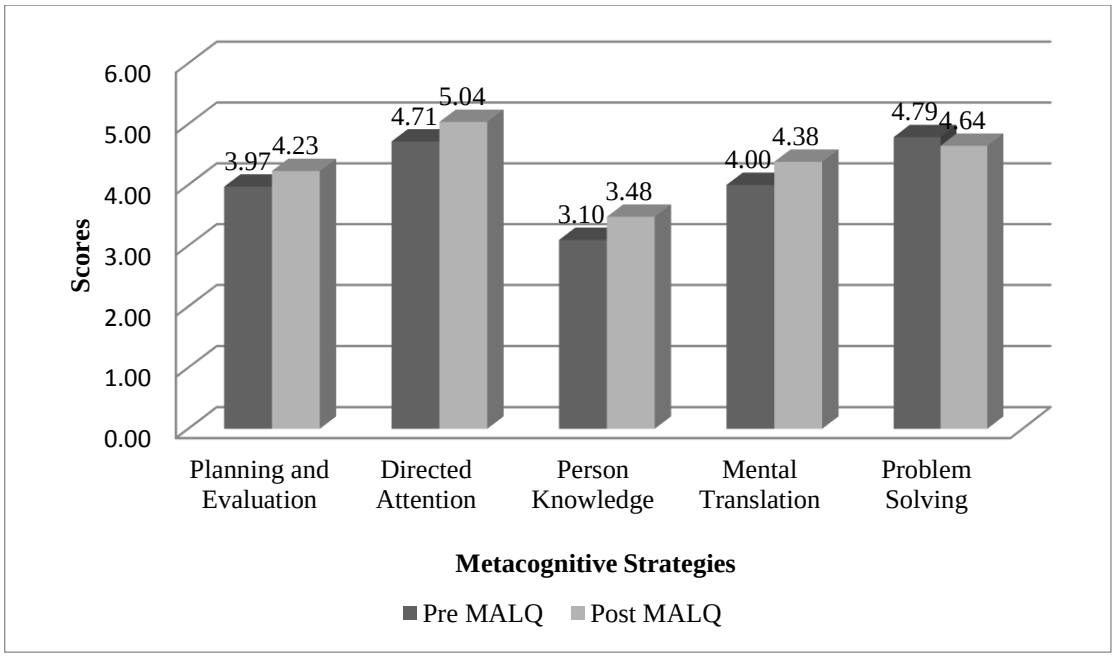



Figure 6. Experimental group pre- and post-Metacognitive Awareness Listening Questionnaire results.

As can be seen in the figure and table above, four out of five strategy items of the Metacognitive Awareness Listening Questionnaire increased their number, and one of them decreased. Planning and evaluation rose by 0.26, directed attention increased by 0.33, person knowledge and mental translation rose by 0.38, and problem solving decreased its average by 0.15.

It can be said that there was an increase in the average score between the pre- and post-Metacognitive Awareness Listening Questionnaire of the experimental group. The data show that the strategies that were developed the most were mental translation and person knowledge. Taking into consideration that the statements regarding mental translation were reverse coded, its increase should be considered positive as it points to a decline in the use of the strategy. It is believed that the increase of the strategy's average was due to the fact that the academic year continued normally and therefore, the level of proficiency of the students was supposed to increase and naturally, mental translation is expected to decrease. Furthermore, by training participants into the other four strategies, the pedagogical sequence does not pretend to encourage mental translation, therefore its use is expected to decrease.

Regarding person knowledge, it can be said that its increase was due to the fact that the pedagogical sequence included this strategy in the model. This means that in every intervention session, there was a final verification and reflection stage; the students were supposed to listen to the assigned audio for the last time, and add details of the listening text to their previous notes. Then, the students evaluate their listening performance in order to improve it in the next session. Thus, it can be said that metacognitive instruction can help improve the students' knowledge about themselves.

Planning and evaluation, and directed attention show a slight increase in their average in the pre- and post-questionnaire. This difference can be explained on the fact that the pedagogical sequence includes planning and evaluation as the first stage of the model. Thus, students are supposed to make predictions about the topic they are about to listen to and possible words that may be present in the assigned audio. Regarding directed attention, it can be said the strategy average increased because all intervention sessions were focused on listening for details or global understanding, which contribute to the

development of directed attention. Taking the frequency of use of this strategy in the instruction sessions into consideration, the average score was expected to have a higher increase; however the increase was moderate. Therefore, it can be stated that in this case, metacognitive instruction did not help to significantly improve either planning and evaluation nor directed attention when listening.

As mentioned above, the problem solving strategy average decreased, contrary to what was expected. This decrease might be explained because the schemata evoked in the planning and evaluation stage, which occurs in the first phase of the Pedagogical Sequence, may be insufficient. Thus, the prior knowledge activated might have been unsatisfactory to solve possible problems that could arise during the development of the Pedagogical Sequence.

As the results in Table 6 show, the standard deviation decreased as expected in three strategy items and increased in two: planning and evaluation decreased by 0.23, directed attention by 0.3, person knowledge by 0.06; on the contrary, mental translation increased by 0.11 and problem solving rose by 0.03. According to the descriptive statistics, directed attention presented the highest decrease, reflecting more homogeneous answers in the post-test among the students. In turn, mental translation presented the higher increase among the students, contrary to research expectations. Consequently, the scores were heterogeneous.

According to the descriptive statistics, the standard deviation should decrease in at least 0.2, in order to assure a more homogeneous range of scores, i.e., the scores of the answers in the post-Metacognitive Awareness Listening Questionnaire should be closer to 6 points in comparison to the pre-Metacognitive Awareness Listening Questionnaire.

### 4.2.2 Control group

The table and figure below show the average and standard deviation of the pre- and post-Metacognitive Awareness Listening Questionnaire results of the control group.

Table 7

Control group pre- and post-Metacognitive Awareness Listening Questionnaire results.

| | Pre MALQ | | Post MALQ | |
|---|---|---|---|---|
| MALQ Five Strategies | Average | Standard Deviation | Average | Standard Deviation |
| Planning and Evaluation | 4.08 | 1.26 | 4.48 | 1.17 |
| Directed Attention | 4.80 | 1.12 | 4.85 | 1.24 |
| Person Knowledge | 3.60 | 1.40 | 3.47 | 1.09 |
| Mental Translation | 3.73 | 1.61 | 3.73 | 1.53 |
| Problem Solving | 5.13 | 0.96 | 5.00 | 0.86 |

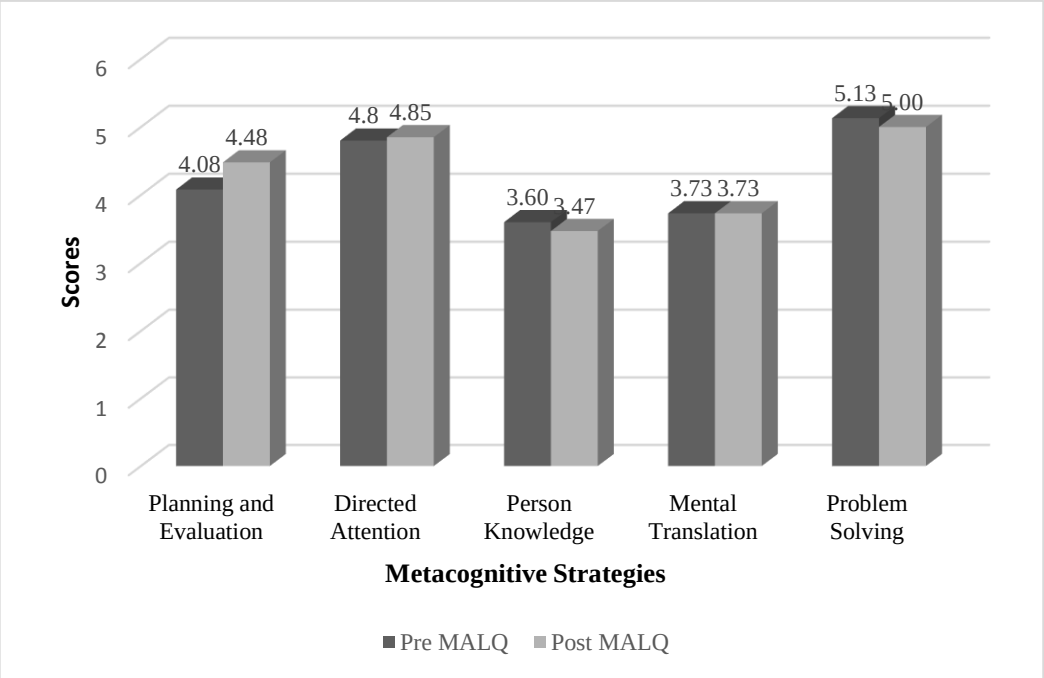



Figure 7. Control group pre and post Metacognitive Awareness Listening Questionnaire results.

As can be seen in the figure and table above, two out of five strategy items increased its average, one remained the same, and two of them decreased. Thus, planning and evaluation rose by 0.4, directed attention increased by 0.05. Mental translation maintained its average score. On the contrary, person knowledge and problem solving decreased by 0.13.

It can be state that there were no major increases between the pre- and post-Metacognitive Awareness Listening Questionnaire of the control group. The data show that the strategy that was developed the most was planning and evaluation, which presented the highest average increase. In turn, directed attention increased its total score, yet it did not show a major change in its average.

Regarding person knowledge, it presented the lowest average in both the pre- and the post-questionnaire, and the average decrease from pre- to post-questionnaire. In spite of the fact that there was a decrease in the problem solving average, it still remained the highest average of the five factors, with 5.13 in the pre-questionnaire and 5.00 in the post.-questionnaire.

As the results in Table 7 show, the standard deviation decreased as expected in four of the five strategy items and increased in one: planning and evaluation decreased by 0.09, person knowledge by 0.31, mental translation by 0.08, and problem solving in 0.1. On the contrary, directed attention increased by 0.12. According to descriptive statistics, person knowledge presented the highest decrease, reflecting more homogeneous answers in the post-questionnaire. In turn, directed attention presented the higher increase among the students, which means more heterogeneous answers.

### 4.2.3 Comparison between groups

Regarding the second research question, it can be claimed that there is a difference in the Listening Metacognitive Awareness as measured by the five Metacognitive Awareness Listening Questionnaire subscales or strategies between the experimental and control groups before and after the intervention, as it can be seen in Table 8 below.

Table 8

Experimental and control group pre- and post-Metacognitive Awareness Listening Questionnaire results compared.

| | Pre-MALQ | | Post-MALQ | |
|---|---|---|---|---|
| MALQ Five Subscales | Experimental | Control | Experimental | Control |

| | | | | |
|---|---|---|---|---|
| Planning and Evaluation | 3.97 | 4.08 | 4.23 | 4.48 |
| Directed Attention | 4.71 | 4.80 | 5.04 | 4.85 |
| Person Knowledge | 3.10 | 3.60 | 3.48 | 3.47 |
| Mental Translation | 4.00 | 3.73 | 4.38 | 3.73 |
| Problem Solving | 4.79 | 5.13 | 4.64 | 5.00 |

As shown in Table 8 above, the experimental group improved in four out of five metacognitive strategies: planning and evaluation, directed attention, person knowledge, and mental translation. As compared to the control group, which improved in two out of five strategies: planning and evaluation, and directed attention. The total score increase of the experimental group ranges from 88.7 points to 92.7 points, in contrast to the total increase of the control group that ranges from 92.4 to 93.4, as shown in Table 8. Thus, the experimental group increased its average by 4 points in contrast to the control group that increased by 1 point. However, the control group scored higher total averages in the pre- and post-Metacognitive Awareness Listening Questionnaire than the experimental group.

It can be stated that the experimental and control groups showed higher metacognitive awareness in directed attention, and problem solving. Students in both groups are able to concentrate on the listening task and ignore distractions to maintain their attention while listening. Additionally, students in the experimental and control groups are able to use their prior knowledge to infer unknown information with the clues in the listening text and check the validity of their inferences. On the contrary, the strategy that showed lower metacognitive awareness in the experimental and control groups was person knowledge. Students in both groups may have difficulties recognizing their own strengths and weaknesses in L2 listening because they lack the opportunity for introspection. These similar results can be explained by the fact that all students were already acquainted with metacognitive listening strategies, due to the fact that the teacher of the listening sub-component frequently instructs students on this matter.

4.3. Comparison between the results of the pre- and post-listening comprehension test and the results of the pre- and post-Metacognitive Awareness Listening Questionnaire

The results of the pre- and post-listening comprehension test and the results of the pre- and post-Metacognitive Awareness Listening Questionnaire will provide an answer to research question 3: Are there any relationships between the students' listening comprehension level of proficiency and their metacognitive listening awareness before and after the intervention?

For the purpose of answering this research question, the averages of the listening comprehension tests and Metacognitive Awareness Listening Questionnaires were calculated taking each group as a whole, as can be seen in Table 9 below.

Table 9

Pre- and Post-Listening Comprehension Tests, and pre- and post-Metacognitive Awareness Listening Questionnaires averages of the experimental and control groups.

| | Pre-Test | Post-Test | Pre-MALQ | Post-MALQ |
|---|---|---|---|---|
| Experimental group | 19 | 20.4 | 88.7 | 92.7 |
| Control Group | 22.8 | 20.6 | 92.4 | 93.4 |

The results on Table 9 show that there was an increase of 1.4 points in the average score listening comprehension tests of the experimental group. In turn, the Metacognitive Awareness Listening Questionnaire of the experimental group increased its total average by 4 points. Thus, it can be stated that there is a relationship between the post-listening comprehension test results and the students' level of metacognitive awareness after the metacognitive instruction.

As mentioned above, the control group showed a decrease of 2.2 points in its listening comprehension average. In addition, the Metacognitive Awareness Listening Questionnaire of the control group increased its total average by a single point. These slight changes between the pre- and post-questionnaires revealed a moderate improvement, despite that fact that the control group were not instructed in the use of metacognitive listening strategies designed by the research group. The control group went on with regular listening classes, which might explain the improvement in their metacognitive awareness,

since the methodology normally used by the teacher of the listening sub-component includes metacognitive activities.

Finally, the results cannot be generalised because of the limited amount of students and the number of intervention sessions. Moreover, it is important to mention that even though the general averages of the experimental group listening comprehension tests and Metacognitive Awareness Listening Questionnaires increased, it cannot be stated that the metacognitive instruction was completely successful, but it can be claimed that there was a slight improvement in the students' listening performance and metacognitive awareness.

## 5. Conclusions

The present study attempted to explore the relationship between metacognitive instruction and listening comprehension proficiency in Chilean intermediate university students of English as a second/foreign language. The importance of addressing this object of study is based on the fact that listening comprehension is the least studied and researched language skill, probably due to its complex nature. At Chilean university level, English language teaching and learning emphasize oral communication, which involves listening as a crucial skill. Therefore, the research group agreed with most of the reviewed literature on the importance of the listening skill for second/foreign language learning.

Researchers have suggested that the methodology commonly used as instruction for the listening skill has been limited to grading or testing, instead of training the students in listening comprehension. In other words, they have claimed that the teaching of listening has focused on the product rather than on the process of listening. In order to overcome this problem, applied linguists working on this field of study have suggested that students should be trained in the use of metacognitive strategies to deal with the complex processes involved in listening comprehension. This issue motivated the seminar group to choose the object of study of the present research. The study sought to answer three research questions:

1. Are there any differences in the listening comprehension level of proficiency between the experimental and control groups before and after the intervention?

2. Are there any differences in the listening metacognitive awareness as measured by the five metacognitive awareness listening questionnaire subscales or strategies (directed attention, planning/evaluation, person knowledge, mental translation, problem solving) between the experimental and control groups before and after the intervention?

3. Are there any relationships between the students' listening comprehension level of proficiency and their metacognitive listening awareness before and after the intervention?

In order to provide answers to these questions, the research group designed a quasi-experimental study which involved an implicit metacognitive instruction intervention carried out with an experimental group on the basis of Vandergrift and Goh's proposals

(2012). In turn, the control group of students received no instruction on the use of metacognitive strategies and they went on with their regular listening classes. This research design was chosen in order to compare the effects of metacognitive instruction on the students' level of listening proficiency.

Concerning the difference between results of the pre- and post-listening comprehension tests, it can be stated that the experimental group increased its average score, while the control group decreased their score. Both average variations were very moderate: the experimental group increased by 1.43 points and the control group decreased by 2.2 points. This moderate success of the experimental group could preliminary show that the intervention was fairly effective.

Concerning the difference between the results of pre- and post-Metacognitive Awareness Listening Questionnaires, it can be stated that both groups increased their average scores: the experimental group increased its total average by 4 points, while the control group increased its total average by 1 point. When considering the average increase of each of the five subscales separately, it can be observed that the experimental group experienced an increase in four out of five metacognitive strategies taught during the intervention: planning and evaluation, directed attention, person knowledge, and mental translation. The control group improved in only two out of the five metacognitive strategies: planning and evaluation, and mental translation. Since more strategies increased in the experimental group, this could preliminary show that the intervention was slightly effective.

Taking into account the results of the pre- and post-listening comprehension tests and the pre- and post-Metacognitive Awareness Listening Questionnaires, the research group attempted to establish a relationship between the students' listening comprehension level of proficiency and their metacognitive listening awareness. For the experimental group, the slight increase of both averages including the number of metacognitive strategies or subscales that increased their awareness, point to a moderately successful intervention. For the control group, a discrepancy appears, as the listening comprehension average decreased and the metacognitive listening awareness average increased. This may be explained by the fact that the control group went on with regular classes, and that the

teacher of the listening subcomponent includes metacognitive activities in the methodology normally used, making the control group acquainted with metacognitive strategies even if they did not go through the intervention.

The results obtained are similar to smaller scale studies in regard to amount of participants (Goh & Taib, 2006; Bozorgian & Fakhri, 2013), in which the rate of success has been equally moderate. The more successful studies (Li, 2013; Rahimi & Katal, 2013; Fahim & Fakhri, 2014) normally had a much larger sample of participants, typically over thirty and in most cases, over a hundred. The duration of these studies varied widely, ranging from four listening lessons to a full academic semester (Bozorgian, 2012; Al-Alwan, Asassfeh, & Al-Shboul, 2013), making the amount of participants a more relevant variable then the duration of study. This implies that a greater amount of participants seems critical when trying to obtain generalizable results. The present study supports this view, as the low amount of participants limited the study's procedure and results.

Various limitations hampered this research, but the most influential flaw was the reduced participation at the final stages of the study, which hindered the usable data collected. This was an unexpected situation taking into account that the experimental and control groups were initially constituted by 25 and 23 students respectively. Another limitation was the short duration of the intervention period of the research study, which only allowed for 6 intervention sessions. An unforeseen limitation that emerged during the results analysis was that, from the beginning, the control group scored higher total averages in the pre- and post-listening comprehension tests and in the pre- and post- Metacognitive Awareness Listening Questionnaire than the experimental group. Due to administrative reasons and taking into consideration that the groups chosen were intact classes, nothing could be done regarding this fact.

Taking these limitations into account, some suggestions for further research can be made. To begin with, the sample size should be larger, as this prevents the participant drop outs being an issue. In addition, a large sample allows for generalizable results and for different descriptive statistical procedures, such as calculation of correlation coefficients between variables and tests of significant variation between groups. Furthermore, the time

allotted for intervention conducting should be extended, prolonging the time devoted for the intervention sessions.

# Bibliography

Al-Alwan, A., Asassfeh, S., & Al-Shboul, Y. (2013). EFL learners' listening comprehension and awareness of metacognitive strategies: How are they related? *International Education Studies*, 6(9), p31.

Anderson, J. R. (1983). A spreading activation theory of memory. *Journal of verbal learning and verbal behavior*, 22(3), 261-295.

Anderson, J. R. (1985). Cognitive Psychology and its Implications. New York: W. H. Freeman.

Anderson, J.R. (1995). Listening to parents' voices: Cross cultural perceptions of learning to read and to write. *Reading Horizons*, 35(5), 3.

Anderson, A., & Lynch, T. (1988). Listening. Oxford: Oxford University Press.

Austin, J. (1962). How to do things with words. Oxford: Clarendon Press.

Bacon, S. M. (1992). The relationship between gender, comprehension, processing strategies, and cognitive and affective response in foreign language listening. *The Modern Language Journal*, 76(ii), 160-178.

BBC Learning. (2014, February 8) Drinking around the world. *6 Minute English Podcast*. Podcast retrieved from http://www.bbc.co.uk/worldservice/learningenglish/general/sixminute/2014/02/140220_6min_drinking.shtml

Bozorgian, H. (2012). Metacognitive instruction does improve listening comprehension. *ISRN Education*, 2012, 1-6.

Bozorgian, H., & Fakhri, E. (2013). Metacognitive instruction: Global and local shifts in considering listening input. *Education Research International*, 2013, 1-8.

Braxton, M. A. (1999). Adult ESL language learning strategies: Case studies of preferred learning styles and perceived cultural influence in academic listening tasks. (Doctoral dissertation, The Ohio State University).

Carter, R., & McCarthy, M. (1997). Exploring Spoken English. Cambridge: Cambridge University Press.

Chamot, A.U. (1995). Learning strategies and listening comprehension. In D. Mendelsohn & J. Rubin (Eds.), *A guide for the teaching of second language listening* (pp. 13–30). San Diego, CA: Dominie Press.

Chamot, A. U., Barnhardt, S., El Dinary, P. B., & Robbins, J. (1999). The Learning Strategies Handbook. White Plains, NY: Addison-Wesley Longman.

Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic journal of foreign language teaching*, 1(1), 14-26.

Chang, C. W. (2013). Metacognitive awareness in English listening: A study of Taiwanese non-English majors. *國立虎尾科技大學學報*, 31(3), 75-90.

Chiang, J., & Dunkel, P. (1992). The effect of speech modification, prior knowledge and listening proficiency on EFL lecture learning. *TESOL Quarterly*, 26, 345–374.

Cohen, A. D. (1998). Strategies in Learning and Using a Second Language. New York: Addison-Wesley Longman.

Cohen, A.D. (2007).Coming to terms with language learning strategies: surveying the experts. In A.D. Cohen & E. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice* (pp.165-186). Oxford: Oxford University Press.

Cohen, A. D., & Macaro, E. (2007). Language Learner Strategies: Thirty Years of Research and Practice. Oxford: Oxford University Press.

Fahim, M., & Fakhri, E. (2014). Exploring the effects of the model of metacognitive instruction on the listening performance of EFL learners. *International Journal of Research Studies in Language Learning*, 3 (6), 3-20.

Field, J. (1998). Skills and strategies: Towards a new methodology for listening. *ELT Journal*, 52, 110–118.

Field, J. (2004). An insight into listeners' problems: Too much bottom-up or too much top-down. *System*, 32, 363–377.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34, 906–911.

Flowerdew, J., & Miller, L. (2005). Second Language Listening: Theory and Practice. New York: Cambridge University Press.

Goh, C. (1997). Metacognitive awareness and second language listeners. *ELT Journal*, 51(4), 361–369.

Goh, C. (1998). How learners with different listening abilities use comprehension strategies and tactics. *Language Teaching Research*, 2, 124–147.

Goh, C. (1999). What learners know about the factors that influence their listening comprehension. *Hong Kong Journal of Applied Linguistics*, 4, 17–42.

Goh, C. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28, 55–75.

Goh, C. (2002). Exploring listening comprehension tactics and their interaction patterns. *System*, 30(2), 185-206.

Goh, C. (2008). Metacognitive instruction for second language listening development: Theory, practice and research implications. *RELC Journal*, 39(2), 188–213.

Goh, C., & Taib, Y. (2006). Metacognitive instruction in listening for young learners. *ELT Journal*, 65(3), 222-232.

Goh, C., & Hu, G. (2014). Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness*, 23(3), 255-274.

Grenfell, M., & Harris, V. (1999). Modern Languages and Learning Strategies: In Theory and Practice. London: Routledge.

Grice, H. P. (1975). Logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and semantics 3: Speech acts* (p.41-58). New York: Academic Press

Halliday, M. A. K. (1985). Spoken and Written Language. Oxford: Oxford University Press.

Henner-Stanchina, C. (1986/87). Autonomy as metacognitive awareness: Suggestions for training self-monitoring of listening comprehension. *Mélanges Pédagogiques17*. Université de Nancy 2: CRAPEL.

Hymes, D. (2001) On communicative competence. In A. Duranti (ed.) *Linguistic anthropology: a reader* (pp. 53–73). Malden: Blackwell,

Johnson, K., & Morrow, K. (Eds.). (1981). Communication in the Classroom. Harlow: Longman.

Kasper, G. (2006). Pragmatic comprehension in learner-native speaker discourse. *Language Learning*, 34, pp. 1–20.

Kawai, Y. (2000). Effects of cultural contextualization in listening materials on motivation and strategy use. *ITL. Institut voor Togepaste Linguistik*, 127-28, 101-126.

Kramsch, C., & Whiteside, A. (2008). Language ecology: towards a theory of symbolic competence in multilingual settings. *Applied Linguistics*, 29, 645–671.

Laviosa, F. (2000). The listening comprehension processes and strategies of learners of Italian: A case study. *Rassegna Italiana di Linguistica Aplicatta*, 2, 12.

Levelt, W. J. M. (1993). Language use in normal speakers and its disorders. In G. Blanken, J. Dittmann, H. Grimm, J. C. Marshall & C.-W. Wallesch (Eds.), *Linguistic disorders and pathologies* (pp. 1–15). Berlin: De Gruyter.

Li, W. (2013). A study of metacognitive awareness of non-English majors in L2 listening. *Journal of Language Teaching and Research*, 4(3), 504-510.

Long, D. R. (1991). Listening Processes and Authentic Texts. In *Acting on Priorities: a commitment to excellence. Dimension: Languages '90*. (Report on Southern Conference on Language Teaching)

Macaro, E. (2001). Learning Strategies in Foreign and Second Language Classrooms: The Role of Learner strategies. London: Continuum.

Macaro, E., Graham, S. &Vanderplank, R. (2007). A review of listening strategies: Focus on sources of knowledge and on success. In A.D. Cohen & E. Macaro (Eds.),

*Language learner strategies: Thirty years of research and practice* (pp.165-186). Oxford: Oxford University Press.

McCarthy, M., & Carter, R. (1995). Spoken grammar: What is it and how can we teach it? *ELT Journal*, 49, 207–218.

Meichenbaum, D. (1985). Metacognitive methods of instruction: Current status and future prospects. *Special Services in the Schools*, 3(1-2), 23-32.

Mendelsohn, D. (1994). Learning to Listen. San Diego: Dominie Press.

Mendelsohn, D. (1998). Teaching listening. *Annual Review of Applied Linguistics*, 18, 81–101.

Munby, J. (1978). Communicative Syllabus Design. Cambridge: Cambridge University Press.

Murphy, J. M. (1985). An Investigation into the Listening Strategies of ESL College Students. (ERIC Document Reproduction Service No. ED 178 275).

Murphy, J. M. (1989). Listening in a second language: Hermeneutics and inner speech. *TESL Canada Journal*, 6(2), 27-44.

O'Malley, J.M., & Chamot, A.U. (1990). Learning Strategies in Second Language Acquisition. Cambridge. Cambridge University Press.

O'Malley, J. M., Chamot, A. U., & Küpper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10, 418–437.

O'Malley, J. M., Chamot, A. U., Stewner‐Manzanares, G. L., Russo, R. P., & Küpper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19(3), 557-584.

Oxford, R. (1990). Language Learning Strategies: What Every Teacher Should Know. Boston: Heinle and Heinle.

Peters, M. (1999). Les stratégies de compréhension auditive chez des élèves du Bain Linguistique en français langue seconde. (Unpublished PhD dissertation, Ottawa University, Canada.)

Rahimi, M., & Katal, M. (2012). Metacognitive listening strategies awareness in learning English as a foreign language: A comparison between university and high-school students. *Procedia-Social and Behavioural Sciences*, 31, 82-89.

Richards, J. (1983). Listening comprehension: Approach, design and procedure. *TESOL Quarterly*, 16, 153–168.

Rixon, S. (1981). The design of materials to foster particular listening strategies. *ELT Document Special*, 121, 68–106.

Rost, M. (2011). Teaching and Researching Listening. London: Routledge.

Rubin, J., Chamot, A. U., Harris, V., & Anderson, N. J. (2007). Intervening in the use of strategies. *Language Learner Strategies*, 30, 29-45.

Ruhe, V. (1996). Graphics and listening comprehension. *TESL Canada Journal*, 14(1), 45-60.

Sanders, T., & Gernsbacher, M. A. (Eds.). (2004). Accessibility in Text and Discourse Processing. Mahwah, NJ: Erlbaum.

Stern, H. H. (1983). Fundamental Concepts of Language Teaching. Oxford: Oxford University Press.

TafarojiYeganeh, M. (2013). Metacognitive listening strategies awareness in monolingual versus bilingual EFL learners. *Procedia-Social and Behavioural Sciences*, 70, 1787-1793.

Taguchi, N. (2009) Comprehension of indirect opinions and refusals in L2 Japanese. In N. Taguchi (ed.), *Pragmatic competence* (pp. 249-274). The Hague: Mouton de Gruyter.

Teichert, H. U. (1996). A comparative study using illustrations, brainstorming, and questions as advanced organizers in intermediate college German conversation classes. *Modern Language Journal*, 80(3), 509–517.

Thompson, I., & Rubin, J. (1996). Can strategy instruction improve listening comprehension? *Foreign Language Annals*, 29: 331–342.

Underwood, M. (1989). Teaching Listening. Harlow: Longman.

Ur, P. (1984). Teaching Listening Comprehension. Cambridge: Cambridge University Press.

Vandergrift, L. (1997). The strategies of second language (French) listeners: A descriptive study. *Foreign Language Annals*, 30, 387–409.

Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning*, 53(3), 463-496.

Vandergrift, L. (2004). Learning to listen or listening to learn? *Annual Review of Applied Linguistics*, 24, 3–25.

Vandergrift, L. (2007). Recent developments in second and foreign language listening comprehension research. *Language Teaching*, 40, 191–210.

Vandergrift, L., & Goh, C.C. (2012). Teaching and Learning Second Language Listening: Metacognition in Action. New York: Routledge.

Vandergrift, L., Goh, C. C., Mareschal, C. J., & Tafaghodtari, M. H. (2006). The metacognitive awareness listening questionnaire: Development and validation. *Language Learning*, 56(3), 431.

Vanderplank, R. (1988). Implications of differences in native and non-native speaker approaches to listening. *British Journal of Language Teaching*, 26(1), 32-41.

Vogely, A. (1995). Perceived strategy use during performance on three authentic listening tasks. *The Modern Language Journal*, 79 (1), 41-56.

Wenden, A., & Rubin, J. (Eds.) (1987). Learner Strategies in Language Learning. Harlow: Prentice-Hall.

Young, M. Y. C. (1996). Listening comprehension strategies used by university level Chinese students learning English as a second language. (Unpublished doctoral dissertation, University of Essex, UK.)

Young, M. Y. C. (1997). A serial ordering of listening comprehension strategies used by advanced ESL learners in Hong Kong. *Asian Journal of English Language Teaching*, 7, 35-53.

Appendix A: First certificate in English (FCE) samples 1 and 2

**2**

**Part 1**

You will hear people talking in eight different situations. For questions **1 – 8**, choose the best answer (**A**, **B** or **C**).

---

**1** You hear a message on a telephone answering machine.

Why is the speaker calling?

**A** to confirm some arrangements

**B** to issue an invitation

**C** to persuade someone to do something

**2** You hear two people talking about a water-sports centre.

The man says the centre should

**A** pay more attention to safety.

**B** offer activities for small children.

**C** provide all the equipment needed.

**3** You hear a professional tennis player talking about her career.

What annoys her most about interviewers?

**A** their belief that she leads a glamorous life

**B** their assumption that she's motivated by money

**C** their tendency to disturb her while she's travelling

**4** You hear a poet talking about his work.

What is he doing?

**A** giving his reasons for starting to visit schools

**B** justifying the childlike nature of some of his recent poems

**C** explaining that his poems appeal to people of different ages

**3**

**5** You hear two people talking about a programme they saw on TV.

The woman thinks the programme was

**A** irritating.

**B** sad.

**C** uninformative.

**6** You hear two people talking about an ice-hockey game they've just seen.

How does the girl feel about it?

**A** pleased to have had the experience

**B** relieved that she'd dressed appropriately

**C** impressed by the performance of the team

**7** You overhear two friends talking about a restaurant.

What do they both like about it?

**A** the presentation of the food

**B** the atmosphere of the place

**C** the originality of the cooking

**8** You hear a man talking on the radio.

What type of information is he giving?

**A** a travel announcement

**B** a weather forecast

**C** an accident report

**4**

**Part 2**

You will hear a woman called Angela Thomas, who works for a wildlife organisation, talking about the spectacled bear.

For questions **9 – 18**, complete the sentences with a word or short phrase.

---

## Spectacled Bears

Angela says that it was the **(9)** ..... of the spectacled bear that first interested her.

Angela mentions that the bear's markings can be found on its **(10)** ..... as well as its eyes and cheeks.

Angela is pleased by evidence that spectacled bears have been seen in **(11)** ..... areas of Argentina.

Angela says the bears usually live in **(12)** ..... , though they can also be found in other places.

Spectacled bears behave differently from other types of bear during **(13)** ..... , which Angela finds surprising.

Angela is upset that **(14)** ..... are the biggest danger to spectacled bears.

Angela says that spectacled bears usually eat **(15)** ..... and tree bark.

Bears climb trees and make a **(16)** ..... , which fascinated Angela.

**5**

**Part 3**

You will hear five short extracts in which people are talking about their visit to a city. For questions **19 – 23**, choose from the list (**A – H**) what each speaker liked most about the city they visited. Use the letters only once. There are three extra letters which you do not need to use.

---

**A** the efficiency of the public transport system

**B** the natural beauty of the scenery

Speaker 1 | | **19**

**C** the variety of goods in the markets

Speaker 2 | | **20**

**D** the style of the architecture

Speaker 3 | | **21**

**E** the well-designed plan of the city

Speaker 4 | | **22**

**F** the helpfulness of the people

Speaker 5 | | **23**

**G** the range of leisure opportunities

**H** the standard of the accommodation

**6**

**Part 4**

You will hear part of a radio interview with a woman called Rachel Reed, who works in a commercial art gallery, a shop which sells works of art. For questions **24** – **30**, choose the best answer (**A**, **B** or **C**).

---

**24** What does Rachel say about her job title?

**A** It makes her feel more important than she is.

**B** It gives people the wrong idea about her work.

**C** It is appropriate for most of the work she does.

**25** What is the most common reason for the gallery not exhibiting an artist's work?

**A** The subject matter is unsuitable.

**B** It is not of a high enough quality.

**C** The gallery manager doesn't like it.

**26** When can phone calls from artists be difficult for Rachel?

**A** when their work doesn't sell

**B** when they don't receive payments

**C** when their work is not accepted

**27** Why does Rachel include a commentary in the catalogue?

**A** It gives background information about the artist.

**B** It encourages people to buy paintings over the phone.

**C** It tells people what experts think of the work.

**28** What does Rachel say about administrative work?

**A** She is able to leave a lot of it to others.

**B** She would like to have an assistant to help with it.

**C** She finds it hard to get it all organised.

**7**

**29** What is Rachel's role in the service the gallery offers to large companies?

**A** making initial contacts

**B** responding to enquiries

**C** promoting a certain type of art

**30** What does Rachel find most enjoyable about her job?

**A** meeting interesting people

**B** the fact that it's unpredictable

**C** being close to works of art

**Part 1**

You will hear people talking in eight different situations. For questions **1 – 8**, choose the best answer (**A**, **B** or **C**).

---

**1** You hear a young man talking about his hobby of rock climbing.

How does he feel about it?

**A** satisfied with his level of expertise

**B** concerned about doing a dangerous sport

**C** proud when he copes with difficult conditions

**2** You hear a public announcement at a family theme park.

What does the announcement contain?

**A** a change to a timetable

**B** details of a new attraction

**C** instructions about a location

**3** You hear two people talking about a course they have attended.

What was the topic of the course?

**A** book illustration

**B** journalism

**C** publishing

**4** You hear two people talking about a film they have both seen.

What do they agree about?

**A** The story wasn't very original.

**B** Reviews of the film weren't accurate.

**C** The message wasn't very positive.

**5** You hear a man being interviewed about a new project he has set up in his home town.

What is the purpose of the project?

**A** to reduce the amount of litter on a town's streets

**B** to increase the inhabitants' awareness of recycling

**C** to stop shopkeepers using plastic bags for customers' purchases

**6** You hear a man talking on the radio about salespeople.

What does he say about them?

**A** They take pride in forming good relationships with buyers.

**B** They keep one objective in mind at all times.

**C** They prefer people they think are easy to sell to.

**7** You hear two friends talking about a student website.

What do they agree about it?

**A** It is visually attractive.

**B** It has a lot of useful advertisements.

**C** It is easy to navigate round.

4

**Part 2**

You will hear a man called Chris Graham talking to a group of students about a vacation job he had in Australia.

For questions **9 – 18**, complete the sentences with a word or short phrase.

---

## My Vacation Job in Australia

Chris thinks the best place to find a job like he had is the

**(9)** ..... .

Chris is studying **(10)** ..... at university.

For most of the time he was working for the travel company, Chris lived in a

**(11)** ..... outside of the town.

Chris was often asked to go to a **(12)** ..... at the weekend.

In the mornings, Chris had to drive tourists to see the **(13)** .....

in the desert.

Many of the tourists were unaware of the need to keep their

**(14)** ..... covered up when they were in the sun.

The tourists particularly wanted to know how to tell the difference between the

**(15)** ..... of the wild animals.

In the afternoons, the tourists were able to see some **(16)** .....

that had more than one use.

Chris says that the local government would like to have a larger

**(17)** ..... to attract tourists.

Chris advises other students to send off their job application forms in the month of

**(18)** ..... at the latest.

**5**

**Part 3**

You will hear five short extracts in which people are talking about happiness. For questions **19 – 23**, choose from the list (**A – H**) what each person says happiness means to them. Use the letters only once. There are three extra letters which you do not need to use.

---

**A** Having a happy personality allows you to cope effectively with problems.

**B** Happiness comes from having someone special to share your thoughts with.

Speaker 1 | | **19**

**C** Happiness is all about the experience of overcoming problems.

Speaker 2 | | **20**

**D** Happiness is a short escape from everyday routine.

Speaker 3 | | **21**

**E** True happiness lies in making others happy.

Speaker 4 | | **22**

**F** Older people are less happy than younger ones.

Speaker 5 | | **23**

**G** Happiness is being thankful for what you have.

**H** Happiness comes from achieving your goals.

**6**

**Part 4**

You will hear part of a radio interview with an author called Mickey Smith, who is talking about becoming excellent at sport. For questions **24 – 30**, choose the best answer (**A**, **B** or **C**).

---

**24** When asked about his theory on talent, Mickey says that

**A** he is doing further research with other people.

**B** he realises some people disagree with him.

**C** he has not yet fully proved his ideas.

**25** Mickey believes that outstanding football players

**A** have better levels of concentration than other players.

**B** are aware of the positions of other players on the pitch.

**C** are faster runners than other players.

**26** How did Mickey feel when he first became successful at gymnastics?

**A** convinced he had a natural aptitude for the sport

**B** conscious that others in his area didn't have the same chances

**C** lucky to have had one of the best training routines

**27** Mickey says that the motivation to continue training for long periods of time

**A** develops at an early age in people who become experts.

**B** depends on your personal attitude towards success.

**C** does not come naturally to most people.

**28** Mickey says that coaches working with young people need to understand that

**A** children and adults have different thought processes.

**B** young people have a built-in drive to succeed in areas like sport.

**C** it is important to focus on mental rather than physical techniques.

**7**

**29** Mickey says that many people who play sport don't bother to try hard because

**A** they feel incapable of reaching the same levels as sports stars.

**B** they don't have time to put in the necessary effort.

**C** they are not confident in their ability to deal with success.

**30** According to Mickey, what can cause some sports people to fail at important events?

**A** They haven't trained enough.

**B** They are inexperienced at dealing with pressure.

**C** They can become too aware of their actions.

Appendix B: Metacognitive Awareness Listening Questionnaire (English)

**Figure 6: Metacognitive Awareness Listening Questionnaire (MALQ)**

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 indicate your opinion after each statement. Circle the number which best shows your level of agreement with the statement. For example:

| | **Strongly disagree** | **Disagree** | **Slightly disagree** | **Partly agree** | **Agree** | **Strongly agree** |
|---|---|---|---|---|---|---|
| like learning another language | **1** | **2** | **3** | **4** | **5** | **6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **1.** Before I start to listen, I have a plan in my head for how I am going to listen. | 1 | 2 | 3 | 4 | 5 | 6 |
| **2.** I focus harder on the text when I have trouble understanding. | 1 | 2 | 3 | 4 | 5 | 6 |
| **3.** I find that listening is more difficult than reading, speaking, or writing in English. | 1 | 2 | 3 | 4 | 5 | 6 |
| **4.** I translate in my head as I listen. | 1 | 2 | 3 | 4 | 5 | 6 |
| **5.** I use the words I understand to guess the meaning of the words I don't understand. | 1 | 2 | 3 | 4 | 5 | 6 |
| **6.** When my mind wanders, I recover my concentration right away. | 1 | 2 | 3 | 4 | 5 | 6 |
| **7.** As I listen, I compare what I understand with what I know about the topic. | 1 | 2 | 3 | 4 | 5 | 6 |
| **8.** I feel that listening comprehension in English is a challenge for me. | 1 | 2 | 3 | 4 | 5 | 6 |
| **9.** I use my experience and knowledge to help me understand. | 1 | 2 | 3 | 4 | 5 | 6 |
| **10.** Before listening, I think of similar texts that I may have listened to. | 1 | 2 | 3 | 4 | 5 | 6 |
| **11.** I translate key words as I listen. | 1 | 2 | 3 | 4 | 5 | 6 |
| **12.** I try to get back on track when I lose concentration. | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **13.** As I listen, I quickly adjust my interpretation if I realize that it is not correct. | 1 | 2 | 3 | 4 | 5 | 6 |
| **14.** After listening, I think back to how I listened, and about what I might do differently next time. | 1 | 2 | 3 | 4 | 5 | 6 |
| **15.** I don't feel nervous when I listen to English. | 1 | 2 | 3 | 4 | 5 | 6 |
| **16.** When I have difficulty understanding what I hear, I give up and stop listening. | 1 | 2 | 3 | 4 | 5 | 6 |
| **17.** I use the general idea of the text to help me guess the meaning of the words that I don't understand. | 1 | 2 | 3 | 4 | 5 | 6 |
| **18.** I translate word by word, as I listen. | 1 | 2 | 3 | 4 | 5 | 6 |
| **19.** When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense. | 1 | 2 | 3 | 4 | 5 | 6 |
| **20.** As I listen, I periodically ask myself if I am satisfied with my level of comprehension. | 1 | 2 | 3 | 4 | 5 | 6 |
| **21.** I have a goal in mind as I listen. | 1 | 2 | 3 | 4 | 5 | 6 |

# Appendix C: Metacognitive Awareness Listening Questionnaire (Spanish)

**Cuestionario de conocimiento y uso de estrategias de aprendizaje para la comprensión auditiva**

Los siguientes enunciados describen algunas estrategias para la comprensión auditiva y como te sientes respecto a la habilidad de escuchar un texto en la lengua que estás aprendiendo. ¿Estás de acuerdo con ellos? Esto no es una evaluación; por lo tanto, no existen respuestas "correctas" o "incorrectas". El calificar estos enunciados podría ayudar a tu profesor y a tì mismo a comprender tu progreso en el aprendizaje de comprensión auditiva. Por favor, indica tu preferencia después de cada enunciado. Encierra en un círculo el número que mejor representa dicha preferencia. Por ejemplo:

| | **Muy en desa-cuerdo** | **Desa-cuerdo** | **Un poco en desa-cuerdo** | **Parcial-mente de acuer-do** | **De acuer-do** | **Muy de acuer-do** |
|---|---|---|---|---|---|---|
| *Me gusta aprender otra lengua.* | **1** | **2** | **3** | **4** | **5** | **6** |
| **1.** Antes de empezar a escuchar, tengo planeado cómo voy a escuchar. | 1 | 2 | 3 | 4 | 5 | 6 |
| **2.** Me concentro más en el texto cuando tengo problemas con la comprensión. | 1 | 2 | 3 | 4 | 5 | 6 |
| **3.** Considero que la comprensión auditiva es más difícil que la comprensión lectora, la producción oral o escrita en inglés. | 1 | 2 | 3 | 4 | 5 | 6 |
| **4.** Traduzco mentalmente a medida que voy escuchando. | 1 | 2 | 3 | 4 | 5 | 6 |
| **5.** Utilizo las palabras que comprendo para adivinar el significado de las palabras que no comprendo. | 1 | 2 | 3 | 4 | 5 | 6 |
| **6.** Cuando pierdo la concentración, la recupero de inmediato. | 1 | 2 | 3 | 4 | 5 | 6 |
| **7.** Mientras escucho, comparo lo que entiendo con lo que sé sobre el tema. | 1 | 2 | 3 | 4 | 5 | 6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **8.** Siento que la comprensión auditiva en inglés es un desafío para mí. | 1 | 2 | 3 | 4 | 5 | 6 |
| **9.** Uso mi experiencia y conocimiento para ayudarme a entender. | 1 | 2 | 3 | 4 | 5 | 6 |
| **10.** Antes de escuchar, pienso en textos similares que podría haber escuchado antes. | 1 | 2 | 3 | 4 | 5 | 6 |
| **11.** Traduzco palabras claves mientras escucho. | 1 | 2 | 3 | 4 | 5 | 6 |
| **12.** Trato de retomar la tarea cuando pierdo la concentración. | 1 | 2 | 3 | 4 | 5 | 6 |
| **13.** Mientras escucho, rapidamente ajusto mi interpretación si me doy cuenta que no está correcta. | 1 | 2 | 3 | 4 | 5 | 6 |
| **14.** Después de escuchar, hago memoria de como escuché y pienso en qué podría hacer de manera diferente en una siguiente ocasión. | 1 | 2 | 3 | 4 | 5 | 6 |
| **15.** No me siento nervioso/a cuando escucho en inglés. | 1 | 2 | 3 | 4 | 5 | 6 |
| **16.** Cuando me es dificil entender lo que escucho, me rindo y dejo de escuchar. | 1 | 2 | 3 | 4 | 5 | 6 |
| **17.** Uso la idea general del texto para que me ayude a adivinar el significado de las palabras que no entiendo. | 1 | 2 | 3 | 4 | 5 | 6 |
| **18.** Mientras escucho, traduzco palabra por palabra. | 1 | 2 | 3 | 4 | 5 | 6 |
| **19.** Cuando adivino el significado de una palabra, hago memoria de todo lo que he escuchado anteriormente, para ver si mi suposición tiene sentido. | 1 | 2 | 3 | 4 | 5 | 6 |
| **20.** Mientras escucho, periódicamente me pregunto si | 1 | 2 | 3 | 4 | 5 | 6 |

estoy satisfecho/a con mi nivel de comprensión.

| | | | | | | |
|---|---|---|---|---|---|---|
| **21.** Tengo un objetivo en mente mientras escucho. | 1 | 2 | 3 | 4 | 5 | 6 |

*Translated by: Applied metacognition seminar, 2015*

Appendix D: Letter of consent

**Cuestionario de conocimiento y uso de estrategias de aprendizaje para la comprensión auditiva.**

El siguiente cuestionario tiene como propósito servirnos de guía para nuestro proyecto de tesis en "Applied Metacognition" durante el presente año 2015.

Para poder organizar la información requerimos que escribas tu nombre. Tus datos personales no serán utilizados para ningún otro fin que no sea este estudio en particular y nos comprometemos a respetar esta confidencialidad con los participantes. Si deseas conocer los resultados del análisis final o quieres realizar alguna consulta, puedes contactarnos al correo electrónico appmetacognition2015@gmail.com.

Si deseas participar en esta investigación, por favor escribe tu nombre, apellido y firma a continuación:

Yo, _____, firmo el presente consentimiento para participar en el proyecto de tesis del seminario "Applied Metacognition".

Fecha: ___/___/_____

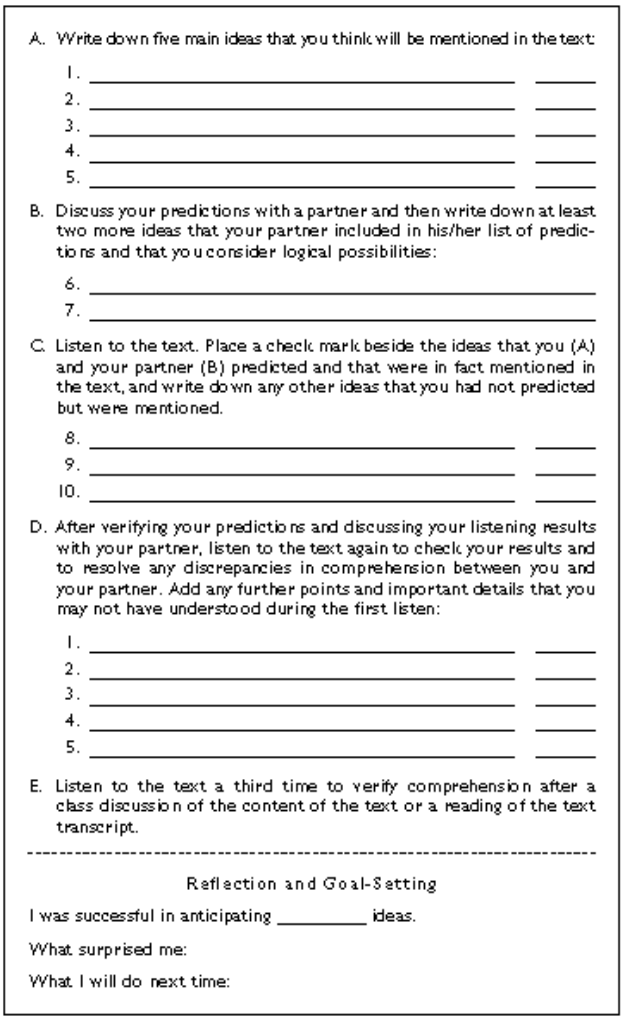
# Appendix E: Lesson plan

**Intervention 1**

*Objectives:* Listen and predict, listen for main ideas and listen for details.

*Materials to be used*:

1. Book *North Star 5: Listening and Speaking.* Sherry Preiss. Third Edition (2009).
2. Paper sheet with the pedagogical sequence proposed by Vandergrift (2004 & 2007)



A. Write down five main ideas that you think will be mentioned in the text:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

B. Discuss your predictions with a partner and then write down at least two more ideas that your partner included in his/her list of predictions and that you consider logical possibilities:

6. _____
7. _____

C. Listen to the text. Place a check mark beside the ideas that you (A) and your partner (B) predicted and that were in fact mentioned in the text, and write down any other ideas that you had not predicted but were mentioned.

8. _____ _____
9. _____ _____
10. _____ _____

D. After verifying your predictions and discussing your listening results with your partner, listen to the text again to check your results and to resolve any discrepancies in comprehension between you and your partner. Add any further points and important details that you may not have understood during the first listen:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

E. Listen to the text a third time to verify comprehension after a class discussion of the content of the text or a reading of the text transcript.

---

Reflection and Goal-Setting

I was successful in anticipating _____ ideas.

What surprised me:

What I will do next time:

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.

*Description:*

(1) Before listening/planning *10 minutes*: First, the teacher gives a Pedagogical Sequence handout to each student for them to fill in. Then the teacher is supposed to ask the students to write down the ideas that come to their minds when listening to the title of the activity, *Boosting brain power through the arts.*

(2) First listening *10 minutes*: Second, they will listen to the audio for the first time, and they will answer letter C from the pedagogical sequence. After taking notes, they will compare their answers with a partner and will add important information previously missed.

(3) Second listening *6-8 minutes*: Third, they will listen to the audio again and they will answer letter D in about 6 minutes. After that, the entire class is supposed to discuss what they listened to, what they think is interesting about it and exchange opinions in relation to the content of the listening.

(4) Third listening *6 minutes*: They will listen for the last time and will enrich their answers and opinions.

(5) Final reflection *5-7 minutes*: Finally, they will reflect on what they did and how they felt about it. Besides, they will share their opinions about this last stage of the activity.

## Intervention 2

*Objectives:* Listen and predict, and listen for global understanding.

*Materials to be used:*

1. Compilation of tracks 29 to 32.
2. Answer sheet from *North Star 5: Listening and Speaking*. Sherry Preiss. Third Edition (2009).
3. Unit 9: *Boosting brainpower through the arts*

*Note:* Each part of the activities has an estimated completion time; this is only a suggestion or for referential use.

*Description:*

(1) Before listening/Planning *5-7 minutes*: Students are informed about the topic and are asked about their predictions for the listening; they share ideas out loud with the teacher and she writes them on the board.

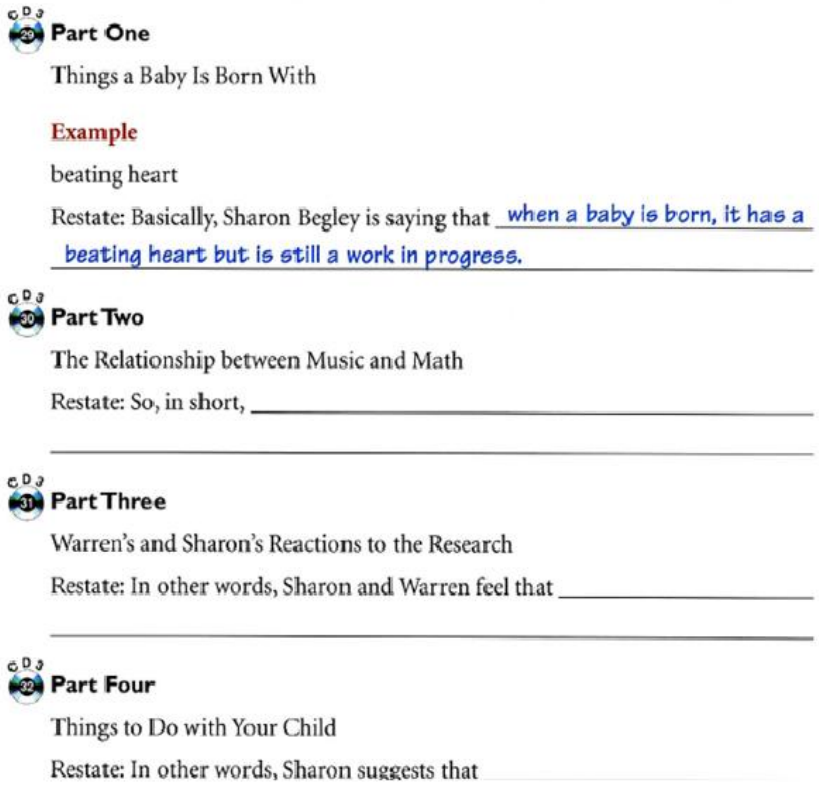
(2) First listening *5 minutes*: After listening to the audio, students will find out whether their predictions were accurate and will make notes about additional information that they missed in the planning stage.

(3) Instruction for the activity *5 minutes*: The teacher will provide a handout for the following activity. Students will be asked to use the notes taken at the beginning of the class and use the information provided by the audio to subsequently paraphrase the statements heard and will rewrite the statements in the answer sheet.

(4) Second listening *7-10 minutes*: Students will add details to enrich the paraphrased sentences written on the activity sheet. Afterwards, they will share their thoughts and their paraphrasing with a partner to compare and contrast them.

(5) Third listening *4-5 minutes*: Students listen specifically for information that they could not understand the previous times.

(6) Final reflection *5-7 minutes*: Along with the teacher, students comment on which was the most difficult task was for them and what they would do differently on another occasion.



**Part One**

Things a Baby Is Born With

**Example**

beating heart

Restate: Basically, Sharon Begley is saying that when a baby is born, it has a beating heart but is still a work in progress.

**Part Two**

The Relationship between Music and Math

Restate: So, in short, _____

_____

**Part Three**

Warren's and Sharon's Reactions to the Research

Restate: In other words, Sharon and Warren feel that _____

_____

**Part Four**

Things to Do with Your Child

Restate: In other words, Sharon suggests that

**Intervention 3**

*Objectives:* Listen and predict. Listen for details.

*Material to be used:*

1. Listening one: Interview with a Feng Shui Expert. (CD 2, 3. Page 103). *North Star 5: Listening and Speaking.* Sherry Preiss. Third Edition (2009).
2. Answer sheet from Unit 5, *Feng Shui: Ancient Wisdom Travels West*.

*Note:* Each part of the activities has an estimated completion time. Theis is only a suggestion or for referential use.

*Description:*

(1) Pre-listening (Planning) *10 minutes:* The teacher will present background information about the topic. Then students will make predictions about how Feng Shui might make a person feel. They will write down their notes.

(2) First listen – First verification stage *4-5 minutes:* Students will listen to the interview for the first time. Working with a partner they will verify, correct and note additional information.

(3) Second listen – Second verification stage *6 minutes:* For the second listen, the objective is *Listen for details*. For this activity, the students will be provided with a sheet of paper with the set of questions in the unit. They will have about a minute or two to read them before listening to the interview again. Then they will write down their answers.

**LISTEN FOR DETAILS**

CD 2 5 *Read the questions. Then listen to the interview again, and write short answers. Compare your answers with those of a partner. Complete the questions with as much detail as possible.*

**Part One**

1. Lagatree doesn't think feng shui is a way to keep out evil spirits. Why not?

_____

2. Thomson says that feng shui is very important in Asia. What three examples does he give to support this statement?

_____

3. What two countries make up part of Lagatree's background? What influence have they had?

_____

4. Why do some Chinese people living in San Francisco ask to have one-way street signs removed?

_____

5. Why didn't Lagatree place her desk facing the window?

_____

6. How does she feel about the impact of feng shui on the design of her home office?

_____

**Part Two**

7. What two reasons does Lagatree give for not putting mirrors in the bedroom?

_____

8. What three reasons does she give for putting mirrors in other rooms?

_____

9. As a journalist, how did Lagatree feel about feng shui at first?

_____

10. When Lagatree's skeptical friends asked her if she believed in feng shui, how did she respond?

_____

11. You don't have to be a feng shui expert to know if a place has good feng shui. Why not?

_____

(4) Third listening – Final verification stage *5 minutes:* The interview will be listened to for the third and final time. With a partner, learners verify points of earlier disagreement; make corrections, and write down additional details.

(5) Reflections and goal setting stage *5 minutes*: For the final stage of the process, students will reflect upon the previous listening based on the questions given in the unit presented under the label "Express Opinion". The teacher could ask the whole class the questions as a way of concluding the session.

**EXPRESS OPINIONS**

*Work in a small group, and discuss the answers to the questions.*

1. What is the most interesting thing you have learned so far about feng shui?
2. Would you be interested in applying feng shui principles to make changes in your home? If so, what changes would you like to make? If not, why are you skeptical?
3. Does feng shui remind you of any practices from other cultures? Which ones?
4. What do you suppose leads Westerners to adopt Eastern practices, such as yoga, feng shui, and so on? In what ways does a traditional Eastern practice tend to change when it becomes Westernized?

**Intervention 4**

*Objective:* Listen for details.

*Materials to be used:*

1. BBC 6-minute English audio *Drinking around the world* (shortened version)

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.

*Description:*

(1) Pre-listening (Planning) *10 minutes:* The teacher introduces the topic in broad terms. The students speculate and make predictions on the topic and write them down.

(2) First listen – First verification stage *10 minutes:* After the first listen the previously made predictions are checked in groups or pairs. Now that the students are familiar with the text, a comparison activity is introduced; the students must list the different themes and locations discussed in the audio. This activity should be completed in their own notebooks.

(3) Second listen – Second verification stage: *6 minutes:* After the second listen, further discussion ensues. Ideally, by this time the students should have the comparable notions more or less clear and noted down. Then the students will focus on listing characteristics.

(4) Third listening – final verification stage *5 minutes:* By this time, the students should be able to compare and pinpoint the differences and similarities between the themes and locations mentioned. A final version of the comparison table can be drawn up by the teacher in order to unify the students' individual work.

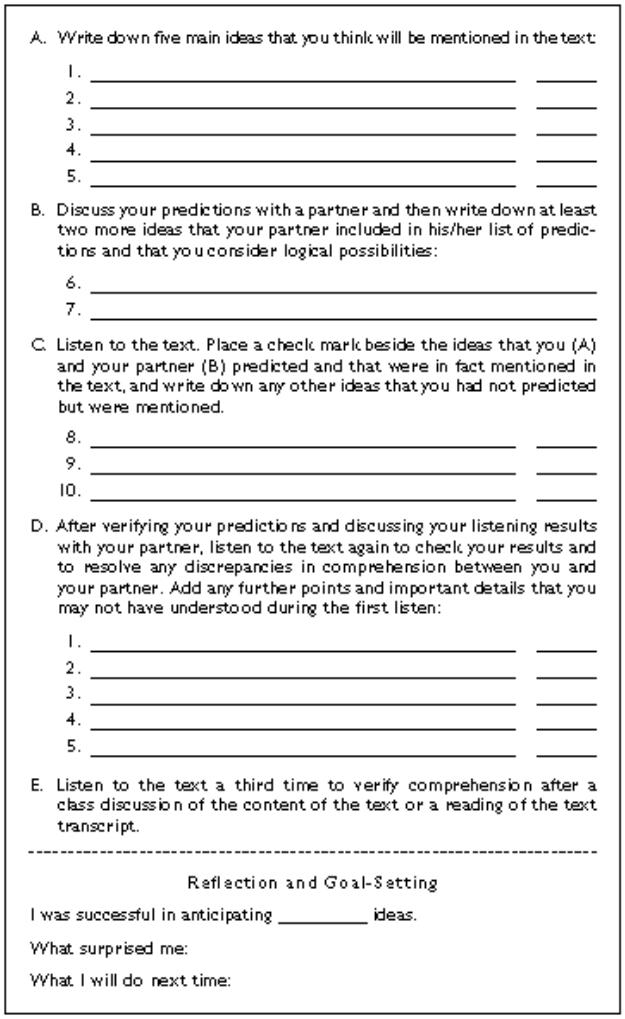
(5) Reflections and goal setting stage *5 minutes*: Finally, the students review their listening difficulties and shortcomings regarding the activity, and think of what they could change for a future activity similar to this one. This stage can be completed by the whole class with the teacher's help by writing down the suggestion on the board.

**Intervention 5**

*Objectives:* Listen and predict and listen for main ideas.

*Materials to be used:*

1. 6 Minute English from BBC Learning English audio: *Learn a thousand foreign words.*
2. Paper sheet with the pedagogical sequence proposed by Vandergrift.



A. Write down five main ideas that you think will be mentioned in the text:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

B. Discuss your predictions with a partner and then write down at least two more ideas that your partner included in his/her list of predictions and that you consider logical possibilities:

6. _____
7. _____

C. Listen to the text. Place a check mark beside the ideas that you (A) and your partner (B) predicted and that were in fact mentioned in the text, and write down any other ideas that you had not predicted but were mentioned.

8. _____ _____
9. _____ _____
10. _____ _____

D. After verifying your predictions and discussing your listening results with your partner, listen to the text again to check your results and to resolve any discrepancies in comprehension between you and your partner. Add any further points and important details that you may not have understood during the first listen:

1. _____ _____
2. _____ _____
3. _____ _____
4. _____ _____
5. _____ _____

E. Listen to the text a third time to verify comprehension after a class discussion of the content of the text or a reading of the text transcript.

---

Reflection and Goal-Setting

I was successful in anticipating _____ ideas.

What surprised me:

What I will do next time:

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.

*Description:*

(1) Pre- listening (Planning) *10 minutes*: First, the teacher gives the students a Pedagogical Sequence handout for them to fill in. Then, the topic is introduced by the teacher. Then the teacher and the students briefly discuss the topic. Students are allowed to write down notes while predicting pieces of information they think are going to be discussed in the audio. After this, each student will discuss their predictions with a classmate.

(2) First listening - First verification stage *4-5 minutes:* Students verify whether their prediction were correct or not, and take notes of additional information they did not consider in the planning stage. This activity is supposed to be done individually at first and in pairs later in order to compare notes, modify information, and decide on the important details that still require special attention.

(3) Second-listen - Second verification stage *6 minutes*: Students verify points of earlier disagreement, make corrections and write down additional details. Then, a class discussion will take place, in which all class members will contribute to the reconstruction of the text's main points and most pertinent details, interspersed with reflections on how learners arrived at the meaning of certain words or parts of the text.

(4) Third listening - Final verification stage *10 minutes*: Students listen to the audio for the last time and make final corrections. At this point, the students will evaluate their performance by assessing the information or message they heard by checking for accuracies, merits, inconsistencies, and contradictions.

(5) Reflections and goal setting stage *5 minutes*: Students reflect on the activity and share their opinions with their classmates.

**Intervention 6**

*Objectives:* Listen and predict, listen for details and listen for global understanding.

*Materials to be used:*

1. 6 Minute English from BBC Learning English audio: *Coffee addiction*

*Note:* Each part of the activities has an estimated completion time. This is only a suggestion or for referential use.

*Description:*

(1) Before listening/Planning *6-10 minutes*: Students are informed about the topic and the teacher asks them what they think about coffee and the experiences that they have had with it. Students share ideas out loud with the teacher and he/she writes them on the board.

(2) First listening *2-5 minutes*: The audio is divided into three parts, the first part (1:28) presents the topic and deals with the following question: Which is the country that drinks more coffee? Students have to guess which country it is and they write it down.

(3) Second listening *5 minutes:* In the second part of the audio (1:28- 3:44) they have to focus on the biological aspects of coffee and the consequences of drinking it too much. They listen to this part of the audio twice in order to obtain more information. They have to write down the main ideas

(4) Third listening *5 minutes:* The third part of the audio (3:44-5:25) presents the opinions of different people about coffee. Students have to write down the main ideas. In the final minutes of the podcast, students have to check their answers

(5) Final reflection *5-7 minutes*: Along with the teacher, students comment on the most difficult part of the task and discuss what they would do differently on another occasion.

# Appendix F: Tables for the experimental and control group: detailed results for each participant

Experimental Group

| Participants | Pre-MALQ | Post-MALQ | Pre-Test | Post-Test |
|---|---|---|---|---|
| Participant 1 | 74 | 80 | 24 | 23 |
| Participant 2 | 89 | 96 | 20 | 20 |
| Participant 3 | 85 | 93 | 19 | 22 |
| Participant 4 | 103 | 94 | 17 | 19 |
| Participant 5 | 77 | 79 | 16 | 18 |
| Participant 6 | 99 | 103 | 19 | 17 |
| Participant 7 | 94 | 104 | 18 | 24 |

Control Group

| Participants | Pre-MALQ | Post-MALQ | Pre-Test | Post-Test |
|---|---|---|---|---|
| Participant 1 | 97 | 86 | 27 | 28 |
| Participant 2 | 103 | 100 | 23 | 18 |
| Participant 3 | 85 | 95 | 25 | 22 |
| Participant 4 | 83 | 95 | 22 | 15 |
| Participant 5 | 94 | 91 | 17 | 20 |