EFFECTS OF METACOGNITIVE INSTRUCTION ON LISTENING COMPREHENSION DEVELOPMENT IN EFL A2 LEARNERS OF AN ECUADORIAN PUBLIC UNIVERSITY

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Prologue

This action research study investigates the effects of metacognitive listening strategy instruction on A2 EFL learners' listening comprehension development of an Ecuadorian public university. Participants chosen from a purposeful sample (N=100) came from four A2 classes ("Basic B courses") taught by both researchers. The experimental group (N=45) listened to four texts using a metacognitive strategy instruction (planning, evaluation, problem-solving, directed attention, person knowledge, translation). The control group (N=55) listened to the same texts without the application of a metacognitive listening strategy instruction. The study lasted four weeks (2 hours a week of instruction). Quantitative and qualitative data were collected through the use of a pre-and post-listening tests, Metacognitive Awareness listening questionnaire (MALQ), and personal interviews. The purpose of this study is to verify if after this instruction, there are differences in the listening comprehension level of proficiency of the experimental and control group and if there are differences in listening comprehension level of proficiency between less and more-skilled learners. Furthermore, the study intends to understand A2 learners' perceptions of the experimental group towards the use of a metacognitive listening instruction to listening comprehension and listening metacognitive awareness.

Este estudio de investigación desea conocer sobre los Efectos de la Instrucción Metacognitiva de la Comprensión Auditiva en estudiantes de inglés como idioma extranjero en el nivel A2 de una universidad pública del Ecuador. Los estudiantes elegidos corresponden a una muestra (N=100) quienes vienen de cuatro grupos diferentes con un nivel A2 ("cursos de Básico B") los cuales están a cargo de las investigadoras de acuerdo a la planificación académica. El grupo experimental (N=45) trabajó con cuatro textos en los cuales se utilizaron una instrucción de estrategia metacognitiva (planeación, evaluación, resolución de problemas, atención dirigida, conocimiento previo, y traducción). El grupo de control (N=55) trabajó con los mismos textos de comprensión auditiva sin aplicarse algún tipo de estrategia metacognitiva. El estudio duró cuatro semanas (2 horas semanales de instrucción). Los datos cualitativos y cuantitativos fueron recogidos a través del uso de tests de entrada y salida, el cuestionario de consciencia metacognitiva de comprensión auditiva, y entrevistas personales. El propósito de este estudio es verificar si después de la instrucción, hay diferencias en el nivel de comprensión auditiva de los grupos experimental y de control y si hay diferencias en el nivel de comprensión auditiva entre alumnos con un nivel alto y bajo de proficiencia en esta habilidad.

Además, el estudio trata de comprender las percepciones de los alumnos en el nivel A2 del grupo experimental hacia el uso de la instrucción metacognitiva de comprensión auditiva y la consciencia metacognitiva de la comprensión auditiva.

Introduction

The present study shows a qualitative and quantitative analysis of the effects of metacognitive instruction on listening comprehension. This study was carried out with four groups of students at A2 level of the Common European Framework of Reference for Language (CEFR), two of these groups were part of the control group, and the other 2 were part of the experimental group.

This study is based on one general objective that is to explore the effect of metacognitive instruction on listening comprehension. Additionally, there are also five specific objectives that are: i) to get informed about the level of listening comprehension of learners before the intervention, ii)the application of metacognitive listening comprehension strategies, iii) to discover if there are differences in the development of the listening comprehension between experimental and control groups, iv)to check if at the end of this study less skilled students of the experimental group make greater gains than the better-skilled students; and finally v) this study can contribute to L2 teachers and instructors with a listening intervention that will improve the listening comprehension proficiency of learners.

The researchers based this study on three sub-research questions about differences in the listening comprehension level of proficiency as a result of a metacognitive listening instruction of an experimental and control group, differences in listening comprehension level of proficiency as a result of a metacognitive listening instruction between lower scored listening students

and higher scored listening students of the experimental group; and finally, the perceptions of the learners in the experimental group towards the metacognitive listening instruction to listening comprehension level and listening metacognitive awareness.

This research work was conducted to understand what the Effects of Metacognitive Instruction on Listening Comprehension are with a class of A2 level learners. This study was conducted during the second term in the first semester of 2016.

The authors of this action research worked with four groups, two of them were experimental and two other were non-experimental groups. For the first case, the researchers conducted four interventions with metacognitive listening instruction techniques that were proposed by Vandergrift and Goh (2012). The application of these techniques intended to demonstrate that the more learners are encouraged to reflect on the way they listen, the better results they can obtain in future listening activities. Experimental groups were interviewed to know their perceptions on the use Metacognitive Listening Instruction.

Regardless the results in the quantitative section, the interviews and results of Metacognitive Awareness of Listening Questionnaire (MALQ) show that learners reach their confidence in this skill when they are encouraged to reflect on their listening process, and also it confirms the need that teachers have to emphasize the use of bottom-up and top-down processes during the

regular classes. The study also suggests that this metacognitive listening instruction should be applied at all levels from A2 to B2.

A2 level students of a public university in Ecuador come from different majors and have to take English as a mandatory subject that is part of the curriculum. These learners are between 18 and 22 years old. Most of them come from public schools where the level of English is very poor so their need to improve is a must.

It seems that in the EFL arena, teachers have relegated the teaching of listening, considering speaking a more valuable skill to focus on in the classroom. This is in part due to the fact that whereas a considerable amount of research has been conducted into reading, writing and speaking; there has been a lack of research in the listening area especially because speaking was always more practiced in class. Vandergrift and Goh (as cited by Kaur, 2014) describe the teaching of listening as a stage in our classes that aims to test our learners, but not to teach them.

However, it has been seen that EFL students need more preparation in the four language skills since listening "is often a source of frustration for second and foreign language (L2) learners". (Vandergrift and Tafaghodtari, 2010, p.471). Students at this university in Ecuador are not able to interact with native or nonnative- English speakers because they claim they do not understand what they say. According to Goh and Taib (2014) in relation to listening, beginners and intermediate "are unable to process information quickly". (p.1).

Learners face different aspects that tend to break down the communication when the speech is not clear, as stated by Brown (2001) these

difficulties could be the accent and rate of delivery. Most of the speech is not understood by students, at basic and intermediate levels especially. When listening comprehension teaching lacks metacognitive and cognitive strategies, the learner may face feelings of "inadequacies or lack of confidence" (Dunkel, as cited by Golchi, 2012). That is why it is imperative that researchers also identify what the learners' perceptions are on the effect of the use of this process-based approach when they are applied with course book material.

Context of the Study

In relation to this study, researchers have observed that learners are encouraged to learn skills like speaking, writing or reading; however, listening has been considered complex to teach and it has been more tested than taught. This is why the authors of this study have believed that this research can contribute to the use of a metacognitive listening instruction that teachers can use in class not only with A2 level, but also with higher levels of B1 and B2. It is important to remark that the activities that we applied during the intervention of groups, can also be applied by learners to activate autonomous learning. In other words, we could also see this study as a way of encouraging students to self-discover their best way of learning and practicing the target language.

The institution, its students, and instructors

The researchers conducted this study with students that were studying at Basic B which is the equivalent of A2 level according to the CEFR. Four classes

were part of this research: two were part of the experimental group and the other two corresponded to the control group. A public University of Ecuador was the institution in where this research took place. The authors of this study were also the regular teachers of these four classes.

The need for research project

The current law of Higher Education in Ecuador (Ley Orgánica de Educación Superior / LOES) demands that university students finish their undergraduate studies at a B2 level, according to the CEFR. It means that they are required to use the four skills: reading, speaking, writing and listening in a way that they can get ready to apply for a post-graduate course in the country or abroad. Since the mastering of the listening skill is essential to interact orally in the professional and academic arena, with this study, the researchers propose to help learners improve their listening skill encouraging them to adopt an active role in their English development.

The results of this study will be a valuable source of information for EFL teachers of this University and other public universities who have similar context and students with listening problems. Teachers could perceive how metacognitive instruction influence their students' listening performance. This study will also show how students experience these metacognitive strategies and levels of anxiety in their classroom.

By 2017 all the English courses at the university where our study will be carried out, will apply an approach called flipped classroom, in which students will work more at home practicing passive skills as listening, reading and

grammar and, less hours in the classroom in which they will practice productive skills as writing and speaking. This study will provide our students with tools for promoting their autonomous learning that will help them be ready for this new learning approach.

Metacognition

Piagetian theories define metacognition as "thinking about thinking" (Dinsmore et al., cited by Azevedo and Aleven, 2014). Flavell, cited by Buratti and Allwood (2015) claims that metacognition is "one's knowledge concerning one's own cognitive processes or anything related to them" (p. 232). It is also seen as leaners' knowledge and their ability to monitor their cognitive tasks in their learning process. Flavell (1979) proposed that metacognitive process is similar to the cognitive one; with the difference that the final aim of metacognition is the cognition itself.

According to Baker, and Wenden, (as cited by Vandergrift et al., 2012) learners acquire the ability of taking over their ideas and adapting their own learning. These authors claimed that there is an agreement on the fact that metacognition is related to the form learners can learn to listen since metacognition improves their mental process and comprehension.

Metacognitive Elements

Metacognition concept derives from Anderson model claiming that metacognitive strategies give learners the opportunity to think about their learning process through the use of knowledge about it. (O'Malley & Chamot, 1990). Metacognition includes among others, these elements:

- Knowledge which is the awareness of people of their own cognition that includes thoughts about cognitive operations of the individual and others (O'Malley & Chamot, 1990).

- Monitoring "set of activities that help students to get that knowledge." (Azevedo and Aleven, 2014, p.619).
- Control that can have three effects on the object level: (a) initiating an action, (b) continuing an action, or (c) terminating an action. (Buratti and Allwood, 2015)
- Regulation of cognition that includes "planning, monitoring, and evaluating learning or problem-solving activity" (Brown and Palincsar and, Brown et al. cited by O'Malley & Chamot, 1990, p.99)

Metacognitive listening instruction techniques

Two types of techniques for metacognitive listening instruction are presented by Goh (2008): (a) students' reflections on their listening process to get new knowledge about listening. (b) opportunities in which listeners have the experience to extract information from a text and elaborate meaning. Both types of techniques reflect prediction, monitoring, problem identification, and evaluation, that is called *pedagogical cycle*. (Vandergrift 2004)

Bransford, Brown and Cocking (2000) claimed that a metacognitive instruction approach let "learners take control of their own learning process by defining learning goals and monitoring their process in achieving them" (p18). When people say that they analyze about the way they learn, it means that learners are able to monitor their own understanding, they initiate an internal dialogue in which they can predict goals, explain to themselves to improve understanding, notice mistakes, failures to comprehend, activate previous knowledge, and plan ahead. Students need to solve problems, evaluate

strengths to attain a goal, and monitor final results. Class analysis and debate discussion are always essential to support abilities development.

Cognition

According to the English Oxford Living Dictionaries, cognition is "the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses." However, O'Malley & Chamot (1990) claim that cognition has a different connotation from a second language acquisition perspective, since there are two aspects that have to be taken into account: the comprehension and production processes in the target language.

Anderson (as cited by O'Malley & Chamot, 1990) states that for most learners, the *Cognitive Stage* is the first part of skill process. It is originated when there is an expert who guides the learners in their way to accomplish the tasks, or the learners try to figure it out and learn on their own. At this stage, learners are conscious of their own learning, likewise they are able to declare and describe verbally the acquired knowledge. Anderson (as cited by O'Malley & Chamot, 1990) proposes examples at this point: memorization of vocabulary and grammar rules when learning the target language. This new learned information motivates the students to describe how to communicate in the target language, disregarding errors that might still exist.

Early cognitive abilities

According to Anderson (2015, as cited by O'Malley & Chamot, 1990) identified some early cognitive abilities:

1.- Even though learners do not have knowledge about a topic, they can make analysis with certain information they have understood.

2.- Learners have the innate skill to solve problems through self-questioning

3.- As soon as they learn how to learn, they can improve their knowledge.

4.- Learners need to activate their "innate capacities" (Bransford, Brown and Cocking, 2000, p.234-237).

Types of knowledge

Anderson (2015) discloses two types of knowledge: *Declarative* knowledge and *procedural* knowledge. The first one is about knowledge that people have or information that is in our memory, the second one is the manner people put into practice what they know. (Anderson, as cited by O'Malley and Chamot, 1990). Therefore, Anderson claimed learners need to go from declarative to procedural knowledge to develop cognitive ability.

Phases to get from declarative to procedural knowledge

There are three stages that are essential to proceed from declarative to procedural knowledge.

Cognitive stage

During this part of the process, students learn how to perform a task; learners are conscious about it and as a result, they can explain the new knowledge. (Anderson as cited by O'Malley & Chamot, 1990).

Associative stage

At this stage, learners identify errors; and the main advantage of this is that they can make corrections, and also they can make connections between the components of the skill. (Anderson as cited by O'Malley & Chamot, 1990).

Autonomous stage

At this level, students can develop the skill quickly. (Anderson as cited by O'Malley & Chamot, 1990).

Cognitive factors

Some factors influence the ability to transfer what learners have learned:

- Students need to know where to begin learning.
- Learners need their time to learn complex topics.
- Students need to know and practice grammar, vocabulary, content, etc. about what they will learn. Learning and being familiar with new topics takes a lot of time from learners. Furthermore, they need to be monitored and given feedback about their learning process.
- Learners need to learn in different contexts.

- Learning and transfer should not be evaluated immediately, but formative assessment is recommended to continue their learning process.
- Learners need to use their previous experiences, and activate prior knowledge. (Bransford, Brown and Cocking, 2000).

Learning Strategies

According to O'Malley and Chamot's (1990), learning strategies "are complex procedures that students use when performing a language task…" (p.43). Students should be aware of these learning strategies through cognitive, associative, and autonomous phases. Teachers and instructors could motivate and positively affect students learning by helping them to choose, acquire, organize and integrate new knowledge. In addition, students' beliefs and activities are processed in their brains as the reality perceived by humans is better understood through the perception and interpretation of people's experience. (O'Malley and Chamot,1990).

Purpose of language learning strategies

A survey applied by Cohen, as cited by O'Malley and Chamot (1990), shows that learning strategies have several purposes: (a) to enhance learning; (b) to perform specified tasks; (c) to solve specific problems; and (d) to make learning easier, faster, and more enjoyable. Therefore, teachers and instructors should support appropriate strategies for different tasks and, learners should try several strategies until they find the suitable one for a specific task.

Kind of Strategies

Research done by O'Malley and Chamot (1990) discriminates three categories of strategies: metacognitive, cognitive, and social-affective:

Cognitive strategies

Cognitive strategies are mental procedures for achieving a specific learning goal. This kind of strategies are related to individual learning tasks and adaptation of materials (Brown and Palincsar, cited by O'Malley and Chamot, 1990).

Social-affective strategies

Social strategies are activities in which learners are involved, so as to have enough opportunities to practice the foreign language. Examples of social-affective strategies are cooperative learning, peer interaction, and asking questions for clarification.

Metacognitive learning strategies

O'Malley and Chamot (1990) offered some metacognitive strategies in language learning tasks:

1. Planning: previous organization of tasks that students use them in their learning process. It involves guiding the course of language reception and production. Planning may be influenced by aims or by input that is needed for performing an activity. The significance of goals is suggested in the distinction between top-down and bottom- up processes.

Listening activities that are presented in course books contain these processes that orientate learners to respond effectively to the tasks. Teachers and instructors should know how to conduct these processes that will be explained below:

- Bottom-up process

This is a decoding process in which learners divide the message they receive in sections and then in subsections to construct meaning. It is just after this process that learners can build more complex structures. Nation (2003) claims that bottom-up process is related to comprehension (fill in the gaps, multiple choice activities, short dictations, etc.,) in which students go from the particular to the general.

- Top-down process

This is a process in which prior knowledge and context clues are included to activate information that let learners understand the message. Listeners may draw from all kind of knowledge that they previously have from the target language: discourse knowledge, world knowledge (another term for prior knowledge), pragmatic knowledge, and cultural knowledge. All these elements are present in listeners' long-term memory in the form of schemata, which are activated by the listener when the topic becomes explicit and learners make predictions. Nation (2003) explains that Top-down process involves listening to get a general idea, listening to a story from the teacher, predicting, questioning, making a list of possibilities, looking pictures before listening. 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 that is why teachers should practice both processes.

2. Directed attention: using concentration and ignoring distractors when doing tasks.

3. Selective attention: Learners pay attention to specific aspects of the listening text to accomplish the task.

4. Self-management: comprehend situations to achieve language tasks and control learners' language performance.

5. Self-monitoring: check, correct or verify comprehension in language task. It is a process in which learners are conscious of their learning process. Anderson (2015) states that it consists of choosing the best deduction of the message's meaning based on given information. Listeners may have to monitor later input compared to the first guess and maybe change comprehension errors made at the beginning of the process. Inferencing skills are clearly also included in this strategy since learners must analyze their tasks instructions to define the task difficulty and the correct use of using top-down.

6. Problem Identification: be aware of how to solve a problem or difficulty in a learning task.

7. Self-evaluation: learners check by themselves how they are doing in their language performance. Through the use of self-evaluation, learners reflect on their learning experience.

8. Production Evaluation: Check a task when it is done.

9. Performance Evaluation: Judge how the task is done.

10. Ability evaluation: Judge a skill to perform the task.

11. Strategy evaluation: Judge a strategy after finishing a task.

Metacognitive strategies in class

Vandergrift, et al. (2012) stated that one of the main concerns of teachers and instructors is the lack of knowledge about techniques or strategies to teach listening skills. The authors claimed that there are three aspects of teaching listening that instructors should bear in mind: (a) the processes that listening involves; (b) the strategies to achieve understanding; and finally, (c) the potential that every student has in the language learning process.

In most of the cases, teachers do not face any problem with pre-listening activities. These activities usually come in course books, or instructors sometimes design them. The goal of the presentation of pre-listening activities is to activate the previous knowledge that learners have on the topic. Even though the activities are carried out by learners in pairs or with the whole class, the problem emerges during the listening task. According to Goh (as cited by Vandergrift, et al. 2012) once the instructor has played the video or cd, most of the learners fail in their attempts to construct the general idea of the text, they have missed the first part of it, and then they do not know how to continue.

Another aspect to take into consideration is that when the listening activity has started, there is no way to know if it should be paused or given into pieces, so students can have the chance to step back to the parts that were not understood. However, in reading activities, learners have the opportunity to do a revision on it, so they get and clarify ideas. The question here is why not to stop the listening activity and, the answer is very simple because in real life the listener does not have the opportunity to review the audio produced by the speaker. In other words, the instructor is tempted to imitate a similar circumstance in a natural context.

Vandergrift, et al. (2012) also mentioned that learners who ask for pieces of advice about the way they can improve their listening skills are usually told to watch movies or videos, listen to songs or watch the news on TV. But another question arises, and it is how important it is that learners can be aware of their progress by *self-direction* and *evaluation* to improve their listening; it is the moment when instructors should engage learners to reflect on the way they learn, in other words to metacognition.

Strategy instruction

Strategy instruction has helped learners' improvement because of its efficiency in guiding their learning process. Bruin and Gog, McCormic, Hattie, Purdie and, Palincsar as cited by Schraw and Gutierrez (2014) assume that if teachers instruct students about how to learn from the experience, these strategies are internalized.

Pressley and Wharton-McDonald, as cited by Schraw and Gutierrez (2014) suggested that "strategy instruction is needed before, during, and after the main learning episode" (p.5). Here are some examples of strategies:

- Before learning: setting goals, making predictions, determining how new information relates to prior knowledge and understanding how the learners will use the new information.
- During learning: setting goals, making predictions, determining how new information relates to prior knowledge, and understanding how the new information will be used.
- After learning: reviewing, organizing, and reflecting.

Listening Skill Development

Beginning to listen and then speak in another language requires to follow some principles: (a) focus on meaningful and relevant content that allows learners to use it for their own purposes, (b) maintain interest through a variety of activities related to movements, real objects, trips, songs, and games, (c) apply the saying: "learn a little, use a lot", (d) provide plenty of comprehensive input, and (e) create a stress-free environment.

Listening features

Silent period

This is a period to consider certain time dedicated to observe and learn, which provides the basis for improving other language skills. (Newton, as cited by Nation, 2003). Learners need this period, and some learners can take more time than others.

Pronunciation

Pronunciation deals with the articulation of individual sounds, the specific characteristics of sounds like voice and aspiration, the characteristics of voice, opportunities to practice speaking spontaneously, stress and intonation. If learners have the opportunity for practicing good pronunciation, it may help them in their communication and *phonological loop* (the word comes from the brain and then it is stored in the long-term memory).

Fluency

It is present in meaningful-focused tasks with speed and ease without holding up the flow of communication. Fluency involves using all that students have already learned. Fluency and accuracy used to be contradictory terms but in fact, when fluency increases, there is a result of fewer errors and an increase in grammar complexity. In the case of elementary levels, fluency must be developed little by little therefore, the listening tasks must be adapted using the right pace. When practicing listening fluency, the tasks must be easy, and the teacher must control the language by working from clear text or by consciously controlling the level of the input.

Understanding Intonation and stress

Ur (1984) states that the lack of clarity in the system of stress, intonation, and rhythm can cause interference with foreign learners' understanding. The rhythm of speech depends on different tones and the English language has different groups of tones. As intonation has an impact on the meaning of a sentence, learners need to learn and practice it.

Coping with redundancy and noise

Ur (1984) also claims that learners need to have a certain amount of background noise when they are having oral interaction. Beginners, who do not know words or are not familiar with them, find it difficult to recognize these unfamiliar expressions by the context in a listening task. As a result, the task will be difficult to be solved.

Fatigue

Ur (1984) also mentions fatigue as an element that can disturb some foreign learners because it is tiring to listen and understand no familiar words and phrases and, also because learners cannot set their own pace and make pauses as it is done in reading, speaking or writing skills. Golchi (2012) states that learners need to reduce anxiety to learn in a better way.

Motivation

Ur (1984) claims that beginners need to listen to common topics that they feel interested in, to feel motivated to listen at their first stages of the learning process.

Language Listening Comprehension

Types of Processing

Listening involves the following overlapping types of processing: neurological, linguistic, semantic and pragmatic processing

N**eurological processing**

Hearing

This process is the physiological part of the listening. The unique characteristic that distinguishes hearing from listening is intentional. Rost (2011) explains that intention happens when a learner perceives external input on what he wants to pay attention to.

Consciousness

This is a non-physical part of the hearing and shows the listener's intention to communicate and understand a message.

Attention

It lets students emphasize on a specific message.

Linguistic processing

Perceiving speech

These perceptions could be done when listeners have an efficient language process while they maintain communication with a speaker. The listener will make an effort to understand the speaker; therefore, he will use available acoustic information to reconstruct meaning. (Rost, 2011)

Identifying units of spoken language

For the listener to handle real time communication, he/she must "group the speech into a small number of constituents" (Rost, 2011, p.27) that can be easily processed within short-term memory.

Recognizing Words

This is considered the main characteristic in oral communication, comprehension, and L2 acquisition. The listener needs to pay attention to lexical information. Thus, he must do two tasks: "identifying lexical phrases and words, and activating knowledge related to the identified words and phrases." (Rost, 2011, p.28)

Semantic processing.

Comprehension: the role of knowledge structures

Sanders and Gernbacher, as cited by Rost (2011) define comprehension as the process in which learners build structure comparing language to previous knowledge that is in their brain with the intention of finding coherent meaning.

The comprehension is related to the experience in the sense if the aural input is related to the listener's experience or the external world, whereas the perception in chunks of language which could support or change what the listener has understood. On the other hand, comprehension implies all references that the aural input is providing. It means that comprehension involves the construction of accurate mental representations of different concepts.

Integration of the information is the core process in comprehension. This process allows listeners to incorporate new and old information. Therefore, comprehension works as a system of rearranging of listener's internal model of the speech. Without this modification and integration of new and old

information, comprehension would not take place. "The listener has to store a mental representation of the discourse and continuously update the representation with new information" (Rost, 2011, p.57)

Schemata

To get the correct meaning of a message, listeners need to successfully and efficiently activate mental schemata. Schemata refers to units of knowledge available in the memory that let listeners afford different types of world knowledge. Activation of schemata in order to store new information is the most important key to learning.

Common ground and Inferencing

The listener must have a common link with the speaker to get what he is saying. Listeners must activate social constructions in sharing concepts, routines, and behavior. Social and affective features are significant for the listening process.

Pragmatic processing

Listening from a pragmatic perspective

Understanding of speaker intention in a specific context situation is needed for listening. (Grice, 1975 cited by Rost, 2011)

A Model of Listening Comprehension by Vandergrift and Goh (2012)

Vandergrift, et al. (2012) designs and describes the metacognitive instruction as the focus that instructors can apply to teach their learners how to carry out listening activities in the best way. Consequently, the knowledge

of learner's strengths and weaknesses at the moment of performing a listening task, the awareness of the nature of the task and; finally, the knowledge of strategies have an imperative influence on the improvement that learners can accomplish in listening skills. From this view, the applicability of this approach is based on three metacognitive dimensions that are students, tasks, and strategies.

According to Vandergrift and Goh (2012), it is necessary to help learners understand the cognitive processes that develop their listening comprehension in the class from a metacognitive perspective. Therefore, it is based on the orientation the instructor provides in listening comprehension activities.

Metacognitive Instructional Activities

Regarding the effective application of metacognitive approach, there are some metacognitive instruction activities that pursue the accomplishment of instructional objectives and goals. These activities can be classified into two types: integrated experiential tasks and guided reflective tasks to listen.

Integrated experiential listening tasks

The experience of integrated listening is intended to provide learners with activities that raise their metacognitive awareness through social-based tasks within a classroom context. With the use of this type of tasks, students are benefitted by the awareness of different processes that involve L2 listening tasks and the contribution such activities to listening comprehension activities outside the classroom.

The use of published material can help to adapt the tasks. They can also be applied in different stages of the same listening, pre-listening, while-listening and post-listening exercise. Therefore, the experimental integrated listening tasks would let learners explore their self-concept as a listener, use appropriate strategies during listening, or identify factors that influence their performance in different listening tasks. Vandergrift and Goh (2012) propose the following experimental integrated listening activities: metacognitive pedagogical sequence, self-directed listening or viewing, and post-listening perception activities that will be described in the following subsections.

Metacognitive Pedagogical Sequence

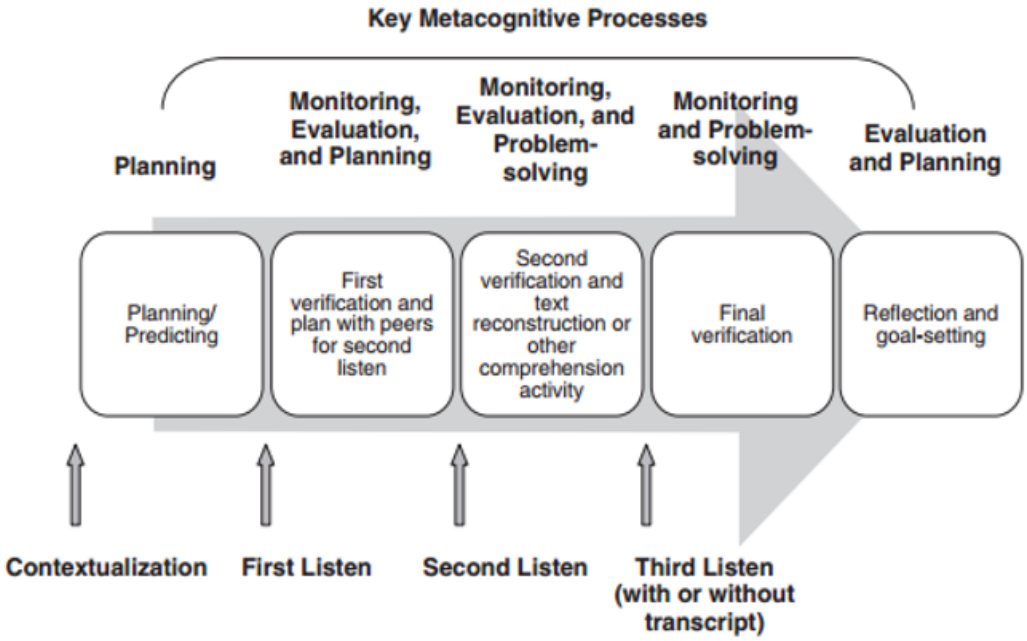

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Figure 1. Stages In The Metacognitive Pedagogical Sequence For Listening Instruction

Source: taken from (Vandergrift & Goh, 2012, p.109).

The Metacognitive Pedagogical Sequence is known as "a sequence of learning activities that integrate metacognitive awareness raising with listening input and comprehension activities" (Vandergrift, et al., p.127). This sequence helps the learners' comprehension of the text content and, at the same time, with all metacognitive aspects that are involved in the process. The main objective is to motivate students to be self-regulated learners at the moment of performing a listening task. The process involves three principal objectives: a) to motivate learners to reflect on themselves as listeners, b) to incorporate complexities related to the demands of the task and, c) to increase the efficacy of the strategies for listening comprehension. (Vandergrift and Goh, 2012).

In relation to metacognitive processes, Vandergrift and Goh (2012) state that this strategy represents a pedagogical methodology that can help learners become familiar with the listening processes. In the end, the pedagogical metacognitive sequence is useful to students as they can improve their skills in (a) "planning for the activity", (b) "monitoring comprehension", (c) "solving comprehension problems" and, (d) "evaluating the approach and outcomes" (Vandergrift et al. 2012, p.105).

The ability of *planning for the activity* helps learners prepare themselves for the task they are going to be asked to do to make a strategic decision on the information that is going to be listened to in detail, and for this reason this skill will help to avoid being involved in the activity without any previous reflection about the topic. Likewise, in order to improve the ability *monitoring comprehension*, it is important that learners control their skills on their

predictions to make some changes if necessary. In this way, they will be able to assess continuously what they understand about the text, verify their predictions and understandings about the text and assess with accuracy their listening comprehension process.

The capacity of *solving comprehension problems* is related to solve problems during a listening task that has to be solved to improve the learners' listening skill. Finally, the ability to *evaluate approach and outcomes* is related to the idea of assessing the "efficacy" of the adjustments that have been done previously in the ability called *solving comprehension problems.* With the development and application of these activities, learners can overcome the deficiencies that have been identified at the previous stages during the listening process.

The pedagogical sequence stages are the following: planning, predicting, monitoring, evaluation, directed attention, selective attention and problem solving. Along these stages, learners are able to control their own listening process; moreover, it will help them improve their performance.

As shown in figure 1, these are the stages of this pedagogical sequence: The "planning/prediction" stage is for the teacher who provides the context of the topic in the listening task through brainstorming, which is one of the principal activities during this stage. During the second stage, the main purpose is to verify information with their peers and then listen for the first time, at this stage the prediction plays an important role. After the second listening, learners proceed with the second verification of ideas and construction of the

texts and any other comprehension activity. After the third listening, students proceed with the last verification. The next stage *final verification*, students listen to the text for the third time to find new information that was not obtained in the two-previous listening. On the other hand, the instructor can introduce part of the transcription to get detailed information. Finally, during the *reflection and goal setting* stage, learners are encouraged to reflect on the listening task, the difficulties, and finally to set goals for future listening activities to apply all the reflections at the last stage.

As a result, these stages help learners check their listening strategies that will help them improve their listening comprehension performance. During the pedagogical sequence stage, instructors request learners to listen to a text three times to get all details that were not gotten during the second and third stages. During the pedagogical sequence, students become more confident, and at the same time, they are able to change the strategies that have shown to be appropriate for this task. Finally, it would be interesting to remark that the metacognitive pedagogic sequence has a cooperative pedagogic approach since the participation with other peers facilitates and improves their listening skills.

Self-directed listening or viewing

Vandergrift, et al. (2012) state that the most successful learning experiences do not take place in a context based in a classroom context. For this reason, instructors should guide their learners with different "messages," to be more specific with "tasks" that will help them self-evaluate further

comprehension listening activities, the integration of both dimensions of metacognitive approach, "text-focused comprehension" and "metacognitive awareness." (Vandergrift et al. 2012, p.129).

The design of these instructions must include these three metacognitive processes: planning, supervision, and evaluation. The main objective of self-directed listening is to help learners evaluate their own listening process.

Post-Listening Perception Activities

The activities that take place in the post listening are based on the sounds and pronunciation in L2 in a natural context. Therefore, learners are encouraged to analyze their "lexical segmentation" ability through "language-focused activities", which help them to reflect on the way real speech works; and, they become more competent at the comprehension listening tasks. In the end, this type of activity helps learners apply their metacognitive skills successfully in listening tasks.

Guided reflections for listening

The main objective of guided reflections is to encourage learners to find new knowledge about their own L2 listening comprehension strategies. Guided reflections can imply language-focused tasks in which learners explore linguistic aspects in L2. On the other hand, one of the objectives of these guided reflections is to motivate learners to apply them in their learning such as "independent activities." Examples are "listening diaries", "emotional temperature chart", "process-based discussions", and "self-report checklist". Below, we are going to discuss the last two mentioned activities.

Process-based discussions

To promote the metacognitive knowledge in learners, a discussion group about their learning process can support this knowledge process. The main objective of this type of activity is to encourage learners to talk freely about their ideas of their learning process. This discussion can be developed and directed by the teacher with small groups or the whole class, the teacher should point out the principal challenges of specific listening comprehension activities.

Self-report checklist

Self-report checklists are descriptions about the learners' beliefs and strategies that are used for the evaluation of their learning process (Vandergrift and Goh, 2012). The main objective is the development of metacognitive strategies that are necessary to carry on a listening comprehension task. Adult and young learners could use metacognitive strategies, and also they can provide a record about what the class think and their feelings about these strategies. (Vandergrift and Goh, 2012)

Problems in listening

Graham (2006) asserts that listening has its level of struggle since real-life speech is complex. Learners require a lot of background knowledge, linguistic awareness, and the aptitude to analyze the input with natural speed (Buck, 2001). Some researchers as Goh, (2000); Ur (1991); Vandergrift (2003) pointed out some problematic issues in listening:

Firstly, some learners do not understand accents of everyday speech at natural speed. So, they cannot get the sound correctly. Second, they do not have essential listening skills and strategies. Third, the content is sometimes so hard to be comprehensive.

Additionally, they (a) do not recognize words they know; (b) lose their concentration thinking about meaning of previous parts of listening; (c) cannot make chunks streams of speech; (d) miss the beginning of texts.

Another difficulty is that learners: (a) forget what is heard; (b) they cannot build mental images (c) do not understand next subsequent parts because of earlier problems.

Moreover, students: (a) understand words but not the message and (b) get confused about key ideas in the message.

All these problems do not let learners develop their listening performance. They usually ask their teachers for repetition of the listening exercises, and this is not helpful because in a real scenario they will not have repetition. (Ur, 1991). Furthermore, when learners do not have strategies, they do not easily remember what they heard. Other learners do not know the pronunciation or meaning of words in different context (Goh, 2000) and it does not let them build a general meaning of the whole oral text because of the lack of schemata. As a consequence, students can feel tired, bored and demotivated. (Vandergrift, 2004)

How to deal with listening problems?

Dealing with the problems shown above and knowing how to overcome seen in their listening skills (Graham, 2006) can be a tragedy for some learners. Vandergrift (2003b) pedagogical cycle can create favorable conditions for a successful progress by helping learners develop and be aware of the metacognitive knowledge to enhance self-regulated listening. That is, learners develop their abilities to self- evaluate their work and get the knowledge to have control over their learning activities. (Mareschal, 2007).

Collaboration is another factor of Vandergrift, et al. (2012) approach which helps learners increase their confidence. Ur (1991) states that group work gives students the chance to enhance their skill because they share what they know and help each other.

Cross (2011) small-scale study was done to twenty adult Japanese advanced learners applying the pedagogical cycle. He wanted to check the effect of metacognitive instruction on listeners' comprehension. He applied a comparison of pre-test and post-test scores showing that three out of four less-skilled listeners get notable gains along five training lessons, whereas only one out of four more-skilled listeners improved.

This research shows that if less-skilled listeners are guided by their teachers with listening training and strategies, they can be more aware of their learning process controlling and evaluating their listening development (Goh

and Taib, as cited by Cross 2011). Metacognitive instruction is an excellent manner of having a positive effect on listening comprehension.

Mareschal (2007) study also corroborates Cross´s (2011) results. Low-skilled students in this study had an improvement in:

> general efforts, attentional in particular; judicious attentional focus while listening (in particular: in their increased focus on the identification of keywords, of the context, and in the filtering out of secondary details); judicious use of translation; use of critical self-questioning following prediction, inference or elaboration; systematization and efficiency in the verification of their predictions, inferences and elaborations based on logic and contextual, general, or related linguistic knowledge; systematization and efficiency in their retrospective evaluation of their comprehension; and, systematization and efficiency in their reflections on the appropriateness of their strategic approaches to listening comprehension. (Cross, 2011, p. 105)

All students also gave a positive response related to:

> the opportunity to listen to aural texts three times consecutively; the opportunity to discuss their comprehension with a classmate following the second of the third listening times; the opportunity for verification and the reinforcement / reinvestment activities following the listening (in particular, the opportunity to verify their listening comprehension the absence of formal academic evaluation in the context of this listening practice, which the students reported had enabled them to feel less

anxious and to derive a greater enjoyment from the listening development activities. (Cross, 2011, p. 106)

Perceptions

Zhang & Goh (2006), did a research which investigated high school Singapore metacognitive listening knowledge and their perceptions of using these strategies and the relationship between such knowledge and perceived strategy use. More than 50% of learners found that these strategies were useful for listening comprehension. These strategies included "cognitive and metacognitive strategies as a prediction, visualization, inferencing, contextualization, selective attention and directed attention..." (p.210). However, learners tended to underuse such strategies and as they mentioned only three were often used such as: getting the idea from the listening text, getting information by the details; and despite the level of difficulty of the text, learners focused on the listening task (Zhang & Goh, 2006).

Mareschal (2007) did a qualitative research called "students perceptions of a self-regulatory approach to second language listening development." She studied the effects of this approach on learner's metacognitive awareness and listening comprehension. This research was done to two groups of native Anglophone Canadian federal employees enrolled in mandatory French as an L2 program. One beginners-intermediate level were the less-skilled learners; the other intermediate-advanced level group were the high skilled-learners. Less-skilled learners revealed a substantial

improvement in listening comprehension success over the course of the nine-week listening training.

Studies by Vandergrift (2003b) and Mareschal (2007) demonstrated that listening metacognition enhances learners' metacognitive awareness, listening skills development, enjoyment in L2 listening, their self-confidence; and, interest and motivation.

Liu and Goh (2006) did research on Tertiary-level Chinese ESL students, who were exposed to a very similar listening instruction concluding an improvement in listening skills, confidence, and motivation. Discussions let learners visualize and understand the principal and secondary ideas, the whole text, and they also were motivated to continue the training in next classes.

The results of this study are also consistent with Goh & Taib's (2006) findings since learners showed an increase in their confidence and metacognitive knowledge. Mareschal (2007); Goh & Taib's (2006) studies also "highlighted the benefits they had derived from the teacher-led discussions which were an integral part of the listening training" (p. 228), as was the case also in Vandergrift's (2003b) study. Wilson (2003) and Mareschal (2007) agreed that when students compare their difficulties with the original text, they can get detailed knowledge to learn.

Yang (as cited by Mareschal, 2007) through a research done with Taiwanese learners confirm that cyclical relationships are presented among students' metacognitive awareness, their motivation, and their strategy use.

Learners also showed enthusiasm toward the opportunity to listen more than once in the training. Wilson (2003) also found that listening tasks require focusing on bottom-up accuracy. Even though they are not used in real life, bottom up pushes listeners' attentions on parts they can miss.

Research paradigm

All research is based on some essential philosophical beliefs about what can be considered a valid research and which specific research methods are suitable for the development and/or undertaking of knowledge. To conduct and evaluate this research, it is, therefore, important to set up what these beliefs are. This chapter discusses the philosophical assumptions in terms of ontology, epistemology, and methodology. According to Denzin and Lincoln (1994), a research paradigm is an all-encircling system of interconnected practice and thinking that describe the nature of inquiry along those three dimensions.

Ontology

According to Tashakkori and Teddlie (as cited by Mertens, 2015), Pragmatism is a paradigm that offers *an underlying philosophical framework* for mixed-method investigation with the proviso that the researcher should ground his/her investigation on the philosophical beliefs of the paradigm. Pragmatists do not agree with the idea that social science could only gain access to the *truth* of the real world through a particular scientific method. In this sense, their belief systems allied them to constructionists. On the Pragmatic viewpoint, there is no single *real world* and everyone has their view of the world.

Pragmatists deal with inter-subjectivity as an important element of social life. In particular, the pragmatist emphasizes the generation of knowledge through points of action, leading to the types of united actions or projects that different people or groups can work on together. Mertens (2015).

Epistemology

Instead of positioning ourselves as distant observers, relational investigators, or social and historically contextualized investigators, the pragmatist feels free to conduct research on a phenomenon that is interesting and valuable to him/her. Researchers conducted this study in different ways that can be judged appropriately, and its results can be used in order to reach positive outcomes within the investigator's value system (Tashakkori & Teddlie, as cited by Mertens, 2015). The criterion to judge the efficacy of a methodology responds to the implicit relationship between the researcher and the subject, as long as he/she achieves the objective. (Maxcy, 2003 as cited by Mertens, 2015)

Methodology

Both quantitative and qualitative methods are compatible with the pragmatic paradigm. The method should be chosen in accordance with the purpose of the investigation (M. P. Patton, as cited by Mertens, 2015). Neopragmatists have written a great deal on the importance of using mixed methods and avoiding limiting themselves to a unique and monolithic method since the *scientific method* is perceived to agree with the post-positivists thinkers. On the other hand, pragmatism lets researchers choose the methods

(or a combination of methods) that work best in answering some research questions. (B. Johnson & Onwuegbuzie, as cited by Mertens, 2015).

Research tradition

This is a mixed method research since it involves in research practice, and is recognized as the third major research paradigm, in conjunction with qualitative and quantitative research. Both methods helped researchers to validate and contrast findings, achieving the final objective of this study, which is understanding the effects of metacognitive instruction on participants' listening comprehension development.

Mixed research can be placed between the extremes Plato (quantitative research) and the Sophists (qualitative research), trying to get knowledge (theory and practice) of both of these perspectives while also looking for a middle explanation for a research problem. Miller and Gatta (2006). Consequently, researchers of this study used some standpoints of qualitative and quantitative research: Pre-and post-listening tests, which have helped the study to get information of grades of students, providing evidence of the effect of metacognitive instruction on participants listening comprehension development. Additionally, a previous, while and post questionnaire and a personal interview, which measured perceptions of learners on this same metacognitive instruction, let researchers compare both instruments but also contrast qualitative and quantitate data.

Quantitative research was intended to answer the first and second research questions, and qualitative research aimed to answer the third one.

The independent variables in both hypotheses are the listening comprehension development that was measured through the grades of participants in the pre- and post-tests and analyzed them with statistical procedures. The independent variables are the interventions of the researchers: in the first hypothesis the decision of having an intervention and non-experimental group; and in the second hypothesis the decision to divide the experimental group in less and more skilled learners.

In contrast, qualitative research pretends to go beyond raw numbers and understand the perceptions of participants about metacognitive instruction on their listening comprehension development having a complete view, formed with words, details and conducted in a natural scenery. (Creswell, 2012)

Nature of the research: Action research

This study is an action research. As Cresswell (2012) and Cohen and Morrison (2005) indicate, this type of study is intended to solve educational problems in a particular scenario. Action research designs "are systematic procedures used by teachers to gather quantitative and qualitative data to address improvements in their education settings, their teaching, and the learning of their learners" (Cresswell, 2012, p.22).

Cohen, Manion, and Morrison (2005) and Bransford, Brown and Cocking (2000) explain that action research, as its name suggests, joins action plus research in a design that can contribute not only to practical change in

teaching and curricula, but also to the development of a theory of education and teaching, embodied in new findings that can be shared with other teachers who experience similar problems, thus making educational practice more reflective.

Bransford, Brown and Cocking (2000) state that this approach motivates teachers to support each other in their intellectual and pedagogical growth; it also increases the professional prestige of teachers through the recognition of their ability to increase the stock of knowledge over and above their teaching activity. Ideally, ongoing dedication to research in teaching-learning also helps create the conditions for understanding the implications of new theories of how people learn.

Researchers

Two teachers participated in the study; both taught students at the same level of English, but in different classes. During the intervention process, although the teaching methodology for listening differed, both groups listened to the same texts, and received the metacognitive listening intervention by the same teacher (researcher) to preserve uniformity. The other researcher observed all teaching sessions for both groups on a continuous basis.

Researchers' role

As researchers and also teachers, we were responsible for both the gathering of the relevant qualitative and quantitative data and the

interpretation of the data. As researchers of an action research, we were also responsible for applying the intervention of metacognitive listening instruction.

Participants and their background

This study was carried out with A2 students from a Center of languages at an Ecuadorian Public University. The research took place from July to August 2016 in the second term of the first semester of the Academic year 2016-2017. These students whose ages oscillate between 18 and 22, were drawn from different disciplines, and have to take English as a mandatory subject that is part of the core curriculum.

This English program at the university starts at an Elementary and continue up to Upper-Intermediate level. The classes follow a standard textbook: *English Unlimited* by Alex Tilbury, Theresa Clementson, Leslie Hendra & David Rea, published by Cambridge University Press, 2010. Students of the Elementary level cover the first ten units of the first book in one semester and reach the threshold of a Pre-Intermediate level. (Appendix C)

Participants Researchers' role

As voluntary participants, they were responsible for attending all the metacognitive listening instruction sessions, work on the listening tasks; and discuss in groups. They were also responsible for doing the pre-and post-tests, questionnaires, and interviews honestly.

Sample

The type of sample selection is Convenience Sampling since the researchers are the teachers of those participants. However, their participation was voluntary. Thus, for the purpose of this study, 148 participants were initially selected: an experimental group of 64 students and a control group of 84 students of an A2 level. However, only 45 participants in the experimental group and 45 in the non-experimental group completed the whole research process.

These groups of students belonged to classes of the researchers. The researchers selected randomly the experimental and non-experimental groups from the 4 classes. These researchers trained students of two classes in the use of metacognitive listening comprehension strategies; and thus, they were part of the experimental group, while the students of the other part were part of the non-experimental group.

To select the sample size, Creswell (2012) and Brown´s (2014) stipulations have been taken into consideration, where they say that for educational purposes researchers need between fifteen to forty participants in each group.

Participants from the experimental group were identified as less or more-skilled learners on the basis of their performance on the listening section of the EF placement test (pre-test). The scores above the mean were classified as more-skilled learners, and the scores below the mean were classified as less-skilled learners.

Data collection instruments and analysis

A school of languages in a public university in Ecuador provided the EF Placement test to determine students' level of English according to the CEFR. This instrument is an online language standardized test especially for non-native English speakers. It is the result of EF (Education First), a global language training company, and a group work of language assessment experts. EF compares the EFSET's accuracy to the most widely-used high stakes standardized English tests: TOEFL, IELTS, and Cambridge International Examinations. This is a 50-minute test which assigns a score on the 6-level Common European Framework of Reference for Languages (EFSET English Certificate).

The researchers tested both groups with the EF before and after the metacognitive instruction. The listening section of this placement test was used as a pre-and post-test to assess the students´ listening proficiency. The listening section lasts 25 minutes and contains three listening texts with a minimum of six questions to be answered. It tested the ability to listen to specific information and opinion stated in each extract.

This exam was previously conducted twice on ten learners not chosen from the sample, to ensure test and retest reliability. The learners were randomly chosen from another A2 level class of a different teacher and 91% of the students got similar results. In this way, it was confirmed that the test was valid.

An anonymous Metacognitive Awareness Listening Questionnaire (MALQ) (Appendix D) with a closed-ended Likert-scale format was chosen. It

has 21 items and students had to answer them by rating their responses on a six-point Likert scale in which 1 means *strongly disagree*, 2 means *disagree*, 3 means *partially disagree*, 4 means *partially agree*, 5 means *agree*, and 6 means *strongly agree*. To avoid misunderstandings by the students, and hence altered results, this questionnaire was given in the Mother Tongue (L1).

According to Mackey (2005), the use of a questionnaire allows greater standardization, easier coding, and analysis of responses. Items are categorized by different factors of the metacognitive process. MALQ subscales statements are: Planning and Evaluation 1, 10, 14, 20, 21; Directed attention 2, 6, 12, 16; Personal knowledge 3, 8, 15; Problem solving 5, 7, 9, 13, 17, 19; Mental translation 4, 11, 18. These are the five factors of MALQ:

1. "Planning and Evaluation (how listeners prepare themselves for listening and evaluate the results of their listening efforts)

2. Problem Solving (inferencing on what is not understood and monitoring those inferences),

3. Directed Attention (how listeners concentrate, stay on task, and focus their listening)

4. Mental Translation (the ability to use mental translation parsimoniously), and

5. Personal Knowledge (learner perceptions concerning how they learn best, the difficulty presented PAGINA by L2 listening, and their self-efficacy in L2 listening)" (Vandergrift & Tafaghodtari, 2010, p.477).

MALQ was administered at the beginning, middle, and end points of the study, immediately after a listening activity given to the experimental and non-experimental group. (90 students).

According to Goh (2012), this questionnaire is based on research and theory about L2 listening and metacognition. This procedure was applied with the purpose of measuring "some strategies for listening comprehension and how participants feel about listening in English." (Vandergrift and Tafaghodtari, 2010, p. 498).

This questionnaire takes into consideration the factors of the metacognitive process, eliciting information about the perceptions that learners have of their use of strategies when engaged in a listening task, and also asks for information on the personal knowledge that they have in relation to how confident they feel about listening in L2.

Validity and Reliability

The researchers found MALQ questionnaire in a paper by Vandergrifth, Mareschal and Tafaghoftari (2006) in which the reliability and factorial validity of the same questionnaire are presented along with evidence for a statistically significant relationship between student response on the instrument and L2 listening comprehension success. MALQ has robust psychometric properties, it is significantly related to L2 listening comprehension success, and can explain up to 13% of the variance in listening performance (Vandergrift et al., 2006).

According to Vandergrift, et al. (2006), MALQ has been used with nearly 1,000 learners from various countries. This questionnaire has high internal reliability and at the same time is easy for language learners to understand and use. Some studies (Mareschal 2007; Zeng 2007) have used the instrument successfully to measure learners' change in metacognitive awareness and listening performance. Consequently, the researchers considered this instruments worthy to be used and additionally, the procedure for recording data fits the research questions and hypotheses of this study.

Interviews

Since this is a mixed method design in which the researchers are opened to new findings and not just to get presumptive data, we decided to apply interviews (Appendix E) to test the hypotheses and to gather more quantitative and qualitative information together with the questionnaires and listening tests. In that respect, Kerlinger (as cited by Cohen, Manion, and Morrison, 2005) suggests that it is useful to follow up unexpected results, for instance, either to validate other methods or to deepen the motivations of learners and their reasons for responding in that way.

Dialogues in interviews make the interviewee feel free to respond to the questions since "the distinctively human element" is an essential ingredient of "validity." Kitwook (as cited by Cohen, Manion, and Morrison, 2007, p.153).

Personal Interviews applied to the experimental group of this study were based on an unambiguous 20-minute semi-structured interview in learners' L1, adapted from the Listening Training Summative Report of Catherine

Mareschal's (2007) study. (Appendix F) Patton (as cited by Mackey (2005) explains that this kind questions allow the participants to respond on their terms giving detailed information about their feelings, personal perceptions and opinions.

The interview questions were adapted to suit the purpose of this study, considering the guide of Gillman's (2005) on how to elaborate semi-structured questions. They were done by both researchers and also reviewed by two other teachers that work with the same CEFR level (A2).

Pre- piloting

The questionnaire of this interview was previously applied twice on eight different learners chosen from a group different from the sample one, before their use with the whole group of participants to estimate reliability and validity. However, it was also pre-piloted on five different learners of the pilot group. (Gillman, 2005). At this stage, the researchers could get analytical feedback from the interviewee.

Piloting

The researchers interviewed 5 participants (who were chosen from a group different from the sample one). The researchers also carried out these interviews as if they were doing them to the participants of the study. The researchers gained a holistic perspective on how the interview was going to be conducted, they practiced each phase and were ready for a real interview in a specific period and noticed prompts to help participants when applying the questions to the research group.

Interviewers needed to be skilled at establishing rapport by asking questions in a suitable mode; doing so, the interviewees were sincere and motivated to answer in an honest manner, and the data were accurate. (Validity). Interviews had to include: trust, a level of curiosity by the interviewer, and naturalness. (Cohen, Manion, and Morrison, 2005)

Experimental group - Metacognitive listening intervention (instruction)

This metacognitive listening instruction was applied to three of the five units that the researchers needed to cover in the second term of this course, as shown in Appendix C.

The Experimental group received a metacognitive listening instruction taken from Vandergrift and Tafaghodtari (2010) using the textbook listening material within a period of 4 weeks during the second term (2 hours per week -8 hours in total). The topics were presented in the units used for the research purpose as: "Work-life balance", "Describe someone you admire" and "Arrange a film night". (Tilbury, et al. 2010).

During the four sessions, students received a worksheet in which they developed the seven stages on the planning/predicting, first verification, second verification, final verification, and final reflection stages of the metacognitive process.

Experimental group - Metacognitive listening intervention (instruction)

Students had to answer the Metacognitive Awareness Listening Questionnaire (MALQ) before the first intervention was conducted. Once the

learners responded the questionnaire, one of the investigators explained the procedure, and once again the instructions in the listening worksheet were given in their L1. The listening sheet was projected on the board, so it was easy to them to follow all instructions. The process followed the pattern below:

1. After receiving all instructions, learners had to discuss what possible vocabulary words and expressions they were going to hear, based on all the previous input that they had received some days earlier. They had to write all their ideas in the first column of their listening worksheet.

2. Once these ideas were discussed in pairs and written in their worksheets, there was a class discussion in which the instructor had to write up all their brainstormed ideas. At this point, the instructor did not evaluate their responses with adjectives of *good* or *bad*, but encouraged them to give more answers at moments when the class turned quiet.

3. First listening: at this stage, learners listened and then shared their ideas in pairs and made corrections if they believed they were necessary.

4. Second listening: Learners had to listen to the same text again, but this time they had to fill in the information in the third column of their worksheet. One more time, the instructor gave them some time to check in pairs and re-evaluate their answers.

5. Third listening: Students had to listen a third time and then discuss their answers and make corrections.

6. Script checking stage: Students had the opportunity to read and listen to the conversation so they could realize what their mistakes were.

7. Reflection stage: Learners worked individually and wrote their reflections on the listening activity, on the listening track that was used for this activity and on the methodology that was used before, during and after the listening. (Appendix H)

Non-Experimental group (control group) - Metacognitive listening intervention (instruction)

The non-experimental group listened to the same texts three times. The procedure, which was the same each time, included the following steps:

Before the listening activity, in the same way as with the experimental group, the students of the control group received the text, and they had to write what they understood about it. The learners did not work in any of the regular activities, nor did those students had the opportunity to analyze, predict, or monitor their comprehension with another classmate. After the third listening activity, the instructor gave more time to open a discussion among students to confirm their comprehension. There was no discussion on the strategy that was conducted.

Validity of the study

Cohen, Manion, and Morrison (2007) state that validity is an important component of effective quantitative and qualitative research. If a research work lacks validity, it is worthless (Winter, as cited by Morrison, Manion, and Morrison, 2007). The qualitative data was validated through careful sampling,

the appropriate instruments and suitable statistical treatments of the data. Researches of this study analyzed the validity of this study in terms of validity, considering the following types:

Internal validity

Internal validity is related to accuracy and can be applied in quantitative and qualitative research. (Cohen, Manion and Morrison, 2007). The internal validity of this study is intended to demonstrate that metacognition in listening has an effect on the variable of listening performance.

Experimental mortality which is the abandonment of participants during research, is a common problem in this type of studies. This study did not represent a problem in the quantitative data collection. However, during the collection of qualitative data just 30 students participated since most of them were very busy with projects or were studying for their next final exams. Regarding the sample size, in our study the number of participants was higher than the one that is suggested by Creswell (2012).

In the qualitative part of this research, internal validity was addressed in this way: using participant researchers and using peer examination of data (McKay, 2006). Internal validity was measured according to the following criteria:

- Confidence and authenticity: Following LeCompte and Preissle, cited by Cohen, Manion and Morrison (2007) the researchers wanted to construct new realities with the data collected and used information

from the personal interviews the idea is to offer a fresh perspective on the researched phenomena.

- Member checking: The researchers assessed the real intention of the study, they also corrected possible misunderstandings or errors in the data collection analysis, and also gave to the participants the opportunity to add additional information (Lincoln and Guba, cited by Cohen, Manion and Morrison, 2007)
- Triangulation: of methods, sources. (Lincoln and Guba, cited by Cohen, Manion and Morrison, 2007)

External validity

McKay, (as cited by Cohen, Manion, and Morrison, 2007) explains that external validity is related to how the findings of one study can be generalized to a wider population or having a random sample of a representative group of the target population. The results of this study can be generalized to other universities and teachers with a similar educational phenomenon.

Content validity

Cohen, Manion, and Morrison (2007) explain that to demonstrate this way of validity the instrument must indicate in a fairly and exhaustively way that it covers the domain and aspects that they are intended to be covered. In this study the MALQ questionnaire was long enough and the questions were clear enough in L1.

Reliability

Reliability in quantitative research is essentially a synonym of consistency, dependability, and replicability through the time over the instruments and surveyed groups.

Pilot studies of the applied research instruments helped the research to confirm reliability. The interval of time was one week, so learners avoid recalling the questions in the tests.

Alternate forms reliability

Researchers used two instruments for measuring the same dependent variable: MALQ questionnaire and the interview had similarities and equivalence over the time as they intended to measure the perception of students about the use of listening metacognition. (Creswell, 2012)

Inter-rater reliability

Usually when two researchers conduct a study, the human judgment fails, for this reason, the investigators reached an agreement by ensuring that each researcher collects the data in the same way.

In this study, dependability was part of member checks (respondent validation), triangulation, prolonged commitment in the field, persistent observations in the field, and independent audits (identifying acceptable procedures to carry out the investigation to get coherent results with data). The audits allowed the investigation to cover the results in terms of process and product. (Golafshani, cited by Cohen, Manion, and Morrison, 2007).

Triangulation

As Creswell (2012) outlines, triangulation corroborates evidence from different types of data, concept that is supported by Brown, et. al (as cited by Cohen, Manion and Morrison, 2007) when he argues that "in social sciences, triangulation refers to the attempt to understand some aspect of human behavior by studying it from more than one standpoint…". (p. 160)

The use of different methods sometimes contrasts with only one method, but the latter is more susceptible since it is part of the research in the social sciences. To ensure triangulation in this study, researchers used a pre-and post-listening test, MALQ questionnaires and personal interviews.

Results

In this chapter, the authors show the results of each methodological instrument in relation to the research questions of the study dividing this section in quantitative results which are related to the EF pre-and post-listening test and then qualitative results which are related to the MALQ questionnaires and personal interviews.

First research question

Are there differences resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group of EFL A2 students of a public University? This research question can be expressed in terms of hypothesis.

The null hypothesis is that there are no differences resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group of EFL A2 students of a public University. The alternative hypothesis is that there are no differences resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group of EFL A2 students of a public University.

EF Pre-Post Listening Test

Table 1

EF Pre-Post Listening Test grades means of control and experimental group

	Pre-test		Post-test	
EF Listening Test	Experimental	Control	Experimental	Control
	32,84	32,44	36,78	33,80

Table 2

Non-experimental and experimental group EF listening test grades

Pre-post tests	points	%
Experimental group	3,93	11,98%
Non-experimental group	1,36	4,18%

Eighty-seven percent (87%) of students of the intervention group increased their pre-listening test grade in comparison to the post listening test. The mean of the intervention group (36.78%) was just a little higher than the mean of the control group. (33.80%).

T-Test

To analyze the first hypothesis a T-test by Levene was performed using the SPSS statistic program. "The t-test evaluates if the means of two groups are statistically different from each other." (Cresswell, 2012). This analysis is appropriate when researchers need to compare the means of two groups, especially in the analysis for the post-test only two-group randomized experimental design. The dependent variable is the listening comprehension

level of proficiency that is measured by the listening section of an EF international exam. The independent variable is the way that the sample was divided into control group who did not receive a metacognitive listening instruction and an intervention group who received a metacognitive listening instruction.

Table 3

Levene T-test analysis for EF Post-Listening Test grades of non-experimental and experimental group

		Prueba de Levene para la igualdad de varianzas		Prueba T para la igualdad de medias						
									95% Intervalo de confianza para la diferencia	
		F	Sig.	T	Gl	Sig. (bilateral)	Diferencia de medias	Error típ. de la diferencia	Inferior	Superior
Calificacion	Se han asumido varianzas iguales	,112	,739	-2,017	88	,047	-2,97778	1,47658	-5,91217	-,04338
	No se han asumido varianzas			-2,017	86,847	,047	-2,97778	1,47658	-5,91272	-,04284

	iguales								

After applying this Levene T-test, a Welch Two Sample T-test was applied getting an F=2.01 and P=0.046. Welch's t-test is a two-sample location test which is used to test the hypothesis that two populations have equal means. Welch's t-test is an adaptation of Student's t-test that is, it has been derived with the help of Student's t-test and is more reliable when the two samples have unequal variances and unequal sample sizes. (Creswell, 2012)

Table 4

Welch Two Sample T-test analysis for EF Post-Listening Test grades of control and experimental group

Data Summary

	A	B	Total
n	45	45	90
ΣX	1521	1655	3176
ΣX^2	53817	62777	116594
SS	2407.2	1909.7778	4516.4889
mean	33.8	36.7778	35.2889

Results

$Mean_a$—$Mean_b$	t	df	P		
-2.9778	-2.02	88	P	one-tailed	0.0232125
				two-tailed	0.046425

For independent samples, these results pertain to the "usual" t-test, which assumes that the two samples have equal variances.

F-Test for the Significance of the Difference between the Variances of the Two Samples

df_1	df_2	F	P
44	44	1.26	0.223231

[Applicable only to independent samples.]
P>.05 indicates no significant difference detected between the variances of the two samples.

t-Test Assuming Unequal Sample Variances
[Applicable only to independent samples.]

$Mean_a$—$Mean_b$	t	df	P		
-2.9778	-2.02	86.85	P	one-tailed	0.023407
				two-tailed	0.046814

Second research question:

Are there differences resulting from a metacognitive listening instruction in listening comprehension level of proficiency between less-skilled learners and more-skilled learners of the experimental group of EFL A2 students of a public university. This research question can be expressed in terms of hypothesis.

The Null hypothesis is that there are no differences resulting from a metacognitive listening instruction in listening comprehension level of proficiency between less-skilled learners and more-skilled learners of the experimental group of EFL A2 students of a public university. The Alternative hypothesis is that there are differences resulting from a metacognitive listening instruction in listening comprehension level of proficiency between less-skilled learners and more-skilled learners of the experimental group of EFL A2 students of a public university.

The dependent variable is the listening comprehension level of proficiency that is measured by the listening section of an EF international exam. The independent variable is the way that the intervention group was divided into less-skilled learners and more-skilled learners. To analyze the second hypothesis a T-test was performed using the SPSS. This test is a method that compares two or more means (the means of lower scored listening students and higher scored listening students of the experimental group).

Table 5

EF Pre-Post Listening Test grade means less-skilled learners and more-skilled learners of the experimental group.

Ef listening test	Pre-test		Post-test	
Experimental group	Less-skilled	More-skilled	Less-skilled	More-skilled
	27,75	41,24	35,64	38,65

Table 6

EF Pre-Post Listening Test grade means difference less-skilled learners and more-skilled listening students of the experimental group.

Experimental group	points	%
Less-skilled	7,89	28,44%
More-skilled	-2,59	-6,28%

One hundred percent (100%) of less-skilled learners of the intervention group increased their pre-listening test grade in comparison to the post listening test. It is seen that less- skilled learners increased their grades in 28.44% when comparing the pre-and post-test. On the other hand, more-skilled learners decrease their grades in 6% comparing the pre-and post-test.

Table 7

EF Post-Listening Test grade means of less-skilled learners and more-skilled learners of the experimental group

	cod_estud	N	Mean	Desviación típ.	Error típ. de la media
	1	17	41.24	6.250	1.516

Pre-test grade	2	28	27.75	2.661	.503
Post-test grade	1	17	38.65	5.678	1.377
	2	28	35.64	6.935	1.311

Table 8

T-test analysis for EF Post-Listening Test grade means of less-skilled learners and more-skilled learners of the experimental group

		Prueba de Levene para la igualdad de varianzas		Prueba T para la igualdad de medias						
								Error típ. de la diferencia	95% Intervalo de confianza para la diferencia	
		F	Sig.	T	gl	Sig. (bilateral)	Diferencia de medias		Inferior	Superior
Grupo2	Se han asumido varianzas iguales	1,040	,313	-1,504	43	,140	-3,00420	1,99721	-7,03197	1,02356
	No se han asumido varianzas iguales			-1,580	39,099	,122	-3,00420	1,90109	-6,84920	,84080

After applying this Levene T-test, a Welch Two Sample T-test was applied getting a P=0.68 for more-skilled learners of the experiment (see Table 6a) and P= 0.00013 for less skilled-skilled learners. (see Table 6b).

Table 9

Welch Two Sample T-test for EF Listening Test grade means of more-skilled learners of the experimental group

Data Summary

	A	B	Total
n	22	22	44
ΣX	839	858	1697
ΣX^2	33219	34094	67313
SS	1222.5909	632	1862.7955
mean	38.1364	39	38.5682

Results

$Mean_a$—$Mean_b$	t	df	P		
-0.8636	-0.41	21	P	one-tailed	0.342979
				two-tailed	0.685958

For independent samples, these results pertain to the "usual" t-test, which assumes that the two samples have equal variances.

F-Test for the Significance of the Difference between the Variances of the Two Samples

df_1	df_2	F	P
---	---	---	not applicable

[Applicable only to independent samples.]
P>.05 indicates no significant difference detected between the variances of the two samples.

Table 10

Welch Two Sample T-test for EF Listening Test grade means of less - skilled learners and more-skilled learners of the experimental group

Data Summary

	A	B	Total
n	23	23	46
ΣX	639	797	1436
ΣX^2	18065	28683	46748
SS	311.913	1065.2174	1919.8261
mean	27.7826	34.6522	31.2174

Results

$Mean_a - Mean_b$	t	df	P		
-6.8696	-4.6	22	P	one-tailed	<.0001
				two-tailed	0.000139

For independent samples, these results pertain to the "usual" t-test, which assumes that the two samples have equal variances.

F-Test for the Significance of the Difference between the Variances of the Two Samples

df_1	df_2	F	P
---	---	---	not applicable

[Applicable only to independent samples.]
P>.05 indicates no significant difference detected between the variances of the two samples.

t-Test Assuming Unequal Sample Variances
[Applicable only to independent samples.]

$Mean_a - Mean_b$	t	df	P		
---	---	---	P	one-tailed	not applicable
				two-tailed	not applicable

Third research question

What are EFL A2 learners' perceptions of an experimental group towards the use of a metacognitive listening instruction to listening comprehension level and listening metacognitive awareness? The researchers show the detailed data from MALQ questionnaire and interviews, which constitute the qualitative results of the study.

MALQ Questionnaire

Table 11

MALQ questionnaire results

	Before interventions		During interventions		After interventions	
MALQ (POINTS)	Experimental	Control	Experimental	Control	Experimental	Control
	74,65	76,97	78,26	77,57	81,50	78,78

Table 11 shows the results of the experimental and control group before, during, and after the interventions. The raw results of data can be seen in Appendix I.

Table 12

MALQ questionnaire results difference in percentages in three different phases

MALQ	pre-during		during-post		pre-post	
	Points	%	Points	%	points	%
Experimental	3,61	4,8%	3,23	4,1%	6,84	9,2%
Control	0,60	0,8%	1,22	1,6%	1,82	2,4%

The authors observed how the experimental group has an increase of 9% related to their perceptions on the use of strategies when engaged in listening tasks

Also, the researchers observed that Planning (32%), Personal knowledge (27%) and directed attention (19%) are the metacognitive factors related to the use of strategies when engaged in listening tasks that learners perceived as most developed.

Table 13

MALQ questionnaire results per each factor

MALQ	Pre-intervention	During-intervention	Post-intervention
Planning	3,67	3,91	4,18
Attention	3,76	4,03	4,05
Personal Knowledge	2,61	2,91	3,04
Problem solving	4,12	4,14	4,33
Translation	2,91	2,99	3,04

Table 14

MALQ questionnaire difference results per each factor in percentage

MALQ	pre-during		during-post		pre-post	
	Points	%	points	%	Points	%
Planning	0,24	26,5%	0,27	40,2%	0,51	32,3%

Attention	0,27	29,5%	0,02	3,2%	0,29	18,5%
Personal Knowledge	0,30	33,1%	0,13	19,5%	0,43	27,3%
Problem solving	0,03	3,2%	0,19	28,1%	0,22	13,7%
Translation	0,07	7,9%	0,06	8,7%	0,13	8,2%

Some closed questions of the interview will give a numerical idea about learner's perceptions toward the use of a metacognitive listening instruction to listening comprehension level. All the interviews were transcribed.

In the next figures, we will see that most of the students gave positive feedback and just a few of them felt this metacognitive listening instruction did not affect positively on their listening comprehension level.

Table 15 shows the results of the coding of the information of all participants' interview present seven labels. Each label has more than two categories. All the codes of each category can be seen in Appendix J.

Table 15. *Coding of interviews*

LABELS	**CATEGORIES**
Planning	Previous knowledge grammar
	Previous knowledge vocabulary
	Previous knowledge content-topic
	Prediction

Evaluation	Peer- evaluation
	Self –evaluation during and after the listening text
Attention	Concentration on the whole text
	Eliminate distractor
	Physical position
Problem-solving	Use the known words to understand the unknown words
	Guess the general idea through known words
	Use my experience and knowledge to understand the text
Translation	Translation when listening
	Translation at beginner levels
Personal knowledge	Anxiety-nervousness
	Frustration
	Interest in practice listening more at home

Interest in practice listening in the classroom

Perception of the audio material

Motivation

Confidence

Knowing Weaknesses

Knowing Strengths

Analysis

In this chapter, the researchers discuss the analysis of findings presented in the previous chapter, focusing on those aspects that directed deal with the questions of this research study.

First research question

Most of the students (87%) of the intervention group increase their pre-listening test grade in comparison to the post listening test one. Using the T-test statistical analysis with SPSS to prove the first hypothesis, the researchers observed a result of F= 2.992 and P=0.07. Confidence Interval of the difference is 95%, and that is why P needs to be less than 0.005 to reject H0. As P was higher than 0.05, then the hypothesis H0 was accepted concluding that there is not a remarkable difference resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group.

Based on this premise, researchers decided to apply the Welch test as the variances were similar. As getting a P=0.04, the alternative hypothesis was accepted having the conclusion that are differences resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group of EFL A2 students of a public University.

The second research question

After using the T-test statistical analysis with SPSS to prove the second hypothesis, the researchers observed the following results: F= 1.040 and P= 0.313. Confidence Interval of the Difference is 95% and therefore, P needs to be lower than 0.05. As P is higher than 0.05, then the null hypothesis was accepted concluding that there is not a remarkable difference resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of lower and high listening scored students.

Researchers decided to apply the Welch test as the variances were similar. After applying this Levene T-test, a Welch Two Sample T-test and getting a P=0.68 for more-skilled learners of the experiment (see Table 6a) and P= 0.00013 for less skilled-skilled learners. (see Table 6b), the authors saw that the effect of metacognition in less-skilled learners was higher than in more-skilled learners, So, alternative hypothesis was accepted having the conclusion that are differences resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group of EFL A2 students of a public University.

Justifications for first and second hypothesis

The authors claim that the results cannot be generalized because of the limited number of students and intervention sessions.

A possible reason for not having a huge difference resulting from a metacognitive listening instruction in the listening comprehension level of proficiency of the control group and experimental group of the participants

might be the number of hours of the metacognitive instruction. Some learners commented about the time of the research as is seen in the followed comments: "This training must be done in the whole semester in order to see an evolution of the listening comprehension". "I think, that we have to practice this exercises in the whole semester" "I am more interested in continue practicing every week".

Another reason could be related to the background of the students since most of them do not come from schools with good English language programs and it is difficult to assert they received a well prepared metacognitive instruction.

Vandergrift and Tafaghodtari (2010) state there is a statistically significant relationship between student response on MALQ and L2 listening comprehension success so EF Test results and MALQ results of the experimental group can be compared. It was seen that for the experimental group, the general averages of listening comprehension grades of EF listening post tests and Metacognitive Awareness Listening Questionnaires increased in the same percentage (9%) and (11%), it cannot be stated that the metacognitive instruction was completely successful in terms of listening performance. In the next part of this document, we will show the perceptions of some of the participants of the experimental group related to the effects on this metacognitive listening instruction to their listening comprehension level and listening metacognitive awareness.

The third research question

The authors observed in the experimental group that the results of the previous MALQ questionnaire increased significantly more (11%) than the one taken at the end of the instruction in comparison to the control group. This result is connected to the interview results which shows that 96% of students think they are more aware of their listening process. Students said: *"Now I am more aware how I learn; positive things and that I need to keep listening as much as possible"." I am more aware of how to listen, I have fewer mistakes in listening practices "."The training taught me how to listen and how to correct my own mistakes" "Now I have more techniques to understand, is like I know where I am stood and what to do"*

Students' perceptions on the use of strategies seem to show how the experimental group has a positive perception on increasing the use of metacognitive listening strategies and listening development. Since MALQ has a direct relation with listening performance, the researchers compared the previous data information with the positive effects of the metacognitive instruction shown in interviewees´ answers. Participants gave relevant opinions and beliefs about the effect of metacognitive instruction on their listening performance:

"I think that I have improved my listening because I understand a lot more words when I listen the audios". "This training has helped me since now I can know what I need to improve understand the oral texts". "I have improved because the teacher dedicated more time for practicing and teaching

listening. Practice is the clue.". "The training taught me how to listen and how to correct my own mistakes". "Now I can listen and do not get so confused,". "Now I have more techniques to understand, is like I know where I am stood and what to do.". "Now I can understand a little bit more songs, dialogues, audios, etc.". "I was pushed to listen.". "I have fewer mistakes in listening practices". "The training helped me to develop some structural steps to understand what I am listening". "I did understand a little more… in the first and second week, I understood almost never, but in the last one I did better".

The authors observe in MALQ results that Planning (32%), Personal knowledge (27%) and directed attention (19%) are the metacognitive factors related to the use of strategies when engaged in listening tasks that learners perceived as the most developed ones. These results perfectly match with what participants said in their personal interviews:

About Planning: *"I have realized the most important thing is to know vocabulary, grammar and ideas about what I will listen so then I can understand". "The most important thing to be in order to understand English is grammar". "I did not have problems when writing during the listening tasks because we learnt that vocabulary in the whole unit", "Previous information helps me to understand better the listening". "Prediction makes me feel more interested in the audio. "With they give topic in each session I could have an idea about what I was going to do, I have an image in my mind about what is possible going to be said, Predicting is what I like the most. I write what I think I will listen".*

About evaluation: *"Now, I know a little bit more about my listening process. In the first listening I get as many ideas as possible, then I reflect about what I listened and have a conclusion how can I improve and do it, when I self-evaluate I can see what are my negative and positive things and have a plan to solve the problem". "Self-evaluation is my trick because I write all what I listen and then I self-correct my mistakes in the second and third listening".*

Self-evaluation: *"It helps me check my strengths and weaknesses". "It helps me control myself, while analyzing I was learning how to do a better listening"." Evaluating my person, motivates me to keep learning". "This is something that I didn't use to do and now I do it while listening, I can correct my own mistakes, I could check mistakes, difficulties and sometimes how to improve them". "It is a great idea when in groups we discussed about how we did the listening, mistakes, possible answers for the next chance of listening", "I can check with my friend and share ideas of how to do it better". "Comparing and completing answers with friends and then check what we did wrong was interesting". "This training was good because the whole class joined to give suggestions how to improve.*

About Personal Knowledge: *This result was also matched with the 76% of students who did increase their confidence and 75% of participants who said they are more motivated in learning listening. Learners reported the following: "At the beginning of the training I felt anxious and impatient and after learning a little", " I could relax myself ", "At the beginning I felt afraid because I know how to write, read, etc. but listening is so difficult to me," "One thing is to read*

in English, another is to listen", "I felt so frustrated because I didn't not understand anything but now I am a little relieved because I know when I know more vocabulary I will understand", "Now I am interested in listening to music at home… videos at home… movies with and without subtitles", "During each training I noticed that I didn't know the pronunciation of some words, so I took my time to practice that, I felt enthusiastic in keep learning and also reflecting about my listening process", "I feel more confident when I listen and I understand", "After these listening classes I feel a little more confident because now I know how to face in listening, this is something that did not happen to me at high school".

About Directed Attention: *"It is important to be concentrated in order not to lose the dialogue.". "This is the most important strategy because you must have to be concentrated in listening without thinking or listening another thing different from the text". "No digress". "Do not stop listening just be concentrated in order to understand everything". "Concentrating let me understand complete ideas instead of single words". "Concentration is a decision, I can get easily concentrated, and however I can easily get concentrated". "I can easily miss the focus, too.". "I realized that when I lose concentration, I lose the idea of the whole listening as if I hadn't heard anything before". "When I concentrate I can pay more attention to the words I listen and I can understand them."*

Conclusions

A summary of the findings and relationship to the questions

The authors found important to conduct this study since listening comprehension is the least studied and researched language skill, probably due to its complicated nature. On the other hand, this university is starting a flipped classroom approach next 2017 in which learners will need to be as autonomous as possible to read and listen to videos that instructors will assign as homework.

Researchers have mentioned that the methodology normally used as instruction for the listening skill has been limited to grading or testing, instead of training the students in listening comprehension. Vandergrift et al. (2012) have suggested that instructors must train learners in the use of metacognitive strategies during their foreign language learning process. This concern encouraged us to choose the object of study of the present research.

The study pursued to answer three research questions. The first two research questions belong to a research study and the third one to a qualitative study.

To offer answers to these questions, the researchers designed an action research study which involved a metacognitive instruction intervention carried out with an experimental group following Vandergrift and Goh's proposals (2012). The non-experimental group of students received no instruction on the use of metacognitive strategies and they went to their regular classes. The

authors chose this action research 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 detailed that the experimental group and control group increased the average score. Both mean variations were very modest: the experimental group rose by 3.93 points and the control group 1.36 points. This moderate success of the experimental group could preliminary show that the intervention was effective. On the other hand, the analysis shows that more-skilled learners decreased their grades in the EF post listening test compared to the EF pre-listening test. It is an interesting issue that deserves a future research since there might be different reasons such as demotivation, projects in other subjects to be developed at the end of the semester, time pressure for finishing the test, lack of interest in getting a good scored in the post-test, boredom among other possible reasons.

Concerning the difference between the results of pre- and post-Metacognitive Awareness Listening Questionnaires, researchers identify that both groups increased their mean scores: the experimental group increased its mean score by 9 points, while the control group increased its mean score by 2 points. When considering the mean increase of each of the five subscales separately, the authors notice that the experimental group experienced an improvement in three out of five metacognitive strategies taught during the intervention: planning and evaluation, directed attention, and person

knowledge. Since more strategies increased in the experimental group, it could preliminary show that the intervention was slightly effective.

Furthermore, regarding quantitative terms, the metacognitive instruction also had a slightly positive statistical effect which was proved by the Welch Two Sample T-test.

Concerning qualitative terms, it seems that the metacognitive instruction had positive effects on participants. The chapter on results indicates that more than 90% of participants felt more confident, motivated, interested in learning listening in and outside the classroom (intrinsic motivation).

Getting this kind of motivation is sometimes difficult to get from our students and that it has an invaluable weight for researchers. In relation to this, participants reported: "*I feel curiosity for learning how to listen and I want to learn new vocabulary*". "*Feel good because of my improvement*". "*I want to learn more when I understand*". "*I felt enthusiastic in keep learning and also reflecting about my listening process.*". "*When I do auto-evaluation I feel more motivated.*"

The study also reveals that participants perceived that now they know at least something about their listening process, steps for listening, some tricks, weaknesses that need to be improved. As researchers, we conclude that these elements are the first steps to learn autonomously especially on listening skill, one of the most useful and at the same time, hardest skill to acquire.

There were some elements that researchers consider clues in metacognitive instruction of this study:

- The combination of collaborative work as seen in Vandergrift et al (2012) and peer evaluation. These two elements seemed to help participants in their listening process. Some participants mentioned that: "The training was good because the whole class worked together to give suggestions how to improve. "It is a great idea when in groups we discussed how we did the listening, mistakes, possible answers for the next chance of listening"
- Prediction and previous knowledge activation before the listening tasks seem to be one of the most important factors of metacognition that helped the experimental group in their listening process. Participants realized how all the grammar, vocabulary, expressions, pronunciation teaching, the topic, given before the listening tasks help them have a better listening understanding. Participants are more conscious about the importance of paying more attention to these sub-skills when teachers explain or make them practice in the classroom.

The researchers also conclude that even though the audios chosen to use in the study were taken from the English Unlimited textbooks instead of choosing videos from YouTube, it seems that learners are used to work with worksheets that present exercises such as true false, multiple choice, or gap-filling questions. Moreover, these listening activities are accompanied by pictures that help learners have an idea what the text is about. It would be

interesting that teachers feel encouraged to use this Metacognitive Instruction worksheet. (Appendix G)

Finally, from the methodological point of view, the findings of the present study stress the value of a mix-method research design such as that recommended by Davis (1995) in the investigation of the chiefly covert processes underlying L2 listening comprehension. Each of the instruments that the authors used in this study contributed to provide deeper understanding for the research questions of interest.

Limitations of the study.

Two aspects of this study limited the study's procedure and results. Firstly, the reduced number of participants at the end of the study. This learner's mortality was an unexpected situation taking into account that the experimental and non-experimental groups were initially constituted by 64 and 84 students respectively. Secondly, the short duration of the intervention period of the research study.

The results of our study are similar to the ones obtained from other small scale studies in regarding the number of participants (Goh & Taib, 2006; Bozorgian & Fakhri, 2013), in which the rate of success was equally moderate. More successful studies (Li, 2013; Fahim & Fakhri, 2014) normally had a larger sample of participants, commonly over a hundred. The duration of these studies varied from four listening lessons to a full academic semester (Bozorgian, 2012; Al- Alwan, Asassfeh, & Al-Shboul, 2013), making the number

of participants a more relevant variable. We can infer that a greater number of participants is critical when trying to get generalizable results.

Future directions and further areas for research

Taking previously detailed limitations into account, some suggestions for further research can be followed. First, the sample size should be larger, as this prevents the participant's mortality being an issue. Also, a large sample allows for generalizable results and different descriptive statistical procedures, such as calculation of correlation coefficients between variables and tests of significant variation between groups. Furthermore, it is recommended to repeat the action research study next semester but now with a period of minimum 14 weeks (28 hours) to get a higher difference between a future experimental and control group in the grades of listening performance that allows accepting a hypothesis. Furthermore, it is suggested to repeat this action research in two consecutive semesters to triangulate the information of both semesters' results and have significant results when applying the T-test analysis.

Researchers suggest offering enough time for practicing the previously mentioned sub-skills as grammar, vocabulary, pronunciation before the metacognitive listening instruction. This practice must be done not also in the classroom since there is not enough time but also outside the classroom sending students engaging material for practicing them at home through video explanations of grammar for beginners, online and interactive pronunciation and vocabulary tasks.

Researchers also suggest to this Institution to give more attention to the audios of the text since most of the participants commented that the videos should not be so fast and that background noise did not allow them to listen properly. Some of them want to have videos when doing listening tasks. That is why the researchers suggested that some oral texts might be elaborated by the same teachers of this Language Center to allow students of these classes to understand the audios or videos by increasing their motivation.

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