



BENEMÉRITA UNIVERSIDAD AUTÓNOMA DE PUEBLA

FACULTAD DE LENGUAS

**TEACHING LISTENING METACOGNITIVE STRATEGIES
IN AN EFL HIGH SCHOOL CLASS: AN ACADEMIC
INTERVENTION**

**A THESIS SUBMITTED TO THE SCHOOL OF LANGUAGES
FOR THE DEGREE OF:**

LICENCIATURA EN LA ENSEÑANZA DEL INGLÉS

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Puebla, Pue.

October, 2018

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CLASS: AN ACADEMIC INTERVENTION

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ACKNOWLEDGMENTS

I would like to express my very great appreciation to my thesis director María Teresa Fátima Encinas Prudencio for all her valuable advice and patience since the beginning of this study until the end of it. I also appreciate all the time that teacher Georgina Aguilar González and teacher Yonatan Puón Castro spent to help me to improve my project.

I would also want to thank to my family and friends who have been supporting me throughout all this process. Especially to my mom, who has been a great source of inspiration, showing me that there is always a reward after working hard. Especial thanks to my friends Citlally, Sury and Uriel, who have been by my side cheering me up and have let me grow with them.

Many thanks to the institution, Benemérita Universidad Autónoma de Puebla, for letting me have been part of it. Especially to all the teachers that were part of my academic formation, I really appreciate you have shared your knowledge with me.

ABSTRACT

Metacognitive awareness helps students raise their awareness about their thinking processes. This could be helpful when learning a new language because students can use their knowledge about their learning processes to improve their skills. This study is an academic intervention focused on the high school student's awareness of metacognitive strategies to improve their listening comprehension. In order to explore students' awareness of their listening metacognitive strategies an adaptation of the Metacognitive Awareness Listening Questionnaire (MALQ) was applied before and after the intervention. Although results were not what expected, they demonstrate how factors such as time, age and motivation can have a great impact on understanding our own learning.

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CHAPTER ONE: INTRODUCTION

1.0 Introduction

Metacognition involves thinking processes that help the understanding, analysis and control of one's learning processes. Flavell (cited in Garza and Leventhal, 2000) and Wilson (2017) agree that metacognition is the procedure in which learners are aware of their own cognitive processes, the steps that help them to achieve a goal.

Today, it is very common to hear that education systems expect students to be more responsible for their own learning. In other words, they want students to be autonomous. One way of achieving this is the implementation of the use of metacognitive strategies in the classroom. Wenden (as cited in Öz, 2005, p.150) explains, "Metacognitive strategies are general skills through which learners manage, direct and guide their learning."

By using metacognitive strategies students analyze how they learn so that teachers do not have to tell them what to think or what to learn. Metacognitive strategies can also be a tool to promote critical thinking and could help students to create meaningful learning.

The question then is how we teach metacognitive strategies. In my experience with high school students who had a psychology class in which they studied metacognition; I noticed they rarely used what they had learnt in their English class.

Therefore, this intervention attempts to explore how the use of metacognitive strategies could enhance students' listening comprehension. Listening comprehension can be one of the most difficult skills when learning a foreign language. According to Aguilera, Illesca, Montecinos, Sandoval, Navarro and Whipple (2016, p.11), listening comprehension has been taught through activities that show a product, instead of activities that help students to think in the process that they followed to achieve the product.

1.1 Why am I researching this?

As mentioned above, in one of my ELT undergraduate classes I worked with high school students. Even though listening is a highly used skill with which these students were constantly in contact, they seemed to have problems understanding oral English. Probably the problem began in the classroom because most teachers asked students to look for specific information in a text, but students were not guided to know how they could get the information.

The main purpose of this study, then, is to investigate how to teach metacognitive strategies in an EFL high school classroom.

1.2 Significance of the study

There is research that indicates that the use of metacognitive strategies can help students to learn a foreign language (Anderson, 2002; Vandergrift and Goh, 2012; Li, 2013). This study is important in education, mainly because it could help EFL teachers to understand how to teach students to use of metacognitive strategies in their classes.

1.3 Context of research

Anderson (2002) states, “the teaching of metacognitive skills is a valuable use of instructional time for a second language teacher. When learners reflect upon their learning strategies, they become better prepared to make conscious about what they can do to improve their learning. Strong metacognitive skills empower second language learners”.

Other researchers, Raoofi, Chan, Makundan and Malaysia (2014, p. 44) concluded, “[...] metacognitive training helped learners to achieve improvements in their language performance. Second, evidence from interventions studies also indicates that metacognitive

instruction can enhance language learners' metacognitive knowledge/strategy usage [...]"

The Inclusive Schools Network affirms "metacognitive strategies refers to methods used to help students understand the way they learn; in other words, it means processes designed for students to 'think' about their 'thinking'" (Metacognitive Strategies, 2017).

Therefore, these studies state that promoting the use of metacognitive strategies in a FL class is beneficial for students and teachers. With the help of these strategies, students become more independent, creative and more responsible of their own learning. Students who use metacognitive strategies in their daily life will have less problems when learning something new. Teachers will also benefit because they will not need to tell their students, and will not need to tell students what to do all the time.

1.4 Background of the researcher

During my social service in a public high school I realized students struggled learning English. Although the language content was not new, they kept making a lot of mistakes. This was concerning because high school students have a psychology class, where they learnt about metacognitive strategies and how to apply them in their classes. Unfortunately, as I realized in the time I was doing my social service in a BUAP high school, students did not pay much attention to their English classes because they thought they were not as important as their other subjects.

1.5 Location

This study will take place in a public high school from the state of Puebla, Mexico.

1.6 Research aims and objectives

- To explore how to promote metacognitive strategies to high school students.
- To study if the students' awareness of metacognitive strategies had an impact on their listening comprehension.

1.7 Research questions

This study aims to answer the following questions:

- What metacognitive strategies did EFL high school students use before the intervention?
- What metacognitive strategies did EFL high school students use after the intervention?

1.8 Summary

To summarize, this chapter gives the reader an overview about this research project. It is seen that the main purpose for doing this study is to know if the implementation of metacognitive strategies in a EFL class is effective to learn English better. Although other researchers have said that they are, it is really important to apply these conclusions in a public Mexican high school context.

This research project is divided into five chapters. The first one, as seen above, is an introduction of all the study. The second chapter is the literature review, where theories from different authors and resources are discussed. Then, the third chapter is the methodology; which explains how the data was gathered and how it was analyzed. Fourth chapter is called findings. This chapter presents the results the author gets from applying the methodology. Finally, the fifth chapter is about the conclusions. In this chapter the author has to take into

consideration all the theories mentioned in the second chapter but also the findings gotten; in that way, the author can draw his own conclusions.

CHAPTER TWO: LITERATURE REVIEW

There are four main skills that a learner must develop to become into a complete user of the language. These skills are divided in two categories, the receptive and the productive. The productive ones are writing and speaking; meanwhile in receptive ones are reading and listening. The mastery of all of these is what helps a learner to become a complete user of the language.

This study is mainly focused in the receptive skill of listening. So, this chapter discusses what listening comprehension is, the process of this skill, its importance, strategies that learners can use to improve their listening comprehension as well as the combination of metacognition with the listening process.

2.1 Listening comprehension

The simple act of paying attention to sound is called “hearing” and “listening comprehension”; it is the act of understanding spoken language. The listening skill is defined, then, as the process by which the language user decodes auditory input (Poelmans, 2003, p.9).

Listening is quite significant for language learners because often it is the skill they are most in contact, especially in the case of teenage learners. This generation tends to listen to songs, watch series and/or movies most part of the week, even daily. In class, they generally listen to instructions in English and teachers often bring listening tasks to class. Wolvin and Coakley (as cited in Bilog, Celik, Yildiz and Mart, 2014, p.1) explain that “listening takes part in more of daily communication than other forms of oral communication inside and outside the classroom.”

Vandergrift and Goh (2012) mention that this skill enables learners to receive and interact with language input and at the same time it promotes the emergence of the other language skills. Learning a new language involves improving comprehension and production skills, such as speaking, writing, reading and listening. In addition learners acquire vocabulary and new grammar rules. Developing all skills is important, but listening, according to Vandergrit and Goh (2012) is the one that facilitates the learning of a new language because without listeting, speaking is not possible, but if someone develops a high speaking proficiency he could be able to improve reading and being able to read enables to write.

Listening involves more than understanding words. That is, understanding a complete message means that people have to consider the context, the tone, and the attitude of the other person or people talking as a complement of the words they are saying.

2.1.1 The top-down and bottom up processes

Listening comprehension in foreign language could mean the most difficult skill to master for some learners. However, it should not be that difficult if they have a good guidance in the process of understanding. There are two processes that a person may follow when listening, although sometimes people just follow one and leave out the other, or even in some schools, teachers are focused on preparing activities that are centered on one of these processes instead of combining both.

The Top – down process is related to understand the general part of a listening text. As Tennant (2017) states, this focuses on the ‘big’ picture of a listening content. It is when learners are given the general topic, in that manner they can start thinking about what they know about that matter, so they can suppose about what the text is going to be and maybe they remember some vocabulary commonly used in that topic. “If students keep in mind this

knowledge while they listen, they increase their opportunities to make sense of the information they find in the listening material” (Gayian, n.d.)

The bottom – up process is the opposite of the one above. It “focuses on listening for details and involves tasks that focus on understanding a sound or a word level” (Tennant, 2017). According to the article “Listening: Top down and bottom up” (2007) this process is directed to help the learners to understand better the linguistics of the language.

It seems that Foreign Language learners in the first stages of language learning use more the bottom – up strategy. Tanner (2017) explains that it is because they focus a lot on understanding every single word, but that could be harmful for students because it could lead them to feel demotivated or frustrated with language since it is almost impossible that they get all the words they hear, especially if they have a low domain of the language. Thus, learners who want to improve their listening comprehension should work with both strategies collectively, so they do not only acquire new vocabulary but they know when to use it.

2.1.2 Listening instruction

It is unavoidable that things change through the years, and teaching is not the exception. English as a Foreign Language has changed greatly, and nowadays instead of being totally concerned about grammar, people are more focused on being communicative. And to become communicative competent learners need to develop the four main skills of a language, one of which is listening comprehension.

During the evolution of listening comprehension teaching, it can be found three types of instruction, which have changed the way of learning and teaching listening comprehension. These three alternatives to teach listening include: Text – Oriented Instruction (TOI), Communication – Oriented Instruction (COI) and Learner – Oriented Instruction (LOI).

Text – Oriented Instruction (TOI) was influenced by the pedagogy of 1950 and 1960. Vandergrift and Goh (2012, p. 6) mention that this type of instruction was emphasized on decoding skills, imitation and memorization of sound grammar patterns. Unfortunately, many teachers, and also textbooks continue using this instruction, in which students are asked to select their answers from some given options instead of writing their own answers. TOI tests students' comprehension rather than teaching how to listen.

In 1970 the Council of Europe set out a model of the communicative needs of the archetypal adult Foreign Language (FL) learner and the **Communication – Oriented Instruction (COI)** was created (Vandergrift & Goh, 2012, p. 8). Listening was presented as a complex set of skills and micro-skills and looking for certain grammar patterns or memorizing was not as important as before. The focus was on helping students to communicate. Authentic materials were implemented in FL classes and also the pre-listening activities were introduced. The last ones helped students to have certain background knowledge about the listening text.

Learner – Oriented Instruction (LOI) comes closest to teaching students how to listen (Vandergrift & Goh, 2012, p.10). By using this type of instruction, teachers need to scaffold listening practice considering metacognitive strategies, which help students to learn how instead of what to listen.

Teaching students first a method that helps them to know how to comprehend what they listen could allow them later to answer better those activities that test their comprehension, and also they can make students communicate better.

2.2 Metacognition

Before talking about metacognitive strategies, the concept of metacognition has to be defined. Metacognition refers to the reflection that people do about their thinking process. Flavell (cited in Garza and Leventhal, 2000) describes metacognition as “our own knowledge concerning our own cognitive processes or anything related to them” (p.122). Furthermore, in her blog, Wilson (2017) explains, “Metacognition is the ability to think about your own thoughts with the aim of improving learning.”

Both authors have a similar definition; metacognition is the process in which people must be aware of how their own thinking and learning work. They also have to be conscious about what their strengths and weaknesses when solving a problem are.

Flavell (cited in Boghian, 2016) classified metacognition into three components: The first component is **metacognitive knowledge or metacognitive awareness**, this component refers to the knowledge that people have about them. It is divided into three categories:

Person knowledge, Schneider (cited in Boghian, 2016) argues that it is “knowledge about the factors that may influence one’s performance as a learner”. It is also the correspondence between one’s knowledge and other people awareness.

Task knowledge, one’s perception of the difficulty of a task. Flavell (as cited in Díaz & Hernández, 2002, p.245) divides this category into two subcategories, which are 1. the relation between previous knowledge and the information that the task provides; and 2. knowledge about the requirements of the task.

Strategic knowledge, this is when a person is able to apply certain cognitive strategies that he /she knows to get a goal, as acquire new information.

The second component is **metacognitive experiences**, as Díaz and Hernández (2002) suggest, not all experiences are metacognitive, these are only considered metacognitive when they are related with a cognitive endeavor. For instance, when something

is hard to learn or understand.

And the third component is **metacognitive regulation**, revision of cognition and learning experiences through a series of steps in order to control one's learning process. In this component more than one opinion about the different activities is found or steps that metacognitive regulation requires. The set of these steps is also known as metacognitive strategies. In Table 1, it is easier to find the authors who have different perspectives about the series of steps that the process of thinking about thinking involves.

Table 1. Metacognitive Regulation Steps

Brown (1978) (cited in Hernández, 1996, p.395)	Anderson (2002, pp.3-4)	Schraw (1998); Jacobs and Paris (1987) (cited in Boghian, 2016)
1. Observe. Analysis and characterization of problems. 2. Judge. Reflection about what is known or unknown and can help to solve the task or problem. 3. Act. Make a plan to solve the problem. 4. Review. Evaluate the process and correct if necessary.	1. Preparing and planning for learning. Students think on their goal and make a plan to accomplish it. 2. Selecting and using learning strategies. Students have the option to select strategies that help them in their learning process. 3. Monitoring strategy use. Now, students decide if the strategies they selected continue working or if they need to change or remove them. 4. Orchestrating various strategies. Coordination, organization and association among different strategies. 5. Evaluating use and learning. Integration of all previous aspects answering the following questions; what am I trying to accomplish?, what	1. Planning. Select strategies and distribution of resources to carry out the performance. 2. Monitoring. Being aware of one's comprehension and task performance. 3. Evaluating. Assessing the product of a task and the efficiency of the strategies used.

	strategies am I using?, how well am I using them?, what else could I do?	
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Despite of the fact that there are different opinions about what metacognitive regulation steps are, Brown (1978) and Anderson's (2002) steps can be included in Schraw (1998) and, Jacob and Paris (1987) suggestion. In other words, Anderson (2002) discusses more steps because they are more specific, so they can be used for those students that are beginners in metacognition. In contrast, planning, monitoring and evaluating can be used for those who have more experience working in the field of metacognition because they have a wide idea of what this process implies, and it is easier for them to know what to do in each step.

The set of these steps is called metacognitive strategies. This research project used the three steps that Schraw (1998), and Jacob and Paris (1978) proposed, which are *planning*, *monitoring* and *evaluating*. The reason for this is that it is simpler to identify these three steps in activities that can improve metacognition in EFL learners.

2.3 Metacognition in FL classes

In the scholarly field both students and teachers have to be responsible for knowing what metacognition is and how this process occurs. Students should be aware of this because they have to improve their previous knowledge and teachers because they are leading students in their learning process.

Anderson (2002, p.4) states,

The teaching of metacognitive skills is a valuable use of instructional time for a second language teacher. When learners reflect upon their learning strategies, they become better prepared to make conscious about what they can do to improve their learning. Strong metacognitive skills empower second language learners.

When teachers promote metacognition in their FL classes they are helping students to become autonomous. This feature will help students and teachers in future classes or courses because they will be more responsible for their learning and become more aware about their cognitive processes, so teachers will be less worried about if students are really learning or not. This does not mean that teachers should stop teaching and leave all the work to students but that students know themselves better so they become more independent and they do not always need to wait for the teacher's help.

“Metacognition can be learned when it is explicitly taught and practiced across content and social contexts” (Wilson, 2014). This is really beneficial because teachers do not have to spend extra time explaining metacognition as if it were an extra subject. Teachers can teach metacognition while they are giving classes, incorporating certain activities that require learners to access that knowledge base.

Certainly, helping students to be aware of their own learning process creates successful students. Öz (2005) argues “learners who are skilled in metacognitive self-awareness are more strategic and perform better than those who are unaware” (p.151). Promoting metacognition in FL classes would be helpful for students because they will be able to control their learning and create meaningful learning, so in future classes they will be able to take previous knowledge and create new one.

2.4. Metacognitive awareness in listening comprehension

As mentioned above, metacognition is a useful tool in learning. The application of this process makes students capable of being autonomous because they get to know themselves better, so they can decide what to do to improve their knowledge. Vandergrift and Goh (2012, p. 100) define metacognitive awareness as “a state of consciousness of our own thoughts as

we focus on a particular cognitive or learning situation”. Hence, it can be said that a student who is able to recognize their cognitive processes in a particular activity can improve its performance.

When it comes to language learning the practice of metacognitive strategies is significant in the four main skills. As Lin (as cited in Li, 2013, p. 504) argues, in listening, the metacognitive awareness alludes to adopt appropriate strategies and ideal allocation of resources. It is well known that people is different in many aspects, essentially in their manner of learning. In consequence, students have to detect how they learn better, so they can select strategies that help them to improve their listening comprehension.

“Metacognition plays an important role in each phase of listening comprehension” (Li, 2013, p.505). Explained by Li (2013), students follow the three steps of metacognition: planning, monitoring and evaluating. She explains that before students approach a listening task, they have to have a goal, elaborate a plan with strategies that will help them to complete the task. While they are answering they are also checking if the strategies they are using are helping them to get their goal. At the end, they evaluate their process, revising their answers. However, students are not conscious about those steps, they follow them unconsciously and they achieve some of their goals. Then, if they are aware of all this process, they could improve.

2.5 Previous research in metacognitive strategies

Recent research has shown interest in using metacognitive strategies in EFL classes. Most of the studies are focused on applying metacognitive strategies in reading comprehension to know the effects in EFL learners.

Raoofi, Chan, Makundan and Md Rashid (2014) centered their attention in the

influence that metacognition, in general, has in ESL or EFL learners from Malaysia, how it affects their learning process. Raoofi et al. (2014, p. 44) concluded, “[...] metacognitive training helped learners to achieve improvements in their language performance. Second, evidence from interventions studies also indicates that metacognitive instruction can enhance language learners’ metacognitive knowledge/strategy usage [...]”.

Besides that, there are studies based only in one skill. On one hand, Surat, Rahman, Mahamod, and Kummin (2014) focused their study in writing. They worked with High School students from Malaysia in the production of essays. In their conclusion they express the importance of metacognitive elements while writing an essay because they improve students’ awareness of learning how to learn, also they mention that metacognition contributes to students’ performance in essay writing. Unfortunately, learners often lack these skills, so teachers would have to teach students metacognitive skills.

On the other hand, Meniado (2016) and, Nosratinia and Mohammadi (2017) work with reading comprehension. They confirm in their work that the use of Metacognitive Strategies (MS) in reading comprehension have a more positive impact in learners than the use of other strategies as Problem Solving Strategies or Collaborative Strategic Reading. Meniado (2016, p. 125) also adds that metacognitive strategies in combination with motivation enhance the comprehension of texts. As he found at the end of his research, although the respondents used MS they were still below the average, and he explains that this happened because of the lack of interest in the texts respondents had to read.

Another study about applying metacognition in reading comprehension was carried out by Zhang and Wu (2009) in a Chinese context. Their conclusion was similar to Surat et al. (2014), even though it was a different skill. Zhang and Wu (2009, p.49) affirm, “what teachers need to do is to find out how effective students are using different strategies and give them guidance accordingly”. This implies that although students have to be responsible about their

own learning they have also to receive guidance to learn how to learn and teachers should help them more in that aspect. Probably, one of the main reasons is that teachers are more closely to students' academic life, so they can lead them and help them to improve.

The studies mentioned above show that metacognition helps students to improve in language learning. Nevertheless studies as Aguilera et al. (2016), Li (2013), Vandergrift and Goh (2012), Coskun (2010) prove how useful the awareness of metacognitive strategies is for listening comprehension.

As noticed above, the use of metacognition and/ or metacognitive strategies in EFL has been studied from different perspectives and for some years. This shows the importance metacognition has in the field. But it does not mean that there is enough research. Metacognition can be studied with other type of subjects or participants and working with a different skill to get a wide idea about the significance of this topic.

Conclusion

For many years, the research of metacognition and metacognitive strategies applied in a Foreign Language class has been studied. There are different opinions about what the metacognitive strategies are. Also, different authors have researched this topic in different areas, some of them have only worked with reading comprehension, other have worked with writing and some authors have researched generally about the use of metacognitive strategies in a FL class.

Through the years and by looking to all these research and theories the conclusion is the same; metacognitive strategies are relevant in a student's learning process. They provide students awareness of their cognitive processes; they get to know better how to learn easier

by following certain steps. Students become autonomous and critical, and also by applying these strategies they can generate meaningful learning.

Even though the results have been very favorable, it is also important to know that they can vary depending on the context. This study, as mentioned in the introduction, takes place in a public Mexican high school. Due to the context results may be favorable or unfavorable. Next chapter will present the instrument that will be applied to the subjects and the findings.

CHAPTER THREE: METHODOLOGY

This study is an intervention study that explored high school students' listening comprehension metacognitive strategies awareness and it aimed to raise their awareness to improve their performance in this skill. In this chapter the participants, the setting, instruments and the step-by-step procedure that was followed to gather data are presented.

3.1 Participants

This study took place in a public high school from Puebla, Mexico. The school is located in a well-known neighborhood in Puebla, and in the school building there is the principal's office, cubicles for the teachers of the different areas, classrooms for each one of the groups, a language laboratory with internet access and a computer for each student, a chemistry laboratory, a cafeteria, a library and bathrooms for teachers and students. Each classroom has enough chairs for each student, a desk and a chair for the teacher, two whiteboards, a screen projector, a projector and Internet connection.

The participants who collaborated in this study were 22 high school students who were completing their first year in high school at the moment of this study. The ages of this group of students go from 14 to 16 years. At least 11 were female and the other 11 were male students. Their level of English is A1, according to the Common European Framework (CEF); most of the students are beginning to acquire this level and some others already have it because they have taken extra courses of English.

While doing the study, participants showed different attitudes. At the very beginning, most of them seemed to be curious about the study. Later on, some of them started showing lack of interest and maybe stopped paying attention to what was explained. Even though

sometimes they were not quite interested in the activity they were doing, all of them were cooperative and never complained about helping with the study.

3.2 Research methodology

This is an academic intervention study. An intervention attempts to change certain situations. Academic context interventions are used to teach students new skills or help them to use these skills in new situations. Therefore, they attempt to help students improve their outcomes in their cognitive, affective or behavioral learning components. This kind of study uses a test to evaluate students before and after the intervention to measure its effectiveness.

The instrument used to collect data was a questionnaire. The questionnaire was adapted for the Metacognitive Awareness Listening Questionnaire (MALQ) (see Appendix 2) and is composed of 21 statements referring to the use of metacognitive strategies in listening comprehension performance. As Vandergrift, Goh, Mareschal and Tafaghodtari (2006, p.449) explain in their work, these statements are divided into five factors: problem solving, planning and evaluation, translation, person knowledge, and directed attention. Li (2003, p. 506) describes each factor and divides the questionnaire statements into the factors they correspond considering the explanation given by Vandergrift et al (2006, p. 450-451).

Table 2: The description of the factors (Li, 2013, p. 506)

FACTOR	THE DESCRIPTION OF THE FACTOR	STRATEGY OR BELIEF/PERCEPTION (STATEMENT IN THE QUESTIONNAIRE)
Planning - Evaluation	Strategies listeners use to prepare themselves for	1. Before I start to listen, I have a plan on my head about how I am going to listen.
		10. Before listening, I think of similar texts that I may have listened to.

	listening, and to evaluate the results of their listening efforts.	14 After listening, I think back to how I listen, and about what I might do differently next time. 20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension. 21. I have a goal in mind as I listen.
Directed Attention	Strategies that listeners use to concentrate and to stay on task.	2. I focus harder on the text when I have trouble understanding. 6. When my mind wanders, I recover my concentration right away. 12. I try to get back on track when I lose concentration. 16. When I have difficulty understanding what I hear, I give up and stop listening.
Person knowledge	Listeners' perceptions concerning the difficulty presented by L2 listening and their self-efficacy in L2 listening.	3. I find that listening in English is more difficult than reading, speaking or writing in English. 8. I feel that listening comprehension in English is a challenge for me. 15. I don't feel nervous when I listen to English.
Mental translation	The online mental translation strategy.	4. I translate in my head as I listen. 11. I translate key words as I listen. 18. I translate word by word, as I listen.
Problem solving	Strategies used by listeners to inference (guess at what they do not understand) and to monitor these inferences.	5. I use the words I understand to guess the meaning of the words I don't understand. 7. As I listen, I compare what I understand with what I know about the topic. 9. I use my experience and knowledge to help me understand. 13. As I listen, I quickly adjust my interpretation if I realize that it is not correct. 17. I use the general idea of the text to help me guess the meaning of the words that I don't understand. 19. When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense.

Although the authors of this survey are Vandergrift et al (2006), this was adopted from: *A Study of Metacognitive Awareness of Non-English Majors in L2 Listening* (Li, 2013), *The Relationship between Metacognitive Strategies Awareness and Listening Comprehension*

Performance (Bogorevich, n.d.) and *The Effect of Metacognitive Strategy Training on the Listening Performance of Beginner Students* (Coşkun, 2010).

This questionnaire was the instrument for this study because there is a lot of research that uses this instrument as a survey and also because there is research that proves that it is an appropriate tool to gain awareness of metacognitive strategies in listening comprehension. As Sahragrad, Kushki, Miri & Mahmooudi (2015, p. 112) concluded in their work “the MALQ questionnaire can provide a useful short-cut for teachers to benefit the procedure of metacognitive instruction.” Li (2013, p. 505) affirms in her work that the MALQ is based on the Flavell’s theory and on the Wenden’s model of metacognition, which provides theoretical validation for item construction. She also claims that the Statistical Package for the Social Sciences (SPSS) examined its reliability and the factorial validity. Finally, Vandergrift et. al (2006) explain in their study, the MALQ was tested in several countries and with different people, from different ages, occupations and in different stages of the L2.

This instrument is helpful to respond the research questions because it is very specific and understandable. It contains several metacognitive strategies for listening comprehension that are exposed clear for students. When getting the data from the first appliance of the MALQ, it will show what metacognitive strategies students use when performing listening. And after the second appliance, it will show how the intervention changed students’ awareness of their metacognitive strategies.

3.3 Data Collection Procedure

After the instrument was adopted, it was necessary to adapt it to the necessities of the participants. The questionnaire was translated from English to Spanish so that the participants could understand it. Subsequently, it had to be piloted. Six students (three female

and three male) from the same group of participants were chosen to read the questionnaire and tell me if they could not understand words, phrases or complete statements. All their observations were taken into consideration to redesign the instrument, so participants would not have many questions or misunderstandings at the moment of answering it.

Then, the audio tracks had to be sought and selected according to the level of students. All the audios used in this study were taken from the web site *Learn English Teens* – British Council (<http://learnenglishteens.britishcouncil.org>). They can be found in the section of SKILLS – LISTENING SKILL PRACTICE – A1, and the names of the tracks are: “A good night’s sleep”, “Getting an ID card”, “Introducing a new friend”, “Describing people”, “Interview with a swimmer”, “Study tips”, and “Online safety conversation”. These audios were chosen because of the level of language they have and the grammar topics were the same students were checking at that time.

Having the statements divided into the different factors (Table 1) and the tracks chosen, it was time to plan all the sessions. In each session, except for sessions one and seven, three strategies were explained and one or two listening comprehension activities were applied. Table 3 shows the distribution from the strategies and the audios, the dates they were applied and the duration of the different activities.

Table 3. Sessions

Date	Activity	Time
10/16/17	- Explanation of the study. - What is it about? - How they are going to help me (questionnaire) - How the following six sessions are going to be.	12 min.
	- Activity 1: - Listen to the “A good night’s sleep” track, (http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/good-nights-sleep) - Listen again and answer the true or false exercise.	5 min.

	- Activity 2: - Explain the questionnaire. - Students answer the questionnaire.	13 min.
10/17/17	- Explanation of the firsts strategies as recommendations: - Have a plan in my head for how I am going to listen - Try to get back when I lose concentration - Have a goal in mind as I listen	10 min.
	Activity 1: Listen to the track “Getting an ID card” (http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/getting-id-card)	2:40 min.
	Activity 2: Listen again and answer the multiple choice exercise.	3 min.
10/18/17	- Explanation of the next two strategies: - Use the words I understand to guess the meaning of the words I do not understand. - I think on similar texts that I may have listened to. - Focus harder on the text when I have trouble understanding.	10 min.
	Activity 1: Listen to the track “Introducing a new friend” (http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/introducing-friend)	1 min.
	Activity 2: Listen again and answer the fill in the gap exercise.	1:30 min.
10/19/17	- Explanation of the next two strategies: - I compare what I understand with what I know about the topic. - I think back to how I listened and about what I might do differently next time. - Ask myself periodically if I am satisfied with my level of comprehension	10 min.
	Activity 1: Listen to the track “Describing people” http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/describing-people	1:45 min.
	- Activity 2: Listen again and answer the multiple choice exercise. - Activity 3: Listen again and answer the gap fill exercise	1:45min. 2 min.
10/23/17	- Explanation of the following two strategies: - I use my experience and knowledge to help me understand. - I quickly adjust my interpretation if I realize it is not correct. - Recover my concentration when my mind wanders	10 min.

	Activity 1: Listen to the track "Interview with a swimmer" http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/interview-swimmer	1:45 min
	Activity 2: Listen again and answer the true or false exercise.	1:45 min
	Activity 3: Listen again and answer the gap fill exercise.	2:00 min
10/24/17	- Explanation of the following two strategies: - Use the general idea of the text to help me guess the meaning of the words that I do not understand. - When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense. - Do not give up on listening	10 min.
	Activity 1: Listen to the track "Study tips" http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/study-tips	1:45 min
	Activity 2: Listen again and answer the multiple choice exercise.	1:45 min
	Activity 3: Listen again and answer the grouping exercise.	2 min
10/25/17	Activity 1: Listen to the track "Online safety conversation" http://learnenglishteens.britishcouncil.org/skills/listening-skills-practice/online-safety-conversation	2:10 min
	Activity 2: Listen again and answer the true or false exercise.	2:10 min
	Activity 3: Listen again and answer the matching exercise.	3 min
	Activity 4: Answer the questionnaire.	10 min

This procedure was selected because it helped to answer the research questions given that there is a before and an after in the study. It can have as positive results as negative. The listening activities were carefully selected, they all belong to an A1 level, and so students could not complain that they did not understand the vocabulary or the topics presented.

3.3.1 Intervention Procedure

In the first session I explained students what metacognition and metacognitive strategies are, also, how they are used for and how their use could help them to improve their

learning process. Then, students listened to the first audio and answered the activity related to it. After that, the questionnaire was explained and I asked if anyone had any questions about the questionnaire they could feel free to ask.

In the following sessions the pattern was almost the same. I presented the strategies that students were going to practice that day and students then had to listen to the audios, sometimes they had to be repeated three times before they could answer the activities. At the end of each session I asked students how they felt practicing the strategies and if some of them were easier to follow. Also, at the beginning of each session I asked students to remind the strategies that they had seen before in order they remember to use them.

While doing the study some problems were presented. The first of them was that as the classes were short there were some occasions when there was not enough time to explain better the strategies or the activities. Other times the audio was not good and some students had trouble listening. Then the attitude of students sometimes was not very helpful because they were bored or felt tired and they did not want to work.

3.4 Data Analysis

After getting all the results, data had to be analyzed. The procedure traced for this study was the following. First questionnaires had to be organized in pairs; for example, student “A” first and second questionnaires were put together. Second, tables had to be done; these tables contained all students’ answers for the 21 items from the MALQ. Then, all the answers were colored depending if they were “agree” or “disagree” answers; red color for those that had a negative connotation and green for those with a positive connotation.

After that all the 21 items were divided into the five factors, which are, planning evaluation, directed attention, person knowledge, mental translation and problem solving. For

each one of the factors it is showed the number of students after and before of the intervention. Subsequently, the percentages were calculated, so the results can be compared and it can be seen how students' awareness and perception about metacognitive strategies changed.

CHAPTER FOUR: FINDINGS

Chapter four presents and interprets the results obtained after the application of the instrument. The participants answered the MALQ twice, one before the intervention and another after it. This chapter is divided into four sections; 1) the results obtained from the first questionnaire, 2) the results from the second application of the questionnaire, 3) a comparison of all the data; and finally, 4) a discussion of all the possible causes that made the results change or remain the same.

4.1 High school students' listening metacognitive strategies before the Intervention

Before answering the questionnaire the first time, students were not aware of the existence of metacognitive strategies. They might have used them before, but they did not know what they were. The results of this first data analysis were unexpectedly good.

4.1.1 Factor 1: Planning evaluation

Planning Evaluation is the factor that corresponds to those strategies that help students to plan what are they going to do, and to check if the process they followed worked for them. The following table contains the final results of the answers given by the participants the first time.

Table 5: Planning Evaluation results for the first application

Item	Agree	Disagree	No answer
1. Before starting to listen, I have a plan in my head about how I am going to listen.	82%	14%	4%
10. Before listening, I think of similar texts that I may have listened to.	91%	9%	0%
14. After listening, I think back to how I listen, and about what I might do differently next time.	92%	18%	0%
20. As I listen, I periodically ask myself if I am satisfied with	77%	23%	0%

my level of comprehension.			
21. I have a goal in mind as I listen.	64%	36%	0%

Summarizing the table, items 1, 10 and 14, students showed more awareness about these three metacognitive strategies. However, items 20 and 21 showed a lower percentage of students' awareness of these two strategies compared to ones mentioned before. Even though the percentages went down, there were, in the four items, more positive than negative answers.

The result of item 21 might indicate that some students did not listen with a purpose. They could be just hearing sounds and recognizing words or phrases, but they did not really understand the message. When people listen to something it is because they want to acquire some information from the message, and that leads them to be more concentrated on what the others are saying. Therefore, most students affirm to have a purpose while listening, which leads them to pay attention to the message so that they can achieve their goal.

4.1.2 Factor 2: Directed attention

Factor number two correlates with students' concentration. The results for the four following items demonstrate how well students deal with focusing on an activity.

Table 6: Directed Attention results for the first application

Item	Agree	Disagree	No answer
2. I focus harder on the text when I have trouble understanding.	95%	5%	0%
6. When my mind wanders, I recover my concentration right away.	59%	41%	0%
12. I try to get back on track when I lose concentration.	64%	32%	4%
16. When I have difficulty understanding what I hear, I give up and stop listening.	68%	32%	0%

Results show that in item 6, almost the half of the participants indicated relatively negative results. Meanwhile, results from item 1 present that 95% of the participants try understand the message. In general, this factor got more positive answers than the ones for Factor1: Planning Evaluation. The other three percentages in Factor 2 show results in which the percentages are closer. That means that almost the same number of participants had similar answers.

As discussed in the previous factor, when students do not have a purpose in mind they do not pay attention to what they are doing. A cause for that could be the lack of interest; that is why they do not set a goal before doing an activity. Keeping concentration is difficult and it is only achieved with practice and interest in what is being done.

4.1.3 Factor 3: Person knowledge

This factor does not represent strategies, but perceptions that students have concerning the performance of listening in a L2. It has only three items and the following table shows the results for them.

Table 7: Person Knowledge results for the first application

Item	Disagree	Agree	No answer
3. I find that listening in English is more difficult than reading, speaking or writing in English.	27%	73%	0%
8. I feel that listening comprehension in English is a challenge for me.	27%	73%	0%
15. I don't feel nervous when I listen to English.	64%	36%	0%

Results show that there were more negative answers than in the previous factor. In two of the three items only the 27% of participants answered positively and the other 73% were negative. The sole item that received more positive answers was item 15, and even the amount of negative answers was not that low.

Even though listening is one of the most used skills, it is one of the most difficult for students. However, nowadays people, especially young people are more in touch with English; they listen to music, watch series, videos and movies in English, some of them also have friends whose first language is English. Teachers often complain that what happens with students is that in a school or a classroom they are asked to look for certain information and they are not good at concentrating because of the lack of purpose, so the results that they get might be negative. Maybe that is why they find this skill more challenging than the others.

4.1.4 Factor 4: Mental translation

Mental Translation refers to those strategies that are pure translation of words, sentences or even the whole text to understand better. For this study, this factor will not be discussed as the previous ones because participants had not much knowledge of English, they were beginners at the moment of applying the instruments. The English level influences this factor because the less awareness of the language, the more students tend to translate.

Table 8. Mental translation results for the first application

Item	Agree	Disagree	No answer
4. I translate in my head as I listen.	86%	14%	0%
11. I translate key words as I listen.	78%	22%	0%
18. I translate word by word as I listen.	64%	32%	4%

As noticed in Table 7, most participants used this kind of strategy most of the time. The item that fewer students reported they used was item 18, which stands for I translate word by word, as I listen.

Taking into consideration the fact that beginners or students with a low proficiency level use more translation to enhance their understanding in this section I will not discuss positive and negative answers. As beginners students translate and this may have a positive impact in

their learning because they are comparing English with their first language. But if they are not translating, that could mean that they are getting used to the language as if it were their first language or that they already have a good proficiency level, so they would not translate.

4.1.5 Factor 5: Problem solving

The last factor is related with strategies that students use to infer what they do not understand and to monitor if what they inferred is correct. This factor consists of six items, and the results are presented in Table 9.

Table 9. Problem Solving results for the first application

Item	Agree	Disagree	No answer
5. I use the words I understand to guess the meaning of the words I don't understand.	86%	14%	0%
7. As I listen I compare what I understand with what I know about the topic.	91%	9%	0%
9. I use my experience and knowledge to help me understand.	86%	14%	0%
13. As I listen, I quickly adjust my interpretation if I realize that it is not correct.	82%	18%	0%
17. I use the general idea of the text to help me guess the meaning of the words that I don't understand.	77%	23%	0%
19. When I guess the meaning of a word, I think back to everything else that I've heard, to see if my guess makes sense.	82%	18%	0%

Compared with the first two factors, the results of this factor reveal more positive answers than negative ones. The item with more positive answers was number 7, which refers to compare the knowledge that someone has about certain topic with what is understood in the listening. On the other hand, item number 17 receives more negative answers; it refers to considering the general idea or topic to try to guess the meaning of some words.

This factor indicates participants tend to understand better with the help of some background. It is going to be easier for them to understand when they are related with the topic because they already have certain information. This factor reflects what the top-down process is about. Letting students be familiarized with the texts is going to make them feel more interested and it could make learning easier, but as Aguilera et al. (2016, p. 40) mention, the top-down processing can also cause miscomprehension if learners do not have enough prior information to understand what the speaker really wants to transmit.

4.2 High school students' listening metacognitive strategies after the Intervention

The intervention implemented for this study lasted one and a half week. During this period, the listening metacognitive strategies concerning factors 1, 2 and 5 were explained to students. Students did some exercises practicing the strategies to raise their awareness of these strategies. Unfortunately, some results instead of going up, went down.

4.2.1 Factor 1: Planning evaluation

Table 10 displays the results for the first factor after having the intervention. Students might have changed their answers for more positive or negative ones.

Table 10. Planning evaluation results after the intervention

Item	Agree	Disagree	No answer
1. Before starting to listen, I have a plan in my head about how I am going to listen.	82%	18%	0%
10. Before listening, I think of similar texts that I may have listened to.	64%	32%	4%
14. After listening, I think back to how I listen, and about what I might do differently next time.	73%	27%	0%
20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension.	77%	23%	4%
21. I have a goal in mind as I listen.	87%	13%	0%

More participants showed indecisiveness in this factor. In two items some students did not answer if they agreed with the statement or disagreed. In plain sight, there were more positive answers. Item 1 and 21 were the ones that received more progressive answers. And item number 10 was answered with more negative answers and indecision.

Although the results are positive, there is certain indecision and that might be caused because students were more aware, at this point, of their cognitive processes. On the other hand, the majority agreed with having a plan while listening, which could improve their concentration level.

4.2.2 Factor 2: Directed Attention

As discussed above, this factor is related to concentration. Results from the second application of the questionnaire, are registered in Table 11.

Table 11: Directed Attention results after the intervention

Item	Agree	Disagree	No answer
2. I focus harder on the text when I have trouble understanding.	73%	23%	4%
6. When my mind wanders, I recover my concentration right away.	64%	36%	0%
12. I try to get back on track when I lose concentration.	78%	18%	4%
16. When I have difficulty understanding what I hear, I give up and stop listening.	68%	32%	0%

Data indicate that items 2 and 12 got more than the 70% of the answers positive. Meanwhile the other two items got also more progressive answers, they also got a good amount of negative ones. And in this factor there are also two items that were not responded by some students.

Maybe as students got better results on the item 22 that corresponds to having a goal, they also improved their results on concentration. Probably the second time they were sure why they were listening and that it was important to have a purpose to follow.

4.2.3 Factor 3: Person knowledge

The way students felt about listening after the intervention can tell a lot. The following results can tell if students feel better or maybe more insecure than they did before the intervention. Table 12 presents the data.

Table 12: Person knowledge results after the intervention

Item	Disagree	Agree	No answer
3. I find that listening in English is more difficult than reading, speaking or writing in English.	27%	73%	0%
8. I feel that listening comprehension in English is a challenge for me.	18%	82%	0%
15. I don't feel nervous when I listen to English.	60%	40%	0%

Unfortunately, participants showed a negative perspective instead of showing a progress. Two of the three items display a great amount of negative answers, and only one has a little more of the half of the answers as positive.

That means that students continued feeling that listening was difficult for them. Probably they imagined that it was easier than they expected and when listening activities that were carried out, they realized that they were missing vocabulary or listening training.

4.2.4 Factor 4: Mental translation

As discussed above, this factor represents how much participants use translation to understand L2 better. Also it has been exposed why the answers for this factor are not taken as positive and negative answers. Instead of that they are divided into the scale (agree

and disagree), only to know how many participants agree on using translation as an efficient strategy. Results after the intervention are presented in Table 13.

Table 13. Mental translation results after the intervention

Item	Agree	Disagree	No answer
4. I translate in my head as I listen.	90%	9%	0%
11. I translate key words as I listen.	87%	13%	0%
18. I translate word by word as I listen.	73%	27%	0%

It is noticed how participants continue using translation as a mean to understand English. Maybe it is a good tool for them because they are beginners, and they are creating relations with their first language. Nevertheless, there must be a time when students should stop using it if they want to become proficient English speakers.

4.2.5 Factor 5: Problem solving

Finally, problem solving represents those strategies that students can use to guess the meaning of something they do not understand. After having the intervention, the results for this factor are displayed in Table 14.

Table 14. Problem solving results after the intervention

Item	Agree	Disagree	No answer
5. I use the words I understand to guess the meaning of the words I don't understand.	77%	23%	0%
7. As I listen I compare what I understand with what I know about the topic.	82%	18%	0%
9. I use my experience and knowledge to help me understand.	100%	0%	0%
13. As I listen, I quickly adjust my interpretation if I realize that it is not correct.	82%	18%	0%
17. I use the general idea of the text to help me guess the meaning of the words that I don't understand.	77%	23%	0%
19. When I guess the meaning of a word, I think back to everything else that I've heard, to see if my guess makes sense.	92%	4%	4%

Data shows how progressive were participants' answers. All items have high percentages on the positive side. Only in item 19 there were some students that did not choose to agree or disagree.

High results prove that these strategies are probably easier to understand and to implement during listening activities. Maybe because when students use them, they feel more related with the activities and they become more interesting for them. That could lead to increase their activities scores.

4.3 Comparisons between the before and after the intervention

Having the results of the MALQ before and after the intervention they can be compared to know how the intervention affected students' awareness of their use of metacognitive strategies in listening comprehension.

4.3.1 Factor 1: Planning evaluation

Table 15: Planning Evaluation results comparison

Item	Agree		Disagree		No answer	
	1st	2nd	1st	2nd	1st	2nd
1. Before I start to listen, I have a plan on my head about how I am going to listen.	82%	82%	14%	18%	4%	0%
10. Before listening, I think of similar texts that I may have listened to.	91%	64%	9%	32%	0%	4%
14. After listening, I think back to how I listen, and about what I might do differently next time.	92%	73%	18%	27%	0%	0%
20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension.	77%	73%	23%	23%	0%	4%
21. I have a goal in mind as I listen.	64%	87%	36%	13%	0%	0%

In both applications, results were more positive. Nevertheless, there is a significant increase in negative answers in items 10 and 14. On the first applications of the

questionnaire, item 10 got only 9% of negative answers, but in the second appliance the negative answers increased to 32%; item 14 had gotten 18% of negative answers and after the intervention that result increased to 27%. However not everything is unfortunate, item 21 increased its positive answers. Before the intervention only 64% of the participants reported had used this strategy, on the other hand, after the intervention the percentage of participants incremented to 87%. Having a goal in mind is probably one of the most useful strategies when learning a language. When having a goal in mind students can “make adjustments when problems appear and evaluate the effectiveness of their listening strategies after finishing the task”. (Li, 2013, p.4)

Probably, item 21 increased its percentage of positive answers because it was one of the first strategies that were explained, so participants got the chance to be more in contact with this strategy and maybe they learned how to use it better. In addition, item 14 seems to be a little more reflective because they have to evaluate their listening performance to change certain things and that was not achieved by most of the participants. Item 10 belongs to planning, here participants had to find something similar to the text in their minds, Perhaps this was more difficult because they could have felt pressured because they did not have a great amount of knowledge about different types of texts.

4.3.2 Factor 2: Directed attention

Table 16: Directed attention results comparison

Item	Agree		Disagree		No answer	
	1st	2nd	1st	2nd	1st	2nd
2. I focus harder on the text when I have trouble understanding.	95%	73%	5%	23%	0%	4%
6. When my mind wanders, I recover my concentration right away.	59%	64%	41%	36%	0%	0%

12. I try to get back on track when I lose concentration.	64%	78%	32%	18%	4%	4%
16. When I have difficulty understanding what I hear, I give up and stop listening.	68%	68%	32%	32%	0%	0%

Items 6 and 12 raised their positive percentages. Item six had 59% of positive answers before the intervention and after it the percentage raised to 64%; item 12 had gotten 64% of positive answers and later the percentage of participants incremented to 78%. Despite the progressive results, there is also regression. In the first applications of the MALQ, 95% of the participants reported that they agreed with item 2, but after the intervention that 95% of participants decreased to 73%.

It was visible that participants have got problems with concentration. It is reasonable because of their age and because it is not that easy to focus on something that they might have not been interested. However, they improved after the intervention. As the case may be, it was because of the repetition of the strategies or because they had a clearer goal in mind while listening.

4.3.3 Factor 3: Person knowledge

Table 17: Person knowledge results comparison

Item	Disagree		Agree		No answer	
	1st	2nd	1st	2nd	1st	2nd
3. I find that listening in English is more difficult than reading, speaking or writing in English.	27%	27%	73%	73%	0%	0%
8. I feel that listening comprehension in English is a challenge for me.	27%	18%	73%	82%	0%	0%
15. I don't feel nervous when I listen to English.	64%	60%	36%	40%	0%	0%

Two out of the three items belonging to Person Knowledge decreased the percentages of their positive answers. Item 8 was the one that changed the most; before the intervention 73% of the participants responded that listening comprehension was challenging for them,

after the intervention the percentage increased to 82%. Item 15 also suffered negative changes. Although the difference was less than in item 8, after having the intervention 40% agreed on feeling nervous when listening to English.

Since the beginning participants demonstrated that they found listening comprehension challenging and more difficult than the other skills. What happened after the intervention was that they realized that it is more difficult for them than they thought. Believably it is because they are low proficiency students and they lack of certain knowledge of the language.

4.3.4 Factor 4: Mental translation

Table 18: Mental translation results comparison

Item	Agree		Disagree		No answer	
	1st	2nd	1st	2nd	1st	2nd
4. I translate in my head as I listen.	86%	90%	14%	9%	0%	0%
11. I translate key words as I listen.	78%	87%	22%	13%	0%	0%
18. I translate word by word as I listen.	64%	73%	32%	27%	4%	0%

As noticed above the three items increased their percentages in the section of agreement. Item 4 increased a 4%; items 11 and 18 increased a 9%.

The results of this factor demonstrate that most of students use translation as a common strategy to understand English. The only strategy that they use less is translating word by word, probably because it is more difficult and because they might not understand all the vocabulary.

It was also discussed before that translation is very common when students are beginners. It is the way they feel more comfortable about the language and also they assimilate and accommodate more easily because they relate better what they know in their mother tongue with the things they are learning in the L2.

4.3.5 Factor 5: Problem solving

Table 19: Problem solving results comparison

Item	Agree		Disagree		No answer	
	1st	2nd	1st	2nd	1st	2nd
5. I use the words I understand to guess the meaning of the words I don't understand.	86%	77%	14%	23%	0%	0%
7. As I listen I compare what I understand with what I know about the topic.	91%	82%	9%	18%	0%	0%
9. I use my experience and knowledge to help me understand.	86%	100 %	14%	0%	0%	0%
13. As I listen, I quickly adjust my interpretation if I realize that it is not correct.	82%	82%	18%	18%	0%	0%
17. I use the general idea of the text to help me guess the meaning of the words that I don't understand.	77%	77%	23%	23%	0%	0%
19. When I guess the meaning of a word, I think back to everything else that I've heard, to see if my guess makes sense.	82%	92%	18%	4%	0%	4%

Comparing data, this factor had considerable increases, but also decreases. Items 5 and 7 suffered a loss of positive answers; 86% of the participants answered positively to item 5 before the intervention, and after it only 77% of the participants had a positive answer. For participants who had answered item 7 with 91% before the intervention, but later the percentage reduced to 82% of the participants. On the other hand, items 9 and 13 suffered a progressive response. Item 9 increased the percentage of participants from 86% to 100%; and item 19 increased from 82% to 92%, which is also a good result.

It makes sense that students have changed their opinion for items 5 and 7 because, as mentioned before, they do not have a wide amount of vocabulary, they are starting to acquire English and also as seen on the results for the first factor, they are not comparing all the previous knowledge, as similar texts, with the new acquisition.

Conclusion

All the analysis of the results has been really helpful to understand certain things about the study and why it did not happen as expected. First, it was the time; it was a really short intervention, and probably if it would have lasted more, results would have been completely different. Another factor was the experience of students with the second language; students had an A1 level according to the CEF and that was a factor that might have affected some results. Linked to the previous possible cause, is that students might not be interested in the topic and that might have provoked that students did not answer sincerely the questionnaire.

However, there are good results concerning the intervention. After the process, students improved in certain areas and they raised their awareness of specific strategies. The strategy that students improved more was the one stated in item 21: "I have a goal in mind while I listen." If students keep putting in practice this strategy, they could improve their reflection about their listening process and evaluating it.

CHAPTER FIVE

This final section discusses all the processes, results and gained experiences that this research project involves. It presents the answers to the research questions as well as the limitations and suggestions for further research.

5.1 Significance of the findings

The findings of this study show that after a brief intervention (two weeks) the participants acquired some listening comprehension metacognitive strategies. Perhaps the ones that were easier to understand and to apply. Probably with the right amount of time to practice these strategies in the classroom, students could acquire most of them.

It is important to mention that metacognitive processes are not simple to understand because they only happen in an individual's mind. With the enough amount of time, practice and motivation, students could learn better how to apply metacognitive strategies not only in an English class but in their life in general.

5.2 Research questions answers

This study aimed to answer the following questions: 1) what metacognitive strategies did EFL high school students use before the intervention, and 2) what metacognitive strategies did EFL high school students use after the intervention?

Results from the first application of the MALQ indicated that students tended to use some of the metacognitive strategies more than after the intervention. This was both surprising and frustrating. It seemed that most participants were aware of how their thinking process worked while listening. The results of the questionnaire after the intervention

indicated that a few students increased the use of the following strategies: Strategy 21 (Factor 1: Planning Evaluation); 6, 12 (Factor 2: Directed attention); 4, 11, 18 (Factor 4: Mental translation); and 9 and 19 (Factor 5: Problem solving). However, these results also showed that in some cases, students used certain strategies less than before the intervention. These strategies were the following: 10, 14 (Factor 1: Planning evaluation); 2 (Factor 2: Directed attention), 8, 15 (Factor 3: Person knowledge); 5 and 7 (Factor 5: Problem solving).

5.3 Research aims

As mentioned in Chapter one, the aims of this study were: a) To explore how to teach metacognitive strategies to high school students, and b) To study students' awareness of metacognitive strategies had an impact on their listening comprehension.

This study gave me an opportunity to explore the teaching of metacognitive strategies and to realize that the amount of time I used was not enough for the participants. Strategies need to be practiced more and probably the lack of enough practice led students to a misunderstanding of the strategies.

The second aim was difficult to achieve because students were not consistent with their attendance. Most of them did not attend all the classes and the ones that attended regularly were the students who had a higher level of English, so the results of these students did not change much.

5.4 Limitations of the research

One of the main limitations of this study was time. Learning new things or acquiring certain knowledge takes time, especially if it is something that only takes part in someone's brain and nobody else can see it. The intervention only lasted eight sessions of 30 minutes or

less. The reason for that was that classes lasted only 50 minutes and students had to see new topics or to do their course activities; another reason was that the semester was almost over and they had to take exams.

The second limitation was students' attendance. The English class was the first hour of class for the participants; it began at 7:00 am, so students tended to arrive late to school and they did not attend the English class. This event happened in most of the sessions.

Another problem was students' attitude towards the study. Most participants showed interest while doing the activities and learning about metacognitive strategies, but some others were not interested. Probably the topic was not interesting for them or they did not pay attention to the activities because they were not part of their grades.

Participants' age and level of English had an impact on their results. Most of participants were beginners and also 15-year-old students. It could have been difficult for them to understand the concept of metacognitive strategies and probably some of the strategies.

5.5 Suggestions for further research

Further research on this topic could be with students who are interested in metacognitive strategies. They could be students who are attending to English certification courses because in those types of courses, skills are practiced more separately and detailed. So it will give you more time to practice the strategies. Also the language level is similar among the students and it will give more precise results.

The suggestion for further research with high school would be to incorporate the teaching of metacognitive strategies to their regular course.

Another suggestion is to do it with older students because they are more mature. Older people tend to be more analytic, so it could be easier for them to understand metacognitive strategies and to recognize how to use them in order to improve their language proficiency.

Conclusion

All the process that this study implied taught me to understand that getting acquainted with our mental processes is not a simple thing. It requires time and a lot of practice. It also requires to be familiarized with us in different ways.

I absolutely think that metacognitive strategies are a great help in learning anything, not only a second language. One of the challenges of education in Mexico is students' autonomy, in the Mexican education system students wait for the teacher to give them all the information. They tend to feel they are not responsible for their own learning, but I think that this could change and probably it is changing, which means that those students will be more curious about learning and will be more reflexive about their learning processes.

APPENDIX

Appendix 1: Metacognitive Awareness Listening Questionnaire (MALQ)

Metacognitive Awareness Listening Questionnaire (MALQ)

The statements below describe some strategies for listening comprehension and how you feel about listening in the language you are learning. Do you agree with them? This is not a test, so there are no “right” or “wrong” answers. By responding to these statements, you can help yourself and your teacher understand your progress in learning to listen. Please indicate your opinion after each statement. Circle the number which best shows your level of agreement with the statement. For example:

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

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

Appendix 2: Adaptation of the MALQ into Spanish

METACOGNITIVE AWARENESS LISTENING QUESTIONNAIRE (MALQ)

La presente encuesta tiene como objetivo investigar las estrategias metacognitivas que el estudiante de preparatoria utiliza para comprender el inglés oral. Las siguientes afirmaciones describen algunas estrategias metacognitivas utilizadas para la destreza de comprensión auditiva y también pretenden dar a conocer cómo se siente el alumno al utilizar esta destreza en la lengua extranjera que está aprendiendo, en este caso el inglés.

Este no es un examen, así que no existen respuestas correctas o incorrectas. Se pide responder con sinceridad ya que los datos obtenidos servirán para una investigación de tesis en la Licenciatura de la Enseñanza del Inglés.

Parte I: Datos personales.

En esta parte se te pedirá que escribas algunos datos personales. Esto es solo para tener un control en el proceso de recolección de información. Ninguno de tus datos personales será publicado.

Nombre: _____
Género: _____

Edad: _____

Parte II: Experiencia en el idioma inglés.

Esta parte es acerca de tus estudios previos en el idioma. Marca (□) la opción que represente mejor tu respuesta.

- ¿Has estudiado inglés anteriormente?

☐ Sí

☐ No

- Si tu respuesta fue "Sí", responde:

¿Cuánto tiempo?

Menos de 1 año	☐
1 año	☐
De 1 a 3 años	☐
De 3 a 6 años	☐
Más de 6 años	☐

¿Dónde? (Puedes marcar más de una opción)

Preescolar	☐
Primaria	☐
Secundaria	☐
Clases particulares (p. ej. Harmon hall, Quick learning, CAALE BUAP, Cursos de Extensión universitaria BUAP, Volkswagen, etc.)	☐

Parte III: Estrategias.

Esta es la última parte de la encuesta, esta está formada por 21 enunciados. Encierra el número que represente mejor tu respuesta para cada afirmación. Toma en cuenta la siguiente escala para responder.

Totalmente en desacuerdo	En desacuerdo	Ligeramente en desacuerdo	Parcialmente de acuerdo	De acuerdo	Totalmente de acuerdo
1	2	3	4	5	6

1. Antes de empezar, tengo un plan en mi mente y sé cómo voy a escuchar.	1	2	3	4	5	6
2. Me concentro mucho en lo que escucho cuando tengo problemas entendiendo.	1	2	3	4	5	6

3. Encuentro más difícil la destreza de comprensión auditiva que la comprensión lectora, producción oral o producción escrita.	1	2	3	4	5	6
4. Traduzco en mi mente mientras escucho.	1	2	3	4	5	6
5. Uso palabras que entiendo para adivinar aquellas que no entiendo.	1	2	3	4	5	6
6. Cuando mi mente divaga, recupero mi atención rápidamente.	1	2	3	4	5	6
7. Mientras escucho, comparo lo que entiendo con lo que sé sobre el tema.	1	2	3	4	5	6
8. Siento que la comprensión auditiva, en el idioma inglés, es un desafío para mí.	1	2	3	4	5	6
9. Uso mi experiencia y conocimiento para que me ayuden a entender.	1	2	3	4	5	6
10. Antes de escuchar pienso en algo similar que puede que haya escuchado antes.	1	2	3	4	5	6
11. Traduzco palabras clave mientras escucho.	1	2	3	4	5	6
12. Cuando pierdo la concentración, trato de recuperarla.	1	2	3	4	5	6
13. Mientras escucho, ajusto mi interpretación rápidamente si me doy cuenta que no es correcta.	1	2	3	4	5	6
14. Después de escuchar pienso en cómo escuché y lo que podría hacer diferente la próxima vez. .	1	2	3	4	5	6
15. Me siento seguro cuando escucho algo en inglés.	1	2	3	4	5	6
16. Cuando tengo dificultades entendiendo lo que escucho me rindo y dejo de escuchar.	1	2	3	4	5	6
17. Uso la idea general de lo que escucho para que me ayude a adivinar el significado de las palabras que no entiendo.	1	2	3	4	5	6
18. Traduzco palabra por palabra mientras escucho.	1	2	3	4	5	6
19. Cuando adivino el significado de las palabras, analizo en todo lo demás que escuché para ver si mi suposición tiene sentido.	1	2	3	4	5	6
20. Mientras estoy escuchando, me pregunto constantemente si estoy satisfecho con mi nivel de comprensión.	1	2	3	4	5	6
21. Tengo una meta en mente mientras escucho.	1	2	3	4	5	6

¡Muchas gracias!

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