

Research into practice: implementing strategy and metacognition-based instruction in the teaching of EFL listening for Algerian university teachers and students.

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Declaration of Original Authorship

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

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Abstract

While research into second language listening is on the increase, over the last decade the interest in research has been primarily in investigating the factors affecting learners' listening ability and how to develop listening proficiency focusing on learners' listening strategies and the crucial role played by metacognition. At the same time, although the teacher potentially plays a crucial role in improving learners' motivation, self-beliefs and performance in relation to listening, it has been argued that language teachers' awareness of research and theory relating to listening is limited. Furthermore, their cognition in relation to listening remains a neglected area for research. As a result, our understanding of a variable that potentially influences listening pedagogy and outcomes is limited.

The current study investigated the extent to which research-based training about listening strategy and metacognition based-instruction benefitted Algerian EFL teachers' and students' self-efficacy for listening, in addition to students' listening proficiency. It also investigated the nature of the relationship between these three main variables and other factors, including students' metacognitive knowledge, strategy use and vocabulary knowledge. This study was conducted in two English language departments in Algerian universities, employing a quasiexperimental and mixed method design, with one intervention group (97 students and five teachers) and one comparison group (89 students and five teachers). Data were collected quantitatively and qualitatively from the participants before and after the intervention which lasted for six weeks. The participants' self-efficacy was explored through two different questionnaires, one for teachers and another for students, in addition to interviews. Students' listening proficiency was assessed through two different listening tests, one at pre-test and another at post-test. Their metacognitive knowledge and strategy use were elicited through a questionnaire, and strategy use was further investigated through a stimulated recall interview with 20 students. Vocabulary knowledge was assessed only at pre-test through an aural vocabulary knowledge test. Classroom observation and teacher instructional logs were also utilised in this study to explore teachers' instructional practice in teaching listening.

The analyses demonstrated that teachers' self-efficacy in both groups improved, however those in the intervention group reported a higher level at post-test than those in the comparison group even though the latter had a higher level at pre-test. Moreover, divergence was found between their stated and actual practice in teaching listening at pre-test, comparing data in the questionnaire and classroom observation was found. There was however marked convergence between teaching logs and classroom observation data.

Students in the intervention group demonstrated a statistically significant improvement across the measures of self-efficacy, listening performance and strategy use; however, a nonsignificant improvement was found in relation to their metacognitive knowledge. By contrast, students in the comparison group demonstrated a statistically significant deterioration across all the measures. Further analyses revealed that teachers' self-efficacy was a significant predictor of students' listening performance only for the intervention group at post-test. Teacher selfefficacy was not a significant predictor of student self-efficacy in either group, neither at pretest nor at post-test. Similarly, students' self-efficacy was a significant predictor of students' listening performance only for the intervention group at post-test; on the contrary, their listening performance was a significant predictor of their self-efficacy for both groups at the two timepoints.

This study provides evidence that strategy and metacognition-based training affected both participants' self-efficacy and students' listening performance positively, and that teachers also become more confident in teaching listening through such instruction. It also uncovers the causal relationship between various variables involved in the teaching and learning of foreign language listening.

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Table of Contents

Declara	ation of Original Authorship	i
Abstrac	ct	ii
Acknow	wledgements	iv
Table o	of Contents	v
List of	Tables	ix
List of	Figures	xi
CHAP	FER ONE: INTRODUCTION	1
1.1	Introduction	1
1.2	Context of study	1
1.2	2.1 Higher education system reformation and English teaching	4
1.3	Statement of the problem	8
1.4	Research aims and questions	9
1.5	Thesis outline	10
CHAP	FER TWO: LEARNING SECOND & FOREIGN LANGUAGE LISTENING	12
2.1 I	ntroduction	12
2.2 L	istening in second and foreign language	12
2.3 N	Aodels of listening	13
2.4 I	ndividual differences in listening	19
2.4	4.1 Cognitive factors	20
2.4	4.2 Affective factors	33
CHAP	FER THREE: TEACHING SECOND & FOREIGN LANGUAGE LISTENING	41
3.1 I	ntroduction	41
3.2 S	second and foreign language listening pedagogy	41
3.2	2.1 Strategy-based listening instruction	42
3.2	2.2 Metacognitive strategy training model	47
	Language teacher cognition	
	3.1 Factors influencing teacher cognition	
	3.2 Second and foreign language teacher subject and pedagogical knowledge	
	Feachers' perceptions about listening	
	4.1 Teacher self-efficacy	
	FER FOUR: RESEARCH DESIGN & METHODOLOGY	
	ntroduction	
	Research questions	
	Research paradigm	

4.4 Design of the study	67
4.4.1 Mixed-methods research design	69
4.4.2 Quasi-experimental design	72
4.5 Research methodology	73
4.5.1 Participants and sampling	73
4.5.2 Research methods	75
4.5.3 Study Procedures	90
4.5.4 Pilot Study	97
4.6 Data Analysis Procedures for the main study	100
4.6.1 Quantitative Data Analysis	101
4.6.2 Qualitative Data Analysis	105
4.7 Ethical Considerations and Approval	115
CHAPTER FIVE: FINDINGS (I)	117
5.1 Introduction	117
5.2 Restating the research questions	117
5.3 Reliability of scales	118
5.4 Normality of distribution	119
5.5 Homogeneity of variance	121
5.6 Statistical tests	121
5.6.1 Parametric tests	122
5.7 Quantitative data analysis	125
5.7.1 To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy beliefs?	125
5.7.2 Effect of teacher training on their understanding of teaching/learning listening	126
4.7.3 Effect of teacher training on their stated instructional practice of the listening in classroom	
5.7.4 Type of activities used in the classrooms	129
5.7.5 Purpose of carrying out listening activities	131
5.8 Analysis of Qualitative data	132
5.8.1 Teacher interview	132
5.8.2 Classroom Observation analysis	164
CHAPTER SIX: FINDINGS (II) – STUDENTS	171
6.1 Quantitative data	171
6.1.1 Effect of strategy and metacognition-based instruction on students' reported met knowledge	e
6.1.2 Effect of strategy and metacognition-based instruction on students' reported stra	
	173

6.1.3 To what extent does receiving listening strategy instruction improve learners' listening proficiency?	174
6.1.4 To what extent does receiving listening strategy and metacognition-based instruction improve learners' listening self-efficacy beliefs?	177
6.1.5 To what extent is student listening performance predicted by their listening self-efficacy teacher self-efficacy beliefs and other variables?	
6.1.6 To what extent is student listening self-efficacy predicted by their listening performance teacher self-efficacy beliefs and other variables?	
6.2 Qualitative data	200
6.2.1 Identification of listening strategies	200
6.2.2 Listening perceptions and beliefs	203
CHAPTER SEVEN: DISCUSSION	223
7.1 Introduction	223
7.2 To what extent does a teacher development programme in listening strategy and metacognit based instruction improve teachers' listening self-efficacy beliefs?	
7.2.1 Nature of teachers' initial self-efficacy	223
7.2.2 Teachers' experience and self-efficacy beliefs in relation to strategy and metacognition- based listening instruction	
7.3 To what extent does receiving listening strategy and metacognition-based instruction impro- learners' listening proficiency?	
7.4 To what extent does receiving listening strategy and metacognition-based instruction impro- learners' listening self-efficacy beliefs?	
7.5 To what extent is student listening performance predicted by their listening self-efficacy, teacher self-efficacy beliefs and other variables?	238
7.5.1 Factors predicting students' initial listening performance	238
7.5.2 Factors predicting students' listening performance after the treatment	240
7.6 To what extent are student listening self-efficacy beliefs predicted by their listening performance, teacher self-efficacy beliefs and other variables?	242
7.6.1 Factors predicting students' initial self-efficacy	242
7.5.2 Factors predicting students' self-efficacy after the treatment	244
CHAPTER EIGHT: CONCLUSION	246
8.1 Introduction	246
8.2 Substantive findings	246
8.3 Contribution of the study	250
8.4 Limitations of the study and future research	252
8.5 Pedagogical implications of the study	252
REFERENCES	254
APPENDICES	266
Appendix A: Pre-test Listening Comprehension	266

Appendix B: Post-test Listening Comprehension	.271
Appendix C: Aural Vocabulary Test	.276
Appendix D : Pre- and Post-test Student Questionnaire	.278
Appendix E: Pre- and Post-test Teacher Questionnaire	.283
Appendix F: Classroom Observation Checklist	.289
Appendix G: Teachers' Instructional Log	.291
Appendix H: Information sheet and Consent Form (Head of the Departments)	.292
Appendix I: Information sheet and Consent Form (Teachers)	.295
Appendix J: Information sheet and Consent Form (Students)	.298
Appendix K: Ethical Approval (IoE University of Reading)	.301
Appendix L: List of Strategies Taught During the Intervention (for students)	.306
Appendix M: A Sample of a Lesson Plan	.308
Appendix N: A Sample Guide for a Lesson Procedure for the Intervention & Notes	.311
Appendix O: Taxonomy of Listening Strategies Adapted from Santos et al. (2008) and Vanderg and Goh (2012).	

List of Tables

Table 1.1 Units and modules of the English language and literature field under the LM	1D
system	7
Table 4.1 Summary of the study plan	68
Table 4.2 Teacher demographic information	74
Table 4.3 Student demographic information	75
Table 4.4 Listening comprehension tests characteristics	82
Table 4.5 Background information on the interview teacher participants	

Tueste ne Duengreund nijernanten en me niter retener pante pante	
Table 4.6 Information on the student participants in the SRI	89
Table 4.7 Reliability statistics of teachers' questionnaire	98
Table 4.8 Reliability statistics of students' questionnaire	98
Table 4.9 Reliability statistics of the initial listening test	99
Table 4.10 Cronbach's alpha of the student questionnaire	103
Table 4.11 Cronbach's alpha of the student listening tests	103
Table 4.12 Cronbach's alpha of the teacher questionnaire	104
Table 4.13 Initial nodes from early coding of teachers' interviews for Time 1 and	<i>Time 2</i> 108
Table 4.14 Coding of students' interviews for time 1 and time 2	113

Table 5.1 Cronbach's alpha of the research instruments	119
Table 5.2 Normality distribution of the quantitative research instruments	
Table 5.3 Homogeneity of variance of the study variables	121
Table 5.4 Descriptive statistics for teacher self-efficacy scores	
Table 5.5 Descriptive statistics for teacher understanding of listening teaching and le	earning
	127
Table 5.6 Descriptive statistics for teacher instructional practices for listening in the	
classroom	
Table 5.7 Frequency of using listening activities at pre and post-tests	
Table 5.8 Mean ranks of the importance of listening activities at pre-test and post-tes	<i>t</i> 131
Table 5.9 Emerging themes from teacher interview analysis	133
Table 5. 10 Summary of main data from classroom observation for all participants and	t Time 1
	165
Table 5.11 Summary of main data from classroom logs for the participants in the inte	
group	169

Table 6.1 Descriptive statistics for student metacognitive knowledge	171
Table 6.2 Descriptive statistics for student strategy use	173
Table 6.3 Descriptive statistics for student vocabulary test	175
Table 6.4 Descriptive statistics for student listening tests	176
Table 6.5 Descriptive statistics for student self-efficacy scores	177
Table 6.6 Correlation matrix between the IVs and the DV (listening comprehension)	for the
intervention group at Time 1.	

List of Figures

<i>Figure 1. 1</i> Structure of the Algerian educational system (Algerian Ministry of National Education, 2019)
<i>Figure 2. 1</i> Cognitive processes in L2 listening and their interrelationships (Vandergrift & Goh, 2012, p.17)1
Figure 2. 2 Levels of representation of a simple utterance (Field, 2008, p.114)1
<i>Figure 2. 3</i> Systems model of the listening process (Vandergrift & Goh, 2012, p.58)1
Figure 3. 1 A metacognitive pedagogical sequence for listening (Goh, 2014, p.85)4
<i>Figure 3. 2</i> Teacher cognition, schooling, professional education, and classroom practice (Borg, 2005, p. 192)
Figure 4. 1 Embodied mixed method design of the study7
<i>Figure 4.</i> 2 Metacognitive listening processes and their interaction (Vandergrift & Goh, 2012 p. 106)
Figure 5. 1 Development of teacher self-efficacy12
Figure 5. 2 Mean scores of teachers' understanding of the teaching/learning of listening12
Figure 5. 3 Means of teacher stated instructional practices for teaching listening in the
classroom12
<i>Figure 5. 4</i> Main barriers affecting teacher self-efficacy beliefs in teaching listening15
Figure 6. 1 Means of student metacognitive knowledge17
Figure 6. 2 Means of student strategy use17
Figure 6. 3 Scatterplot of relationship between vocabulary scores with listening scores for the
intervention and comparison groups before the intervention17
Figure 6. 4 Means of listening comprehension scores
Figure 6. 5 Scatterplot of relationship between self-efficacy scores and listening scores for
the intervention and comparison groups before the intervention
Figure 6. 6 Means of self-efficacy beliefs scores
Figure 6. 7 Student groups emerged from interview data in relation to their levels in listening
performance and self-efficacy
<i>Figure 6.</i> 8 Main factors affecting student self-efficacy beliefs in listening22

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter discusses the background to the study, outlining the Algerian education system in addition to the teaching of English language in general and the skill of listening in particular in the Algerian context. The statement of the problem, the research questions, and the objectives of the study are discussed.

1.2 Context of study

The context of the study is Algerian universities. First and foremost, Algeria is a North African, Amazigh, and Arab country. It is the largest country in Africa and 10th in the world. Due to its geographical site, Algeria, among other North African countries such as Morocco and Tunisia, witnessed a successive series of invasions mainly from the Romans, the Arabs, the Spanish, the Turks, and more recently the French. These series of colonisations shaped the current socio-cultural and sociolinguistic profile of Algerians, resulting in "language contact and its by-product, multilingualism- Berber-Punic, Berber-Punic-Latin, Berber-Arabic, Berber-Arabic-Spanish-Turkish, Berber-Arabic-French and so on" (Benrabah, 2013, p. 23).

Algeria is, therefore, a multilingual society and its linguistic system is rich and complex. The majority of Algerians speak the Algerian Arabic known as 'Darja'. This latter has different variations from one region to another. It is a combination of basic Arabic vocabulary and some loanwords from Tamazight, French, Turkish, and Spanish. The minority of the population speak Tamazight (Berber) as their mother tongue with other variations as well. Algeria has two national and official languages, literary Arabic and standard Tamazight. The languages spoken in the country are not taught at school and do not have written forms.

English was taught in Algerian schools during the French colonization as a first foreign language and held the same status as the Algerian Arabic language. After independence in 1962, the country struggled with re-establishment of the Algerian identity and applying it in the educational system after it had been targeted by the colonizer and crushed through the linguistic and cultural policies of assimilation. The government that time strove to revive the Arabic language, the language of religion, in its educational institutions. Consequently, several attempts of reform have been made to attain this goal. Until 1970, the educational structure followed the French colonial structure of three levels: primary school (5 years), middle school (4 years), and secondary school (3 years). During this period, the first Algerian president (after independence) Ben Bella introduced the policy of 'Arabisation', i.e., the Arabic language had to be the language of instruction in all the educational cycles. French was taught but its status in comparison with Arabic was debateable at that time.

All the previous levels (below university) were taught in Arabic except foreign languages (French and English). Pupils started learning French mandatorily at Grade Four (eight-nine years old) and English at Grade Eight (12-13 years old), whereby French was the first foreign language and English the second one. Other foreign languages - German, Italian, Russian and Spanish - were dropped from the middle school programme in 1986 (Benrabah, 2007).

In the 1990s, the country witnessed a civil war known as 'the black decade', a result of cultural and language tensions between the Arabisers and Francophones. According to Benrabah (2013), this war had its roots in the impact of the French colonizer on Algeria and Algerians regarding their attempt to impose violently their language and culture on the expense of the local cultures. In 1993, the government proposed the teaching of English language in the primary school instead of the French language, as the former represented an international language and the latter represented a symbol of a long tragedy. Some parents agreed with the suggestion, while the majority went for French to be the language taught to their children at that stage because of its familiarity (Benrabah, 2013). In 1995, the government initiated the teaching of the Tamazight language as an optional language, as the minority spoke it.

In 2001, the National Commission for the Reform of the Educational System introduced a different educational structure of 5-4-3 years (primary, middle, and secondary respectively). It attempted to develop high school pupils' levels of bilingualism and biliteracy by teaching scientific subjects in French besides Arabic (Benrabah, 2007), as most (95%) of the technical and scientific fields were taught in French at the university level. It also suggested a policy to teach French in Grade Three (pupils 7-8 years old) instead of Four and English in Grade Six (10-11 years old) instead of Eight; so, when they finish their high school, pupils have already learned the English language for seven years (an average of three hours per week). The Algerian educational system is public and tuition-fee free. The system is structured under two ministries, the Ministry of National Education and the Ministry of Higher Education and Scientific Research. The former is in charge of basic and secondary education, while the latter is responsible for the tertiary sector in collaboration with other ministries like the Ministry of Professional Education (Clark, 2006).



Figure 1. 1 Structure of the Algerian educational system (Algerian Ministry of National Education, 2019).

Figure 1.1 represents the structure of the current educational system in Algeria. The academic calendar of the system starts in September and ends in June. Females represent about 60% of the total number of students (Adeola, 2016). The first nine years are compulsory for children. The secondary level aims to prepare students for higher education after taking the Baccalaureate exam (Baccalauréat). After streaming students in their first secondary year for letters or science and technology, their second and last years are more specialized. Success in the Baccalaureate exam, scoring a minimum of 10/20, or an equivalent foreign certificate, is the only way to have access to the tertiary level. On the other hand, students have another opportunity for professional development in case they fail in the final exams (BEM and

Baccalauréat). The Ministry of Professional Training and Education opens the door for those students, according to some criteria, to gain a certificate of 'senior technician' in several fields.

Despite the fact that pupils at the end of secondary school have, potentially sufficient amount of exposure to the English language, the majority of them are likely to get a low score in the final exam. This phenomenon can be explained by the discrepancy between what has been taught and what was evaluated, as it was noted by Guesbaoui (1986, cited in Lakehal-Ayat Bermati, 2008); in the sense that on the one hand, 60% of class time was allocated to listening to the instructor, 5% to speaking, 15% to reading, and 20% to writing. On the other hand, the final national exam of the English language tests students' literacy skills (60% on writing and 40% on reading) consisting of a text followed by comprehension questions, grammar and vocabulary activities, and finally essay writing on a particular topic that is related to the main exam text. Listening and speaking were totally neglected in this exam. Unfortunately, the same evaluation system is still applicable today.

Until now, despite the high prevalence of English language in the world, it could not replace French in the Algerian society possibly because, from a quantitative perspective (60% of the Algerian population speak French): Algeria is the second francophone country in the world (Cordel, 2014). Interestingly, only very recently – July 2019 -, an attempt by the ministry of higher education and scientific research has been initiated to introduce the English language as the first foreign language in higher education at the expense of the French language, as most fields at the Algerian university are taught in French while most research in the world is published in English.

1.2.1 Higher education system reformation and English teaching

First and foremost, attending higher education requires a Baccalaureate certificate and other conditions overseen by the Ministry of Higher Education and Scientific Research annually. These conditions are presented in the form of the field of the study in the Baccalaureate, student choice, average score in specific fields in the baccalaureate, the number of the available seats in each field and jurisdiction (N. Clark, 2006).

The teaching of English language as a field of study in Algeria is receiving much attention in higher education compared to previous years. For instance, over a period of nine years the number of English departments in Algerian universities rose from 30 in 2010 to 43 in

2019 according to the Ministry of Higher Education (2010, 2019). Mainly, the departments of English language are the only institutions in which students are instructed in English language. Admissions to this department consider mainly students' choice, field of study in the baccalaureate (priority for literary students), average score in English language in the baccalaureate exam. For instance, the University of Sétif 2 (North Algeria) minimum admission level (out of 20) in 2016 was 11.07, 12.06, and 13.27 for students who had their Baccalaureate in Foreign Languages speciality, Letters and Philosophy, and Science and Technology respectively. Meanwhile, it was approximately 10.00 at the University of Adrar (South Algeria) for all students.

In 2004, there was the introduction of a new educational system, the three-cycle degree system, LMD (Licence, Master, Doctorat), or in English, Bachelor, Master and Doctorate (BMD). One of the main goals of the reform is "graduate employability" as it was reported by Allab and Benstaali (2009, p.4). This reform was applied after Algeria had participated in the Tempus (Trans-European Mobility Programme for University Studies) programme in 2002. This new system has been applied as an initiation towards globalisation (Idiri, 2005).

The LMD system introduced some key notions including "student/teacher mobility, interdisciplinary activity and employability" (Miliani, 2012, p. 219). It is based on the communicative approach to teaching and learning, and it aims at bringing innovation in assessment of knowledge and skills based on continuous and regular monitoring of students' learning (Sarnou, Koç, Houcine & Bouhadiba, 2012). In comparison to the previous system, the LMD is different in terms of the modules, teacher-learner roles, assessment, and teaching materials. More specialised modules were introduced, for instance, the teaching of syntax and morphology modules are new to the speciality of English language while it was embodied within the teaching of traditional grammar in the previous system. Moreover, the academic year in the old system was structured within two terms while it changed to be within two semesters under the new reform besides continuous assessment which did not exist in the previous system. Furthermore, the reform emphasised the integration of information and communication technologies (ICTs) in the classroom. Additionally, more focus has been given to students' autonomy in learning and developing their capacities, meanwhile teachers' role shifted from the traditional view of knowledge providers to facilitators and mediators of the learning process (Sarnou et al., 2012).

Miliani (2012) describes the reform as merely structural while pedagogical focus receives little attention. Lakehal-Ayat Bermati (2008) claimed that this change in the educational system resulted in haste to recruit unqualified teachers just for the sake of satisfying the needs of the educational institutions. University teachers in general, on the one hand, face problems when trying to implement the reform as they received no training on how to cope with the alterations. The latter includes new modules which require teachers to read and develop their own lesson content. In her study, Idiri (2005) used observation as a research tool to identify the problems encountered by teachers in a case study of one Algerian English language department within one semester. The researcher outlined the observation results as follow; besides the huge number of students and the limited number of teachers, the reform calls for new teaching methods and alterations in lectures' contents, however, teachers were observed to use the same teaching methods and subjects' contents as the old system. Furthermore, cooperation and coordination between the teachers is missing and students receive different input in the same module which results in students' varied standards and output. Within the universities, the weekly allocation of learning in the previous system (classical) was 15 hours for four years of Bachelor degree (BA), while it is 25 hours in the current system (LMD) for the three years of the BA, which results in lack of motivation among students and teachers (Megnounif, n.d). Correspondingly, Azzi (2012, p. 1004) reports that teachers are required to:

- Develop the contents of their pedagogical programs instead of complying with the national program set by the Ministry of Higher Education and Scientific Research
- Adopt the learner-centred approach instead of the teacher-centred one
- Provide their students with on-going assessment instead of a one-shot exam at the end of each semester.

On the bright side of the reform, teachers have more opportunities to benefit from scholarships abroad in comparison with the old classical system (Rezig, 2011). According to the LMD system, the English language and literature modules are organized into units as presented in Table 1.1.

Unit	Modules
	Written technique of expression, oral technique of expression, grammar,
Fundamental	introduction to general linguistics, phonetics (theory and practice), introduction
	to language culture, and introduction to literary texts.
Methodology	Methodology of academic work.
Discovery	Language of speciality (ESP).
Transversal	A foreign language (French, German, or Spanish) and introduction to information and computer technology in education.

Table 1.1 Units and modules of the English language and literature field under the LMD system

The LMD system was introduced by the ministry of higher education in 2004, but it was not applied in all universities simultaneously. Azzi (2012) was interested to identify the perception of a small number of an English department staff (12 teachers) of the new pedagogical practices under this reform. Using Rogers' (1995) innovation adoption/diffusion framework, she developed a questionnaire of 12 questions based on a five-point Likert scale. Rogers' (1995) model "is widely used to study innovations in a variety of fields as marketing, public health, communication, anthropology, geography, linguistics, education and particularly ELT programs" (Azzi, 2012, p. 1005).

The framework, according to Rogers (1995), includes five items related to innovation. First, relative advantage, which refers to the perception that the innovation is better than the previous idea. Second, compatibility refers to the consistency between the existing values and experiences with the features of the innovation, so that the latter can be adopted easily. Third, complexity; it demonstrates the adopters' perceptions of the level of complexity and difficulty of the innovation. The next item is trialability. It denotes that a new idea or practice can be tried and experimented on the instalment to check its value, so that its adoption can be easy in the field. Last but not least, the feature of observability. This latter has been described as the results of the innovation being visible to others.

From the results obtained by Azzi, it seems that most teachers were reluctant to change and had negative perceptions of the new pedagogy. Moreover, teachers were mostly unsure or had low self-efficacy in their ability to design the content of the courses themselves to meet learner-centred objectives of learning and to continuously assess their learning during their learning process. They were also less efficacious to satisfy the need of the Algerian higher education to compete in the international arena. The researcher in this study identified several factors within teachers' aversion to adopt the new system, mainly their inability to teach some modules they were not majored in, such as English for Specific Purposes (ESP) and Educational Technology (ET). In addition, there was a lack of pre-and in-service training to develop their skills in order to be ready for the adoption of new teaching methods and evaluation procedures.

1.3 Statement of the problem

Curriculum reform in the context of English language departments in Algeria places focus on the Oral Expression module as one of the fundamental units in the basic educational programme for the undergraduate level, and in which listening forms part of the module exam. However, the systematic teaching of EFL listening, as part of the Oral Expression module in the English language curriculum, is highly neglected. The time allocated for this module is three hours per week, divided into two sessions, one for speaking classes and the other for listening classes. However, it is not the case for all universities; in some institutions the time allocated for the Oral Expression module is only one hour and a half because of the large number of students in comparison to the limited number of teachers and classrooms in which interest in speaking is favoured at the expense of listening. Moreover, other teachers tend to focus on the speaking part in both sessions of the module and neglect the listening one.

Anecdotal evidence from university teachers suggests that the new educational system in Algeria does not pay much attention to the teaching of listening, in the sense that there is no shared curriculum, coursebook, or materials for teaching listening, rather, teachers are just provided with the themes or topics they need to tackle in the classroom. Consequently, teachers tend to approach listening pedagogy differently according to the materials they select. Generally, the listening materials (tasks) are authentic, taken from English learning websites, such as 'British Council' and 'One Stop English'. Additionally, there appears to be little focus on the skill development in the sense that teachers approach listening as an activity rather than as a skill to develop. In a typical lesson, some new vocabulary is explained, some sounds and individual words are highlighted for pronunciation, and whole class discussion follows on a selected topic. As a result, students' performance in the skill might vary remarkably. Research in the field of second and foreign language listening argues for the importance of the listening skill in learning a language. Despite its significance, teachers were identified to lack pedagogical and practical approaches to teach the skill (e.g. Graham, Santos, & Francis-Brophy, 2014; Siegel, 2014a). Furthermore, teaching listening strategies including metacognition has been one of the predominant areas of focus in research and, this type of instruction has been found to improve learners' listening performance and their perceived ability to comprehend spoken language. However, language teachers' awareness of research and theory relating to listening is limited (Graham & Santos, 2015) and their cognition in relation to listening remains a neglected area (Graham, 2017). Therefore, the current study seeks to explore whether training teachers to approach listening through strategy and metacognition-based instruction would have benefits for teachers and students alike in the context of EFL listening in Algeria. The intention was to expose teachers to research-based training, seeking to evaluate its impact on teachers' practice and self-efficacy beliefs as well as on the students' listening performance and self-efficacy.

1.4 Research aims and questions

The 'unit of analysis' of second language acquisition research has predominantly been the language learner (Dörnyei, 2018; Gkonou, Mercer & Daubney, 2018, Saleem, 2018), and interest in the language teacher in general and listening in particular has been limited. Moreover, research suggests that teacher self-efficacy is important in the learning and teaching process, however there is very little research about self-efficacy in teaching listening. Therefore, this research aims to investigate the relationship between teachers' and learners' listening selfefficacy beliefs, the effects of research-based training on teachers' listening beliefs in general and self-efficacy beliefs in particular and their instructional practice. In addition, this study seeks to explore the impacts of strategy and metacognition-based instruction on students' listening performance and their self-efficacy beliefs. To achieve these aims, the study poses the following questions:

- 1. To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy
- 2. To what extent does receiving listening strategy instruction improve:
 - a. Learners' listening proficiency
 - b. Learners' listening self-efficacy
- 3. To what extent is student listening performance predicted by their listening selfefficacy and teacher self-efficacy beliefs?
- 4. To what extent is student listening self-efficacy predicted by their listening performance and teacher self-efficacy beliefs?

1.5 Thesis outline

This thesis is divided into eight chapters. The first chapter presents the background and context of the study. The research questions, aims and significance are also tackled. Chapter Two reviews literature pertinent to the nature and models of foreign/second language listening. It also provides a brief review of literature on learners' individual differences in relation to L2/FL listening. Chapter Three deals with the teaching of L2/FL listening. It covers listening pedagogy, focusing mainly on strategy instruction and the metacognitive model. Additionally, it tackles teacher cognition and the factors affecting them. Lastly, teachers' beliefs and knowledge of listening, including self-efficacy beliefs, are also reviewed.

Chapter Four presents the methodology adopted to answer the research questions and reach the study aims. A mixed method approach is used and explained with a quasi-experimental design. The data collection, data analysis instruments and procedures are described. The results from the pilot study are also presented.

Chapter Five presents the reliability of the scales and the statistical techniques used in the analysis of data from all participants. But this chapter is only devoted for the analysis of the data collected from teachers both quantitatively and qualitatively in relation to the first research question. Chapter Six presents the analysis of data related to students including both the quantitative and the qualitative ones in relation to the second, third and fourth research questions. Chapter Seven presents the discussion of the findings in relation to each research question with reference to the literature and the theoretical and empirical backgrounds. Interpretation of the current study findings and some instances of similarities and difference between them and previous evidence are presented. Chapter Eight, the last chapter, summarises the main findings of this study. It also describes the contribution of this study to knowledge, acknowledges the limitation of the study and suggests some areas for future research. Then, it concludes with some pedagogical implications.

CHAPTER TWO: LEARNING SECOND & FOREIGN LANGUAGE LISTENING

2.1 Introduction

This chapter reviews literature related to the present study. It includes a brief review of listening in general, followed specifically by listening as part of second/foreign language learning. Listening models are reviewed; and lastly, individual differences in listening, including cognitive and affective factors, are also discussed.

2.2 Listening in second and foreign language

Listening may not be easy to define or describe as the available knowledge may not be sufficient for accurate understanding or description (J. Field, 2008; Janusik, 2010; Siegel, 2014a). Its definition has also evolved over time (Rost, 2002). Listening was first viewed as recording acoustic signals in the brain, with the listener considered as a tape recorder (Anderson & Lynch, 1988), in which comprehension occurs when the listener is able to remember the aural message through hearing and attention. With later developments in telecommunication, computer sciences, anthropology, and transpersonal psychology, listening was to be viewed more as a highly integrative construct in which the listener plays an active role of a mental model builder.

According to Rost (2002), the first stage of listening is neurological processing, through which a conscious and a continuous reception of information occurs. In the next stage, the perception of speech (linguistic processing) occurs when the listener identifies the words and activates knowledge of the words' meaning. Listeners in this view are required to employ phonotactic rules, so that they can be aware of sound variations such as assimilation (e.g. 'meet you' /mi:t ju:/ becomes /mi:tʃu:/ in rapid speech) and elision (e.g. 'I don't know' becomes 'I duno'). To manage spoken language in real time, listeners need to separate the speech into small constituents that can fit in short-term memory. Utilizing prosodic features such as pauses, intonation and rhythm is of importance for understanding the input, by indicating the start of a new idea or expressing personal attitudes. In direct interaction between the interlocutors, non-

verbal cues or backchannel signals like eye contact, hand and head movements are to be integrated as well (Rost, 2011).

According to Grice's (1975) theory of implicature, what is said is not always meant, therefore pragmatic processing plays a crucial role in understanding what is communicated. The role of the listener is to infer the speaker's intended meaning within a social frame (contextual meaning), including the participants' social status and relationships, culture and social background; in other words, the social distance between the participants and how language is used to facilitate the interaction between them. In this perspective, listening comprehension is anything but an easy task, in the sense that the understanding and response to an aural message is related to the interpretation of the speaker's intention (Burleson, 2011).

From previous definitions, it can be seen that listening is a highly integrative skill and anything but a passive task (Vandergrift, 1999), ephemeral in nature, viewed to be both a psychological and social phenomenon that takes place in people's cognition and develops interactively with others (McLaren, Madrid, & González, 2006). Scholars however, when defining listening, rarely make clear to what kind of listening they are referring. By contrast, Janusik (2010) highlighted the difference between conversational listening and unidirectional listening, termed in her work as "linear listening" (p.205), and hence the cognitive processes involved in both types are different. A potential active role of the listener in the listening process is presented in the models developed by researchers in the field.

2.3 Models of listening

An understanding of the nature of the listening process and how listeners approach spoken signals is a good source of knowledge for both teachers and learners, and hence, for the development of listening pedagogy. Scholars have reached a consensus that listening comprehension is the result of a combination of the physical aspects of aural information and the cognitive processes of the receiver, e.g. Khuziakhmetov and Porchesku (2016).

In this token, the listening process has been illuminated from the perspective of cognitive psychology by the work of Anderson (1995). Anderson's model consists of three different phases of processing: perceptual processing, parsing, and utilization. This cognitive framework has been developed for L1 comprehension, but was adopted in SL/FL contexts as

the underlying fundamental cognitive processes are considered to be similar; although SL/FL learners encounter more linguistic and sociolinguistic difficulties (Færch & Kasper, 1986).

As far as listening is concerned, it "encompasses receptive, constructive, and interpretive aspects of cognition, which are utilized in both first language (L1) and second language (L2) listening" (Rost, 2005, p. 503). It is believed that the cognitive processes involved in listening are complex, but there is harmony between them because interaction between sound signals and learners' prior knowledge occurs and different types of knowledge are required and connected during the listening process (Goh, 2014). During the perceptual processing phase (the lowest level), the listener encodes the acoustic message through the identification of phonemes and word boundaries. The next processing is parsing, during which the words are combined together according to syntactic structure and assigned semantic relations, according to knowledge existing in the long-term memory. The input thus processed is stored as propositions to be utilized via listeners' knowledge of the world to interpret what has been communicated (Rost, 2011).

Moreover, the cognitive processes involved in listening are regarded as interrelated, recursive and can happen simultaneously during a single listening event. Anderson (1995) comments that these processes are "by necessity partially ordered in time; however, they also partly overlap. Listeners can be making inferences from the first part of a sentence while they are already perceiving a later part" (p. 379). This view has been later clarified in relation to what listeners actually do during the act of listening, how they engage in listening efficiently, and how they regulate these cognitive processes. Figure 2.1 demonstrates the interrelationship between the cognitive processes needed in L2 listening, developed by Vandergrift and Goh (2012).



Figure 2. 1 Cognitive processes in L2 listening and their interrelationships (Vandergrift & Goh, 2012, p.17).

The notions of bottom-up and top-down processes refer to the directions of approaching aural input. On the one hand, bottom-up processes involving the listener's "knowledge of the segmentals (individual sounds or phonemes) and suprasegmentals (patterns of language intonation, such as stress, tone and rhythm) of the target language" (Vandergrift & Goh, 2012, p. 18), then the combining of the smallest units together, in other words, from phonemes, words, phrases, clauses, to sentences to create meaning. On the other hand, in top-down processes, listeners rely on different types of knowledge stored in long-term memory. It is presented in the form of schemata in order to compensate for unclear words in the message including "prior (world or experiential) knowledge, pragmatic knowledge, cultural knowledge about the target knowledge, and discourse knowledge (types of texts and how information is organized in these texts)" (Vandergrift & Goh, 2012, p. 18).

Furthermore, Field (2008) argues that the issue of whether top-down or bottom-up processing is more important than the other is confusing and misleading, because the processes involved in second language listening are highly interrelated and cannot be separated. He added that listening is an online activity in which a minimal amount of decoding is needed, and the

use of non-linguistic knowledge can serve "to compensate for gaps in understanding or to enrich a fully decoded message" (p. 132). Therefore, he developed a model constituting of two main processes for listening comprehension, decoding and meaning-building types of processes. The models he developed concerning the processes involved are based on empirical research evidence, so that teachers can rely on them throughout listening instruction (Field, 2012).

Decoding processes

These processes, according to Field (2008), represent a sequence of related processes through which a listener goes in order to convert acoustic input to a standard form of language. The involved processes are presented in different levels within an information-based model. It requires moving from the smallest level to the largest one, including phoneme level, syllable level, word level, syntactic parsing, intonation level, and normalization to speaker voices. The decoding processes are complex per se; each level encompasses other processes that are needed to master each particular level. An example of how a simple utterance is built up according to the decoding process is presented in Figure 2.2.



Figure 2. 2 Levels of representation of a simple utterance (Field, 2008, p.114).

Mastering, to some extent, all the different levels in the decoding process is of crucial importance in the understanding of an utterance. Field (2012) claims that any small failure that may occur during this process is likely to affect the grasping of the intended meaning of the spoken message. In L2 listening classrooms, the previous processes can be practised, while some language features need to be drilled intensively in order to achieve higher automaticity when processing connected speech (Field, 2008).

Meaning-building processes

Unlike the decoding processes that are based on the sounds, words, and grammar of the target language, meaning building processes are drawn from processes that are already used in the native language, in the form of the listener's knowledge of the world, the speaker and his/her utterance (Field, 2008). The processes suggested by Field that help in meaning building are employed by the L1 user, including word meaning, syntactic meaning, intonation meaning, contextual knowledge, schematic knowledge, context/co-text and meaning, inferencing, referencing connections, interpreting the utterance, selecting information, integrating information, and forming and checking provisional discourse representations.

Correspondingly, previous work emphasised the various contributions of each of the processes in listening comprehension. For instance, a study was conducted by Tsui and Fullilove (1998) on a large sample size in Hong Kong over a period of seven years (examination papers taken from 1988 to 1994), in which they were interested in investigating the most important skill for processing aural input. The listening test used in this study was taken from the Hong Kong Certificate of Education Examination (HKCEE). The variables manipulated in the study were, first, the type of schema used (matching and non-matching), while the first type refers to the congruence between schema activated by the initial linguistic input and the upcoming linguistic input, the second type refers to the lack of match between the initial schema activated and the subsequent input. The second variable was the type of question (global and local).

The findings revealed that skilled listeners (i.e. those gaining high scores overall in listening) were more likely to answer correctly non-matching schema items than lower scoring learners irrespective of the type of questions. Thus, better listeners were able to process and decode the linguistic input accurately and rapidly, in other words, they relied more on bottom-

up processing. On the contrary, less skilled listeners were not able to persevere with understanding the input and rather could rely on top-down processing to comprehend its meaning.

Another study was conducted by O'Malley, Chamot, and Küpper (1989) on the different processes learners use in listening comprehension, the strategies they employ in the different phases of processing aural academic texts, and the differences between effective and less effective listeners in relation to strategy use. To attain these aims, the researchers used think aloud procedures with a small number of participants (eight intermediate English learners) after the participants were trained on thinking aloud. The results revealed that effective listeners as designated by their teachers and the researchers (according to some criteria such as ability to respond appropriately in a conversation and following instructions without asking for clarification) outweighed ineffective listeners in the use of three main types of strategies: selfmonitoring, elaboration, and inferencing. More precisely, effective listeners relied mainly on top-down processing in the use of prior knowledge to understand different aural texts.

From the two previous studies, the two groups of skilled and less skilled listeners were distinguished on the basis of the processing and strategies they employed throughout the listening process, in terms of the processing and strategies they were using throughout the listening process. However, different results were obtained. In the first study, an ample number of listening samples over a period of seven years were analysed, from which generalization can be made. Nonetheless, the sample used in the second study might be too small to allow conclusions to be drawn and the only tool used (thinking aloud) may not essentially be valid; as Seliger (1983) doubted the extent to which learners' verbalizations can be valid. Interestingly, in both studies proficient listeners demonstrated a good command of prediction and verification strategies based on either linguistic or non-linguistic knowledge from different types of texts.

Ultimately, listening is an interactive and interpretive process, and the transient nature of listening requires a simultaneous interaction of phonological, syntactic, semantic, and pragmatic types of information. This combination is better managed by listeners' metacognition -as shown in Figure 2.1-, which refers to their ability to have control over the listening process. Hence, this process can be affected by other factors including the listener and the listening text type.

18

2.4 Individual differences in listening

Correspondingly, in language classrooms, differences exist among individual listeners' performance even though they have the same learning experience, same teacher, and same curriculum (Vandergrift & Goh, 2012), with other factors likely to contribute to these differences. Vandergrift and Goh (2012) highlight, however, that little empirical research has been conducted to establish a causal relationship between such factors and listening outcomes. These factors are presented in the following figure:



Figure 2. 3 Systems model of the listening process (Vandergrift & Goh, 2012, p.58).

Looking at the details of this model (Figure 2.3) can help both teachers and learners better understand the multidimensional nature of the listening skill, so that listeners' listening problems can be identified more easily. The figure demonstrates how dynamic the system is. That is, the three elements (person factors, listening contexts and listening results) are interdependent, in which a change in one factor may lead to change in the other aspects within the system. It appears from the figure that person factors and listening contexts can define the way spoken input is approached (e.g., the strategies to be used) by the listener on the one hand, and the final product of this approach on the other one. Vice versa, it shows how the outcomes of a listening experience can affect person and context-related factors, and further influence

the listening behaviour. Interestingly, it seems that listeners' sense of understanding aural input (listening self-efficacy) has a crucial role in the way listening is perceived by the learners. Self-efficacy can be a prerequisite factor to determine the intensity of efforts needed to process input, and an outcome resulting from experiencing exposure to the input, whether positively or negatively.

In the next section, some of the factors presented in the model above are discussed - only those of significance to the current study – in relation to some empirical studies.

2.4.1 Cognitive factors

2.4.1.1 Vocabulary knowledge

Under this section, three types of knowledge have been studied in the area of foreign/second language listening: vocabulary, syntax, and discourse knowledge. However, the vocabulary seems to have received more attention in comparison to the other two aspects. Besides, as the current study does not focus on all these factors, literature related only to vocabulary is presented.

An interesting study was conducted by Vandergrift and Baker (2015), where they explored the relationship between 157 Grade Seven students' cognitive variables and French as an L2 listening comprehension in Canada. The variables include L1 listening proficiency, L1 and L2 vocabulary knowledge, auditory discrimination ability, working memory capacity, and metacognitive awareness of listening. The study revealed a positive relationship between all the variables and L2 listening proficiency; however, there was a strong association between L2 listening proficiency and L2 vocabulary. This association is also found in the earlier work of Stæhr (2009), with a high correlation (r = .70) between listening achievement and vocabulary size. While Stæhr assessed knowledge of the written forms of words through reading, Vandergrift and Baker (2015) used a different instrument for oral receptive vocabulary assessment known as the Peabody Picture Vocabulary Test (PPVT), where learners choose the correct picture corresponding to the word they hear among other options, in a panel of four pictures. The French version of the PPVT was used in the study with a reliability coefficient ranging between r = .80 and .85.

A more recent study by Wang and Treffers-Daller (2017), explored the listening comprehension of 151 non-English major university students in China in relation to vocabulary knowledge and other variables, including general language proficiency and metacognitive awareness. Students' vocabulary size was explored using a receptive test developed by Nation and Beglar (2007), while the listening comprehension test was taken from the listening part of a widely used standardized English test in China 'National College English Test Band 4'. Correlation results demonstrated a positive medium relationship between listening comprehension and vocabulary size (r = .44). A causal relationship was also explored using hierarchical multiple regression controlling for general language proficiency and metacognitive awareness. The results showed that vocabulary size explained 19% of variance in students' listening comprehension. This indicates that vocabulary is important in comprehending aural input.

Other studies suggest that the relationship between listening and vocabulary is however less straightforward than these studies suggest. Van Zeeland and Schmitt (2013) conducted a study to investigate the relationship between lexical coverage and L1/L2 listening comprehension of 76 individuals. The participants of the study were 32 native speakers of English in their first-year undergraduate at a British university, and 40 of them were non-native speakers of English with an advanced or high-intermediate level in English language. The researchers used four authentic spoken passages in a form of short stories, wherein participants' comprehension was measured through a multiple-choice test. A revised version of Nation's (1983) Vocabulary Levels Test (VLT) was used to test participants' lexical coverage. The results revealed the contribution of lexical knowledge to both L1/L2 listening comprehension, but they also demonstrated that there exists more variation among L2 listeners when they knew 90% and 95% of words. That is, though listeners may have the same level of vocabulary levels but still understood quite well, and vice versa.

From the different results obtained in the previous studies, it can be suggested that there exist other factors that contribute to listening comprehension in addition to lexical knowledge; with Van Zeeland and Schmitt (2013) conjecturing that some listeners in their study were more strategic than others and had better metacognitive control over the listening process using effective strategies. They did not however explore whether listeners did indeed employ strategies differently.

2.4.1.2 Metacognitive knowledge

Learners' awareness of their cognition and how to control this complex process is seen to have a direct impact on the process and outcomes of learning (Zimmerman & Schunk, 2001). The term metacognitive knowledge originated from work in cognitive psychology (Flavell, 1976, p. 232) where it is referred to as:

One's knowledge concerning one's own cognitive processes and products or anything related to them ... [it] refers among other things, to the active monitoring and consequent regulation and orchestration of these processes in relation to the cognitive objects or data on which they bear, usually in the service of some concrete goal or objective.

Hence, it can be said that metacognition in learning is the learners' insights into their thought processes, allowing them to actively analyse, monitor, and evaluate this process against a pre-defined goal, with the aim of improving the learning behaviour in future experiences. Baddeley (2000, in Vandergrift & Goh, 2012) regards metacognition as influencing the way individuals think and the way they control their thinking. Broadly speaking, Vandergrift and Goh (2012) argue that metacognition is an overarching process that controls learning instead of just a process that manages strategy use. Schmitt and Sha's (2009) framework of metacognition includes two main areas, knowledge and regulation. The former embodies three sub-types of knowledge: declarative, procedural, and conditional. Declarative metacognitive knowledge about how to implement strategies in a particular task is known as procedural metacognitive knowledge. Last but not least, awareness of the contextual environment of why and when certain strategies are to be selected to perform a task is referred to as conditional metacognitive knowledge (Schmitt & Sha, 2009).

As far as metacognitive regulation is concerned, Schmitt and Sha (2009) regarded it as "the overarching cognitive processing construct" (p, 254); it is executive, meaning it puts metacognitive knowledge into action, through the identification of problems when processing tasks, monitoring problem solving actions, planning and revising the strategies used previously for future experiences.

22

In the context of L2 listening, Vandergrift and Goh (2012) considered a third element in metacognition known as metacognitive experience. This latter has been defined by Efklides (2001) as a subjective experience, which may include feelings, beliefs, judgements, and goals. It is considered to have impact on both individuals' self-appraisal and self-regulation, in the sense that, they can add, delete, or revise knowledge already stored to be used later when performing actions in other situations (Flavell, 1981).

Further to what has been reviewed above, previous studies in foreign/second language listening show that successful listeners tend to show higher levels of metacognition in listening and use this knowledge skilfully compared to poor listeners (e.g. Goh, 2002; Graham & Macaro, 2008; Vandergrift, 2003). Similarly, Vandergrift (2015) argues that skilled listeners use metacognitive knowledge to fill gaps in their understanding using cognitive and metacognitive strategies in addition to other sources of information that can help them infer the overall meaning of what they hear. Moreover, preliminary evidence generated from the work of Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) in their validation of the Metacognitive Awareness Listening Questionnaire (MALQ) suggests that 13% of the variance in L2 listening is explained by metacognitive knowledge.

A study mentioned earlier (Wang & Treffers-Daller, 2017) also explored the relationship between listening comprehension and metacognitive knowledge, using the MALQ to explore the latter. The correlation findings demonstrated a positive small relationship between the two variables. When the causal relationship was investigated using a hierarchical multiple regression controlling for general language proficiency and vocabulary size, the results showed no significant contribution of metacognitive knowledge as a whole to listening comprehension. However, the person knowledge section in the MALQ on its own was found to account for 4% of the variance in listening comprehension. This may be ascribed to the fact that person knowledge in the MALQ is very similar to self-efficacy.

A very recent study was conducted by Vafaee and Suzuki (2020) with 263 EFL students in Iran. They were of lower-intermediate to advanced levels of English proficiency with an average age of 27.8. The researchers investigated the significance of some linguistic variables (vocabulary and syntactic knowledge) and other cognitive and affective variables including metacognitive knowledge, working memory and anxiety in second language listening. This latter was assessed through a listening section from the IELTS test. Metacognitive knowledge was explored through the MALQ. The findings from the structural

equation modelling (SEM) demonstrated that metacognitive knowledge had a significant role in L2 listening ability with a regression path of .15 which represented the third strongest variable after vocabulary and syntactic types of knowledge (.55 and .28 respectively).

Moreover, within a framework of learner strategy-instruction, Graham and Santos (2015) highlight the role of metacognitive regulation as a focal point of using listening strategies, arguing that no matter how many strategies listeners use, they are unlikely to be effective unless they have control over these strategies and how to apply them appropriately. Therefore, more attention needs to be paid to developing learners' metacognition in L2 listening.

2.4.1.3 Language learner strategies

Much research (e.g., Graham et al., 2008; Vandergrift, 1997) has been driven by an interest to investigate differences between effective and less-effective listeners from the perspective of the strategies they deploy to achieve comprehension. Hence, this section reviews previous works on language strategies followed by listening strategies. In this work, the term learner strategies are used instead of learning strategies in order to highlight the active role of the learner to employ the strategies.

Research on listening strategies has received a significant amount of attention in the context of second and foreign language learning. Generally, research on listening strategies has been grounded within general language learner strategy frameworks which have been derived from Oxford's (1990) Strategic Inventory for Language Learning (SILL) and O'Malley and Chamot's (1990) taxonomy of cognitive, metacognitive, and socio-affective types of strategies. Hence, listening strategies in foreign language are by no means separated from general language learner strategies. Therefore, these latter are introduced first briefly.

The study of language learner strategies continues to receive attention despite the fact that it has been criticised on different counts and from different theoretical perspectives (Pawlak, 2019). Even now there is not a consensus regarding the exact definition of language learner strategies since the 1970s, and it is still the subject of much controversy (Dörnyei, 2005; Griffiths, 2018, 2013; Macaro, 2006; O'Malley et al., 1985, Pawlak, 2019). For instance, Griffiths (2013) summarized six necessary characteristics of language learner strategies: activity, consciousness, choice, goal orientation, regulation, and learning focus. She presented
language strategies as "activities consciously chosen by learners for the purpose of regulating their own language learning" (p.15).

The active nature of language learner strategies is reflected in the act of learners, as they are not passive recipients (Larsen-Freeman, 2001), but rather they take actions when needed to enhance the learning process. Moreover, scholars like Griffiths (2013) and Cohen (2011) consider strategies to be chosen by learners according to different factors, for instance, learners' personal variables, such as motivation, proficiency level, self-efficacy, culture and others. Other factors might be related to their learning situation as being full-time learners or distance learning, and the teaching/learning methods. The purpose of studying or performing a task, such as to pass an exam or merely for personal satisfaction, has an impact on the choice of strategies to be employed.

The term 'conscious' in the language learner strategies literature seems to be confusing as well. Macaro (2006) for instance argues that the use of strategies is conscious, and Oxford (1990, 2011b) believes that they are often conscious and deliberately used, while A. Wenden (1991) claims that strategies are automatically used. Griffiths (2013) makes it rather clearer that strategies develop on a continuum between deliberateness and automaticity according to the learners' experience in the language learning process. She argues that "novice learners, for instance, or those trying out new strategies, are likely to need to make deliberate decisions, whereas experienced learners' strategy selections are likely to be more automatic, to the point where they may not even be aware of having made choices" (p.9-10). The same idea has been, propounded by Grenfell and Harris (2014), as strategies lie "on continuum between the conscious and the unconscious" (p.191). These authors then use the term 'unconscious' to refer to automatic.

Cohen and Macaro (2007) suggest that the use of learner strategies can lead to improvement in autonomy, but an autonomous learner does not necessarily mean that the learner has a repertoire of strategies. Furthermore, Macaro (2006) highlighted the transferability of the strategies from one situation or task to another one similar to the previous one. Therefore, it is safe to say that learners' metacognition plays a crucial role in this process of transfer via the evaluation of the effectiveness of the strategies used. Ultimately, the aim behind the use of language learner strategies is to learn a language. This claim was supported by Griffiths and Cansiz (2015) that no matter what kind of strategies learners use as long as they provide opportunities for them to learn the target language.

Researchers have argued that the effectiveness of strategies in the learning process is related to the role of learners' high level of metacognition in orchestrating strategy clusters that have been deployed, instead of the number of the strategies used (Macaro, 2006; Macaro et al., 2016). Interestingly, success in a strategic plan (constructed through learners' metacognition) for a particular task is assumed to be dependent to some extent on learners' motivation, and more precisely on their sense of self-efficacy (Bandura, 1993, cited in Macaro, 2006). That is to say, according to self-efficacy theory, individuals' sense of efficacy beliefs are very closely related to their previous experiences, and hence, these experiences, whether successful or not, might affect the way individuals plan their future actions through metacognitive strategies.

Listening strategies

In this study, the focus is not concerned with specific type of strategies, but with the combination of different strategies managed by a metacognitive approach to guide an effective and efficient use of these strategies in listening to English in a foreign language context. For the most part, Vandergrift (1997) developed his taxonomy based on the work of O'Malley and Chamot (1990), Oxford (1990), and Vandergrift (1996). He suggested three types of listening strategies: metacognitive, cognitive, and socio affective. Later, researchers such as Graham and Santos (2015), Santos, Graham, and Vanderplank (2008), Vandergrift (2003) adopted the previous taxonomy but excluding the socio-affective strategies. Subsequently, Vandergrift and Goh (2012) developed another classification of listening strategies used by learners drawing on the work of Goh (2002), and interestingly included socio-affective strategies. These latter are considered to influence the affective and motivational states of learners (Vandergrift & Goh 2012), and hence their listening proficiency and their sense of efficacy despite the fact that little attention has been paid to how to train learners in employing them accurately.

Cognitive strategies are considered to involve a direct manipulation of the target language material. Griffiths (2013), for instance, views them as "activities which directly process the material to be learnt" (p.43). In listening, they are "used to make sense of what we hear" (Lynch, 2009, p.79). Hence, they are viewed to be the most used by language learners in comparison to other strategy types (Oxford, 1990). On the other hand, metacognitive strategies refer to "higher order executive skills that may entail planning for, monitoring or evaluation the success of a learning activity" (O'Malley & Chamot, 1990, p.44). They are the kind of strategies that help listeners plan, monitor, and evaluate their understanding of spoken language. Socio-

affective strategies refer to those used to manage the emotional and affective states of the learner towards learning (Graham & Santos, 2015), and they are also termed self-motivational strategies (Dörnyei, 2003). Additionally, Chamot and O'Malley (1987) state that this type of strategies assists the promotion of positive attitudes and reactions towards language learning. Researchers including Goh (2002) argue that effective learning in all contexts is related to learners' socio-affective strategies. Similarly, these strategies are believed to be crucial in the process of managing the learning experience as they allow learners to learn how to learn (Habte-Gabr,2006). In listening, this can be achieved through collaboration with others, verifying understanding, receiving feedback from teachers or peers for encouragement and reducing anxiety (Lynch, 2009; Vandergrift, 2003).

Field (2008), however, draws his classification of listening strategies from the work of Dörnyei and Scott (1997), in which he proposes four types of strategies:

- 1. Avoidance strategies: learner gets by without the missing or uncertain piece of input.
- 2. Achievement strategies: learner attempts to make maximum sense of what has been decoded.
- 3. Repair strategies: learner appeals for help.
- 4. Pro-active strategies: learner plans her behaviour in a way that might enable problems of understanding to be avoided. (p.298)

Field refers to the first three strategies as reactive strategies, whereby listeners deploy them while exposed to the aural text as a reaction to any comprehension problem that might occur. Whereas the proactive strategies are used before listening as anticipation of problems by planning how to manage the listening process. Nevertheless, the classification provided by Field is broadly presented and the strategies covered in each category are not clearly defined, making them less useful for the present study.

The area of L2/ FL listening strategies received attention in the last 30 years. For instance, Vandergrift (2003) examined the type of strategies used by skilled and less skilled listeners among 36 grade 7 students learning French as an L2 in Canada, through the analysis of think-aloud protocols quantitatively and qualitatively. The quantitative analysis of data revealed that both skilled and less skilled listeners seemed to be familiar with a range of cognitive and metacognitive strategies, in addition to few socio-affective strategies.

In contrast with less skilled listeners, skilled listeners demonstrated openness and flexibility in the use of the strategies. They used twice as many metacognitive strategies, primarily comprehension monitoring along with questioning elaboration (termed a cognitive strategy) that involves combining questions and world knowledge together to draw on logical possibilities for the coming input. Less skilled listeners reported more use of bottom-up processing, relying on a translation strategy more than the skilled listeners did. In this study, it is apparent that less effective listeners focused mainly on cognitive strategies and primarily on word-by-word translation; however, effective listeners used more metacognitive strategies (excluding evaluation, perhaps because of learners' language level) to orchestrate cognitive strategies.

Goh (1998), on the other hand, conducted her study in Singapore on a small sample of 16 ESL Chinese learners at an average age of 19, attending an intensive programme of English language and academic skills. The researcher employed retrospective verbal reports and students' listening diaries in order to investigate the frequency and types of strategies and tactics the learners use to comprehend spoken English. She referred to tactics in her study as specific activities, while strategies as more general, in other words, "tactics operationalize strategies, i. e., tactics are the observable activities that imply that certain strategies are in use" (Schmeck, 1988 as cited in Goh, 1998, p. 125). The learners' listening proficiency was assessed according to their scores in the Secondary Level English Proficiency Test (SLEP), a standardized, multiple-choice test for measuring both the reading and the listening comprehension of non-native speakers of English. The test has been developed by the Educational Testing Service (ETS).

The learners' verbal reports were gathered through interviews; each participant was interviewed individually to reflect on the strategies he/she used to understand a listening passage delivered by the researcher. The analysis of the data gathered demonstrated that the high-ability listeners displayed greater capability in the use of a wide range of strategies and tactics than their low-ability counterparts. Both groups revealed use of cognitive strategies and tactics more than metacognitive strategies/tactics. Correspondingly, they showed extensive reliance on top-down processes, as it is apparent in the use of strategies such as inferencing, elaboration, prediction, contextualization, and reconstruction. Interestingly, high-ability listeners reported on their awareness and use of different types of metacognitive strategies and tactics, including planning, monitoring, and evaluation. Whereas the low-ability listeners

reported low knowledge and use of metacognition, which indicates their low ability to manage the listening process effectively.

Despite the fact that Goh's and Vandergrift's studies are limited to the small number of participants and the use of only introspective methods, their findings reflected that most learners lack knowledge and ability to monitor their listening process, particularly at the stage of evaluation. Emphasis is made on this final stage of evaluation to help listeners develop specific tactics and strategies to reflect on the whole process and suggest an alternative approach for future experiences.

In another context, Kassem (2015) conducted a study with 84 EFL college sophomores in Egypt. He tried to investigate the strategies used by the students, the relationship between listening strategy use and listening comprehension on the one hand, and self-efficacy on the other one. The researcher explored the differences between students' frequency of strategy use and both their levels of listening comprehension and self-efficacy. To assess students' listening comprehension, Kassem used a listening test taken from the Longman TOEFL test. He also developed two questionnaires from the literature, one for learners' strategy use and the other for measuring their level of self-efficacy. The listening test was administered in a lab session while the other tools were applied together in a different session. The findings revealed that students used cognitive strategies more often when compared to metacognitive and socioaffective strategies.

Applying Pearson correlation to find the relationship between the different variables, the statistical analysis demonstrated a significant positive relationship between students' strategy use and their listening comprehension on the one hand, and their self-efficacy on the other. Regarding the three different types of strategies, it was found that the correlation between use of metacognitive strategies and listening comprehension was stronger than for the other two types of strategies. However, learners' listening self-efficacy correlated positively and significantly with cognitive strategy use more than metacognitive or even socio-affective strategies.

In order to identify the differences between high strategy users and low strategy users in relation to their listening comprehension achievement and their self-efficacy, the researcher conducted a t-test by dividing the students into two groups, according to the frequency of strategies they used. High strategy users were those whose strategy frequency was above the average, while those whose strategy frequency was below the average were considered as low strategy users. The findings demonstrated that high users of cognitive and metacognitive listening strategies outperformed low users of these strategies in terms of their level in listening performance and their sense of efficacy in listening, but no difference was found between the two groups of students in relation to the use of socio-affective strategies.

In a different context, Kazemi and Kiamarsi (2017) conducted their study in Iran in two different language institutes, to identify the listening strategies used by intermediate and advanced language learners according to their general language level instead of their listening proficiency. The students' language level was assessed through a Quick Placement Test for overall English language proficiency. Sixty EFL students were chosen randomly for the study, 30 intermediate and 30 advanced. To collect data from the study, two listening tasks taken from TOEFL tests were used within a think-aloud technique to elicit learners' listening strategies implicitly, referring to the taxonomy defined by O'Malley and Chamot (1990).

The analysis of the data gained provided insights into the type of strategies used by the students in both groups. The intermediate students demonstrated a considerable reliance (71.60%) on cognitive strategies, followed by socio-affective, then metacognitive strategies. The frequency of the main strategies used was as follows: note taking, socio-affective (though they did not specify what type of socio-affective strategies were used), and translation.

The advanced students demonstrated use of a larger number of listening strategies than the intermediate students. In addition to that, the first group of students showed a frequent use of metacognitive strategies in comparison to other strategies and to lower proficiency learners, namely self-monitoring, self-management, and self-reinforcement. The use of cognitive strategies was limited mostly to translation and note taking, while the use socio-affective strategies was almost ignored.

This study did not test the learners' listening proficiency in particular, but instead their language proficiency more broadly. It also provides evidence to support other studies in the literature that the level of language proficiency is related to the choice of strategy use. Learners with different language levels use listening strategies differently to solve listening problems. Advanced learners use metacognitive strategies more frequently than the other types of strategies.

The above studies provided more insights on the relationship between language proficiency, listening proficiency, self-efficacy beliefs and strategy use in foreign language listening. The role of socio-affective strategies in the previous works has not appeared to contribute to listening proficiency and self-efficacy, which may be interesting to introduce in the language classroom besides the cognitive and metacognitive strategies.

The previous studies highlight that listeners make use of different listening strategies in order to make sense of what is communicated. Therefore, training learners to use listening strategies has received some attention in the last decade from researchers in the field and it has been conducted in different contexts.

2.4.1.4 Learners' beliefs about listening

Foreign language listening comprehension is a covert complex skill in its nature which makes it challenging for both teachers and learners. The way learners process aural input differs from one to another because of several factors addressed in previous research. Research into second and foreign language learners in several contexts highlights the difficulty of learning or improving the listening skill when compared to the other language skills of speaking, reading, and writing (Graham, 2006; Goh, 2000; Sebina & Arua, 2014).

Learners' conceptualization of what foreign language listening involves has been tackled in most previous works in terms of the nature of difficulties they encounter during the listening process, while Graham (2006) also suggests that it is important that learners are aware of the listening strategies or (sub) skills they deploy during listening. Researchers' approach to investigating learners' beliefs about L2 listening varies from one researcher to another. For instance, Goh (1997) used learners' diaries as a research tool to investigate students' perceptions and knowledge about ESL listening in China, based on Flavell's (1979) metacognitive framework: person knowledge, task knowledge and strategic knowledge. Goh discovered that the students held some knowledge about the obstacles they confronted while listening to English and some of their own shortcomings, in addition to different types of aural texts and their demands and, interestingly, that they were aware of a range of top-down and bottom-up types of strategies.

From a cognitive perspective, Goh (2000) adopted Anderson's (1995) model of language comprehension, which involves three interrelated processes: perception, parsing, and utilization, in order to explore the difficulties encountered by Chinese ESL language listeners during the three previous processes. Goh used small group interviews, learners' diaries and learners' immediate retrospective verbalizations. The study indicates that the

learners were conscious of the problems they faced during listening, which Goh framed within Anderson's model. Most of the problems the students articulated related to the perception and parsing phases of comprehension, revealing their limited input processing capacity when they tried to identify groups of words and their mental presentation. In addition, two other problems were faced throughout the utilization phase, during which the participants were not able to identify the intended meaning of the speaker even when they were able to identify some sounds and distinct words. Goh attributed this failure to the learners' lack of prior knowledge or inappropriate application of background knowledge.

Another area of interest in the previous study is the differences between learners with high-ability and low-ability level in listening. The second group demonstrated more difficulties in terms of low-level processing than the first group, while the latter reported problems with high-level processing more than the former group. This finding is perhaps unsurprising and may be ascribed to the fact that low ability learners struggled to get beyond perceiving and parsing the input.

In England, Graham (2006) investigated learners' perceptions of listening comprehension in French and their views concerning the reasons for success or failure in this skill. Graham developed a questionnaire and a semi-structured interview for this study. The analysis of the data demonstrated that a large number of the students perceived listening as the most difficult skill in comparison to the other language skills. Different students attributed their success or failure when listening to spoken French to different reasons. Some of them held a negative image of themselves regarding the skill, claiming that listening requires natural ability and is hard to acquire. Other reasons may pertain to the difficulty of the tasks they were set, speed of the text, lack of practice, learners' low proficiency in listening and inability to identify individual words in connected speech. Learners made very little use, if any, of listening strategies and tended to attribute failure to factors beyond their control, such as task difficulty, which, Graham claimed, threatened to diminish their motivation and sense of efficacy for the skill, and hence, the likelihood of them making progress.

In an Arabic context, Hamouda (2013) identified almost the same difficulties as have been found in the previous studies, this time for EFL learners in Saudi Arabia, who similarly perceived listening to be important but the most difficult skill to be developed. Exposure to spoken English in their daily life was seldom identified by the participants, meaning their tendency to listen to English outside the classroom was limited. Responses to a Likert-scale based questionnaire identified problems related to the listening material (such as an unfamiliar topic), the speaker (e.g. his/her accent and speed rate), the listener (his/her linguistic deficiency and psychological problems), and the physical setting (like noise).

Unsurprisingly, almost the same problems were found by Hasan (2000) in the context of Syria. He asserts the importance of strategy use for the development of learners' listening comprehension and insists on the crucial role of top-down strategies to compensate for their weakness in bottom-up processing. However, if learners struggle with bottom-up processing, it is very likely that they could find difficulties to go beyond this stage and use top-down strategies. Therefore, it would be more beneficial if these learners are taught bottom-up listening skills. While Saudi learners in Hamouda's work demonstrated some awareness of listening strategies, the problem was their inability and ineffective use of the strategies. Therefore, this suggests that explicit listening strategy instruction is needed in a foreign language learning context in general, coupled with a metacognitive approach for the orchestration of the strategies.

Understanding learners' listening difficulties, beliefs about the skill of listening, and how they approach spoken messages is of importance for both teachers and learners. Cross (2012) argues that learners in an EFL context need support and guidance from teachers on how to manage their listening through strategy instruction instead of just being exposed to a large number of spoken texts for an extended period of time, or what is known as extensive listening (Rost, 2011) as it has been argued by Renandya and Farrell (2011). Teachers on the other hand need to understand learners listening difficulties in order to teach them effective listening comprehension strategies, so that they can overcome their listening problems (Gilakjani & Sabouri, 2016; Siegel, 2014a). At the same time however, studies (e.g. Graham & Santos, 2015; Hamouda, 2013) indicate that listening is the skill least likely to receive training on the part of teachers.

2.4.2 Affective factors

The area of affective factors in second/foreign language learning has received ample attention in educational research because of the profound impact that individual psychology has on the teaching and learning processes. The most researched variable over the past decade according to the literature is motivation (Dörnyei & Ryan, 2015), alongside others such as attitudes, anxiety, and self-efficacy. As the main focus of the current study is on self-efficacy

as a motivational construct, it would be worthwhile to consider briefly motivation before proceeding to self-efficacy.

2.4.2.1 Motivation

Motivation has been regarded by many researchers as the main determinant of second and foreign language learning (Dörnyei, 1998). In addition, it has been defined by different scholars from diverse perspectives. There is however more or less a consensus that motivation is the driving force that impels individuals to perform an action and urges them to persist in order to achieve their goals. For instance, Gardner and Lambert (1972) perceived motivation as goal-directed action, and they distinguished between integrative and instrumental types of motivation. The former refers to the learner's aspiration to integrate and interact with target language native-speakers, while the second type constitutes the learner's aim to gain a desired job or increased salary. Deci and Ryan (1985) developed the theory of self-determination and recognized human motivation in terms of intrinsic and extrinsic drives. Individuals perform actions for the sake of enjoyment or self-satisfaction in the form of intrinsic motivation, whilst fulfilling actions beyond their self-interest in the form of extrinsic motivation.

However, Dörnyei (2005) questions the relevance of the social-psychological perspective of motivation in relation to foreign language learning, for instance in Gardner and Lambert (1972), in which emphasis has been put on the social milieu rather than on the classroom environment. In addition, social-psychological theories viewed motivation from macro perspectives rather than a more complex process. Later, Dörnyei (2009) developed a dynamic system in language development, constituted of learners' motivational, affective, and cognitive factors that are seen to mutually interact and affect each other. Piniel and Csizér (2015) considered these factors as motivation, anxiety, and self-efficacy and applied them in L2 writing in a longitudinal mixed method design in Hungary.

According to Dörnyei (2009), the L2 motivational self-system is categorized into three dimensions. The first is the ideal L2 self, wherein the learner aspires to be, for example, a fluent English speaker. A less internalized dimension is the ought-to L2 self, where the learner believes that he/she ought to possess some attributes of this type of self to fulfil a duty, for instance learning another language in order to impress the employer in his/her job. This dimension seems to overlap with the instrumental and extrinsic types of motivation. The last

dimension is the L2 learning experience which refers to the influence of the teaching materials, teacher feedback, group work and others on learners' behaviours.

The previous model provides a tripartite structure of motivation in the context of second and foreign language learning. Dörnyei (2009) considers it as a comprehensive model, as it covers the different sources of motivation, like the internal desires of the learner and the social environment, which refers to the internal and external self-image of the learner, respectively. In addition to the learning experience where the essential role of other parts in the learning environment are acknowledged to push learners to initiate learning, make efforts, and sustain them along the language learning journey.

Accordingly, the way learners perceive themselves and their abilities to perform a particular task is likely to contribute in predicting success or failure. As a motivational variable, self-efficacy beliefs may predict learning outcomes even better than actual abilities (Bandura, 1997). This factor is discussed in the next section.

2.4.2.2 Self-efficacy beliefs

The concept of self-efficacy was first coined by Bandura (1986) as a key element in the social cognitive theory that he developed. This theory was first known as social learning, then was altered to social cognitive theory to highlight the importance of cognition in enabling people to self-regulate, construct reality, and perform actions (Pajares, 2002). According to social cognitive theory, people are considered to be proactive beings who self-reflect and regulate their behaviour instead of just responding to environmental factors. In addition to that, human functioning is seen to be driven by an interplay of triadic reciprocal causation of personal (cognitive, affective, and biological events), behaviour, and environmental influences; in other words, individuals' experiences are not tied only to their biological characteristics, rather, there is a mutual interaction of, for instance, one's self-beliefs, social interaction, past and current behaviours. Bandura (1986) believes that the reciprocal causation model he developed does not mean that all the factors have the same influence on individuals' functioning, rather, some have a stronger influence than others at a particular moment.

On the other hand, Redmond (2010) argues that goal attainment and motivation in social cognitive theory can be reached through four interrelated processes: self-observation, self-evaluation, self-reaction and self-efficacy. Observing oneself can inform about one's

current actions towards accomplishing a goal and motivate to alter the behaviour in future occasions to attain the desired results. However, this process alone is not sufficient to reach the designated goal, as motivation is dependent on outcomes and efficacy expectations (Zimmerman & Schunk, 2001). Another process is then required for keeping individuals motivated and helping them to persevere to attain their goals; self-evaluation or self-judgement can occur through the comparison of one's current and desired performance goal or by observing other models performing similar tasks. The tasks to be performed should be clearly defined and not vague in order to raise self-efficacy, as explicit goals are easier to measure. Furthermore, the difficulty level of the goal can also affect one's motivation for attaining that particular goal, for instance, a too easy or too difficult goal can be demotivating, while a challenging and attainable goal can help raise one's motivation and self-efficacy (Zimmerman & Schunk, 2013).

Self-reaction refers to individuals' reactions to their performance, whether positive or negative, and it allows people to re-evaluate their actions in pursuit of their goal and sustains their motivation to continue their attempts for an achievable goal (Bandura, 1989). As far as self-efficacy is concerned, Van der Bijl and Shortridge-Baggett (2002) describe it as individuals' beliefs about the likelihood of attaining a goal, with this belief likely to increase their motivation to persist towards challenging tasks.

Within social cognitive theory, Bandura (1997) believes that self-efficacy beliefs are the most central and pervasive type of thoughts that influence human actions. Bandura (1986) first defines self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). This indicates that, self-efficacy is, first and foremost, a belief about one's abilities and not actual abilities; additionally, it is supposed to be task or goal-related. Schunk, Meece, and Pintrich (2014), on the other hand argue that self-efficacy explicitly refers to having the skills to reach a goal instead of just self-recognition of being good at completing tasks. As a central motivational variable, self-efficacy has a considerable impact on individuals' choice of activities, efforts, and persistence (Schunk & Pajares, 2005, 2009). In other words, people who have high selfefficacy are more motivated to perform a task and to persist with the challenges that they may encounter and work harder; whereas, those who doubt their efficacy may abandon the task. In this realm, Bandura (1989) argues that efficacy judgements whether accurate or inaccurate are related to four main sources of information that can raise or lower one's perceived ability to perform a task including, mastery experiences, vicarious experiences, verbal persuasions, and affective indicators.

First, mastery experiences have been considered by Bandura (1997) as the most influential source of one's sense of efficacy, whereby previous success (if achieved with efforts and perseverance) builds a strong belief in one's efficacy, while failure undermines it especially if it precedes a firm sense of efficacy. A strong sense of efficacy according to Bandura occurs after individuals undergo difficult experiences that require them to make efforts and persevere in the face of obstacles, thus, failure after resilience is likely to be a motivator and vice versa. Second, observing others succeed or fail in doing a task can also affect one's efficacy beliefs.

The extent to which others' experiences can affect one's self-efficacy depends on the level of perceived similarity between the model and the observer; in other words, if individuals consider the model as different from themselves, the outcomes of the model's behaviour will not affect the observer's sense of efficacy. Third, verbal persuasion is viewed in terms of encouragement, discouragement, feedback or appraisal given to individuals' performance or ability to perform (Redmond, 2010). In this sense, the effectiveness of verbal persuasion is related to other factors like the degree of credibility of the persuader. Verbal persuasion seems to be a weak source to boost self-efficacy if used alone, but a strong one to undermine it (Redmond, 2010). Providing encouragement to someone to fulfil a goal, persuading him/her of their ability on the one hand, might be motivating, but if the results are disappointing, efficacy beliefs are likely to diminish, and if discouragement is used on the one hand, he/she might avoid taking actions. Verbal persuasion may be used often because of its ready availability (Bandura, 1981).

The last factors to be considered are the physiological and affective states of individuals. The way people perceive and interpret their emotional arousal and physical reaction can also define how they judge their capabilities (Bandura, 1997). Some people consider positive mood as a good enhancer of self-efficacy beliefs, while negative mood as self-discouraging.

Self-efficacy and language/listening learning

In the context of L2 learning, self has been considered by researchers such as Dörnyei (2010) as a constellation that brings together cognition, motives and affect. Self-efficacy, for instance, defined as an individual's belief that they can complete a very specific task successfully (Bandura, 1997), is regarded as the most limited self-construct in relation to scope, size and context and which develops quickly compared to other self-constructs such as self-esteem (Mercer, 2015). Furthermore, Mills (2014) highlighted that self-efficacy is primarily defined and perceived from a cognitive perspective, whereas self-confidence is regarded more from a social perspective. Additionally, self-concept or perception of self-worth is seen from a cognitive and evaluative perspective, in the sense that learners are questioned about the fact of "being and feeling" (Mills, 2014, p.11) about a particular subject area, but they are not task-specific in the way that self-efficacy is.

Though little research has been conducted in the context of language learning, Nicole Mills, Pajares, and Herron (2007) found evidence of the strong contribution of self-efficacy in language learning success. The researchers examined the influence of self-efficacy beliefs and other motivational self-beliefs variables on 303 intermediate French students' achievements in the USA. The students' achievement was assessed by the students' final course grades, while the other variables such as self-efficacy, self-concept and anxiety were measured by a survey. The researchers conducted a hierarchical multiple regression to analyse data obtained from the study. The results revealed a significant positive relationship between self-efficacy and French achievement, in addition to other variables like self-concept and perceived value of the French language. However, students' self-efficacy for self-regulation using effective metacognitive strategies was the strongest predictor of their French language achievement.

Another study was conducted by Anyadubalu (2010) on EFL students' perceptions of self-efficacy and anxiety in English language learning in Thailand. Regression analysis demonstrated that general self-efficacy and English language anxiety constituted significant and powerful predictors of English language performance in comparison to other confounding variables, such as the structure of the English classroom and the teacher's instructional style. A significant moderate negative relationship between anxiety and language performance was established, while no significant direct relationship existed between self-efficacy and English performance. On the other hand, there was a significant negative relationship between

38

language anxiety and self-efficacy. In other words, general self-efficacy has a direct influence on anxiety whereas it has an indirect impact on learners' outcomes. This latter point can be interpreted from the view that self-efficacy beliefs are multifaceted and domain or situation specific rather than general beliefs (Zimmerman, 1999).

In the light of what has been mentioned previously, self-efficacy and anxiety have received some attention in respect of some language skills, mainly reading and listening. Nicole Mills, Pajares, and Herron (2006) in their study investigated the relationship between foreign language self-efficacy and anxiety with regard to listening on the one hand and reading proficiency of 95 French students in the United States on the other. The researchers used the French Self-Efficacy Scale to assess participants' reading and listening self-efficacy on an 8-point Likert-type scale from 0 (not confident at all) to 7 (completely confident). The listening scale reliability was .97, and for reading it was .95. For measuring the participants' level of anxiety, the researchers used an adapted version of Betz's (1978) Mathematics Anxiety Scale (MAS). Students' French proficiency in reading and listening was assessed through the Listening (1990) and Reading (1988) Proficiency Tests in French at the University of Minnesota's Graduate Standard.

As far as the reading skill is concerned, the findings from the regression analysis revealed a positive significant influence of reading self-efficacy on reading proficiency; however, reading anxiety did not have an influence on reading proficiency when reading self-efficacy, gender and the interaction between the variables were controlled. Additionally, reading anxiety was found to be negatively related to reading self-efficacy. The results of the study indicate the powerful role of self-efficacy in enabling students to have control over a given task and over other affective factors like anxiety.

Concerning the listening skill, no independent contribution of listening self-efficacy was found on listening proficiency. But an influence of listening self-efficacy for female participants on listening proficiency was found, while a negative relationship was found with male participants. This result may support what has been claimed by Rua (2006) that female students show higher level of confidence in their linguistic competence for learning a foreign language than males do, in the sense that "girls' high aptitude enhances their confidence, and that both variables thus related contribute to girls' achievement in FLL" (p.110). Listening anxiety, however, was found to influence negatively and significantly listening achievement for both genders, unlike what was found previously in the reading skill in the same study. The

researchers in this study explained that the findings might be attributed to the low inter-item reliability of the listening test and the limited number of males who participated in the study. Therefore, further research on gender and self-efficacy beliefs in foreign language might be needed.

An important contribution to the study of self-efficacy in foreign language listening is found in the work of Graham (2007) and Graham and Macaro (2008) in which they introduced listening strategy training to high school French language learners to assess whether strategy instruction can alter learners' perceived competence to perform listening tasks. The results of the study suggest that the training was effective in strengthening learners' listening selfefficacy beliefs and more precisely about comprehending details and opinions when listening to French. These studies affirm that listeners with a high level of self-efficacy tend to have a sense of control over the listening task, and are more aware of listening strategies and how to apply them skilfully (Graham & Macaro, 2008). In other words, successful listeners are metacognitively aware of the listening process and use metacognitive strategies more effectively when compared to less successful listeners.

In summary, the affective factors addressed previously have not been researched widely in foreign language listening in particular, thus more studies are needed in this area. Correspondingly, it has been argued that shifting from the traditional view of listening comprehension in foreign language classrooms to a more strategy-based instruction boosts learners' listening motivation (Vandergrift, 2005), lowers their anxiety (Goh & Taib, 2006), and develops their self-efficacy beliefs (Graham & Macaro, 2008). Therefore, it is critical to encourage this type of listening instruction in the foreign language classroom, and to highlight the important role of teachers which needs to be investigated deeply in this field.

CHAPTER THREE: TEACHING SECOND & FOREIGN LANGUAGE LISTENING

3.1 Introduction

This chapter reviews literature related to the present study. It includes a brief review of second and foreign language listening pedagogy, including strategy instruction and the metacognitive model, followed by language teacher cognition in general and factors influencing them more specifically teacher education. Lastly, teachers' knowledge and beliefs, including self-efficacy, about L2/ FL listening are also discussed.

3.2 Second and foreign language listening pedagogy

Previously, listening used to be viewed as a passive skill that is developed naturally (Vandergrift, 2004). Recently, the skill seems to have received more attention in research, however its explicit teaching in classrooms is still undeveloped. Therefore, a gap between research and practice in the field of foreign language listening is noticed and needs to be addressed. Compared to the other language skills, teachers and instructional materials pay less attention to the systematic teaching and development of listening skills (Vandergrift & Goh, 2012).

Despite the different studies that have been conducted recently in second and foreign language listening contexts, teachers in a number of contexts still adopt the comprehension approach or text-oriented approach as a method for listening instruction, for example in Japan (Siegel, 2014a, b) and in England (Graham & Santos, 2015). They focus mainly on the listening product, in which the aim of a listening task is to get the right answers while the reasons why learners selected the wrong answers and how to improve are neglected (Graham & Santos, 2015).

It has been suggested that learners who are instructed under the product-based approach in listening feel more anxious and stressed before and after the listening activities (Hamouda, 2013) and lose their motivation (J. Field, 2012). This feeling may be the result of their experience of being tested rather than being taught and directed on how to listen effectively (Vandergrift & Goh, 2012). Therefore, a more learner-centred approach has been developed in SL/FL listening research which focuses generally on the processes that occur in the listener's mind and which lead to comprehension. These processes are covert but active. However, the practice of this approach to teaching listening in language classrooms is still elusive (Zohrabi & Shokrzadeh, 2017). Research suggests that this approach covers strategy instruction and metacognitive approach to teaching listening.

3.2.1 Strategy-based listening instruction

One of the reasons behind studies into the effectiveness of strategy instruction for listening is the finding that the differences between successful and less successful listeners can be attributed to the way in which they deploy listening strategies. This was the conclusion of a study conducted by Graham et al. (2008). These researchers first investigated the potential development of the listening strategies of two students learning French as an L2 in England, without explicit strategy instruction during a period of six months. The participants were of different listening proficiency, one scored high and the other scored low, but they had equal levels of vocabulary and grammatical knowledge as determined by tests designed by the researchers to control for the interference of the linguistic knowledge variable. Learners' verbal self-reports were used to reflect upon the way they employed strategies instead of the number or type of strategies they used at two time points. The listening proficiency of learners was assessed through listening recall protocols at two time points (October then April). The results supported the idea that learner strategies are individualized, and listeners use strategies in different ways; it is less the type of strategies the listeners use and more an issue of whether they deploy them appropriately and effectively according to the task demands. Furthermore, the differences between the two learners remained the same over the period of the study regarding their listening performance and use of listening strategies. This suggests the implementation of an explicit strategy instruction to develop learners' effective use of the strategies.

A further study (Graham et al., 2011) was conducted with a larger group of 15 learners. The findings of this study supported those of their previous study. Nine of the participants remained in the same listening proficiency band across two-time points, two scored below and four scored above their previous band. Differences in strategy use between learners remained fairly constant. However, for this study teachers were interviewed to identify their practice during the listening class. It was suggested that they treated listening as an exercise rather than

a skill that needs development. Ultimately, the researchers argue that the teachers' role is critical in raising learners' awareness of the effective use of listening strategies through training, in order to help them develop knowledge and use of listening strategies to guide their listening process and reach comprehension of spoken messages.

Interventions implementing strategy training have been conducted in different contexts and from different perspectives. An early study was conducted by O'Malley (1987) with intermediate high school ESL learners. He divided the participants into three groups, the first was taught cognitive and metacognitive strategies, the second only cognitive strategies, while the last received no strategy instruction. The intervention lasted for only two weeks, a total of approximately an hour and 45 minutes. The findings revealed that the intervention was beneficial for both groups of learners in the intervention groups. During some daily tests learners performed well, but in the post-test their improvement in the listening tests did not reach significance. On the other hand, the control group that did not receive any kind of strategy training made no progress in their listening. O'Malley attributed the results to the insufficient time span of training the learners received between the pre-test and post-test, in the sense that the strategies had not yet become automatic to be used in future experiences. Therefore, strategy training should be implemented over a long enough period of time to achieve automaticity for later use in other new situations.

A longer timespan was implemented in a study by Thompson and Rubin (1996), who conducted a longitudinal classroom-based study to investigate the impact of systematic listening strategy instruction, in both cognitive and metacognitive strategies, on learners' listening comprehension. The participants were university students attending Russian language courses in the USA. They were divided into two groups, an intervention group who received strategy instruction by an experimenter who had already extensive experience in language strategy-instruction. An instructor who was unfamiliar with strategy-based instruction was designated to be in charge of the control group. Both groups were instructed with the same videos and in the same sequence, yet different lessons were given to each group.

To assess the learners' listening comprehension, the researchers developed a test particular to their study because of a lack of standardized listening tests based on videos. One of the measures of improvement in comprehension was the difference between the pre-test scores and the scores of the post-test. An additional measure was used as well, the listening part from the standardized test of Comprehensive Russian Proficiency Test (Educational Testing

43

Service, 1990). The test was designed for the American Council in the Teaching of Foreign Languages (ACTFL) novice and intermediate listeners. The scores gained from post-test and pre-test were also taken into consideration for evaluation of the learners' listening achievement.

The intervention was conducted through the teaching of both cognitive and metacognitive strategies. The latter involved training learners in planning for listening, defining goals, monitoring, and evaluating the strategies used. The training in cognitive strategies included prediction, listening to the known, listening for redundancies, listening to intonation, and resourcing. Moreover, teaching cognitive strategies for specific genres was also provided, for instance, focusing on the sequence of questions and answers in interviews or on the story line when listening to drama.

The chi-square test results revealed a significant improvement in listening comprehension for the intervention group over the control group. Interestingly, 100% of the learners in the first group improved in the video test, while 70.8% of them improved more than 10%. A paired t-test produced a medium-size effect of the intervention, which indicates that the training was effective. However, the majority of learners in the control group improved less than 10%. Concerning the audio test, the majority of the students in both groups showed improvement in comprehension, but compared to their achievement on video tests, only 87.5% of the learners in the intervention group improved. However, the difference between the learners who demonstrated improvement in the two groups was insignificant.

The study suggests that the training that the learners received was only designed and appropriate for video tests rather than for the audio tests. In addition to that, the period of the intervention (15 hours) was not sufficient for larger improvement. Interestingly, the intervention prompted learners to manage their listening process through metacognitive strategies. Furthermore, the study indicated that learners' self-efficacy to listen to authentic spoken Russian independently outside classroom improved.

As a response to the inconsistency of results gained from previous interventions whose theoretical perspectives were also queried, Graham and Macaro (2008) conducted a study concerning the impact of listening strategy instruction on the listening comprehension and selfefficacy for listening of 68 lower-intermediate learners of French in England listening comprehension and their level of listening self-efficacy in the presence and absence of scaffolding of strategy use.

44

The design of the instruction was based on identifying learners' difficulties first as a preintervention, so that the design of the training would suit their needs. For the aim of the study, the sample was divided into three groups, two intervention groups (high scaffolding HSG and low scaffolding LSG) and one control group. Although both intervention groups received the same materials for developing awareness of different listening strategies, the HSG received more attention and focus in relation to awareness raising and feedback regarding the use of listening strategies in comparison to the LSG in order to raise HSG learners' levels of reflection. For example, the HSG received feedback from researchers on diary entries where learners recorded how they had used strategies, with the aim of drawing their attention to the link between strategy use and learning outcomes.

The researchers used listening proficiency tests at three times, and then a listening selfefficacy questionnaire was delivered at time 1 and time 2. The questionnaire was based on one used by the National Capital Language Resource Center (2000) but adapted for the skill of listening. The participants in the HSG participated in a session involving initial awarenessraising procedure of strategy use, and they kept diaries to reflect on their use of listening strategies, then they received written feedback on them. The LSG did not receive such scaffolded support although they did reflect on their strategy use through tick-sheets, also used by the HSG.

The strategy intervention using clusters of strategies (cognitive and metacognitive) had a positive impact on learners' listening performance. Concerning the amount of scaffolding received from researchers, the HSG outperformed the LSG at time 2, but six months later (time 3), the LSG outperformed the HSG. Furthermore, both groups (HSG and LSG) scored higher than the control group (CG) for both listening and self-efficacy survey, but no significant difference was found between the two intervention groups for self-efficacy. Thus, it can be said that listening performance and listening self-efficacy can be improved through strategy instruction even with a small amount of feedback and scaffolding.

The study conducted by Graham and Macaro (2008) presents insightful directions in instructing foreign language listeners in how to use clusters of strategies effectively besides feedback to develop listening proficiency and listening sense of efficacy. The classroom was instructed by the teachers, but when these encountered difficulties (maybe on account of their lack of experience with the strategies), researchers took over the instruction and provided feedback on behalf of the teachers. The issue of whether researcher-led interventions is more

effective than teacher-led strategy interventions or vice versa was raised by some researchers (e.g., Ardasheva, Wang, Adesope & Vanlentine, 2017; Plonsky, 2011) who argued that researcher-led interventions are more effective than those led by teachers. However, if the aim of classroom interventions is to improve classroom practices, it is suggested that it is crucial to train teachers beforehand on how to teach the strategies, so that they can persevere with instructing the classroom.

In another recent study where the researcher was the instructor, Simasangyaporn (2016) conducted her study in Thailand with 161 undergraduate EFL learners, to investigate the impact of listening strategy instruction on learners' self-efficacy, listening achievement and reported use of listening strategies over the period of 12 weeks. The participants were divided into two groups, an intervention group which received the intervention and the control group which had not been exposed to the intervention. The training had a positive impact on the intervention group's ability to comprehend oral language and use listening strategies effectively, the former at a statistically significant level compared to the control group. By contrast, while their listening self-efficacy developed, the growth was not statistically significant in comparison to the control group.

The researcher attributed the findings concerning learners' sense of efficacy after the post-test to the time span of the training as being short compared to the study conducted by Graham and Macaro (2008) which lasted six months. This was in addition to the learners' failure to use metacognitive strategies effectively, particularly self-monitoring which had affected their sense of evaluation negatively. Another factor she suggested was the influence of the teacher, as in her study the researcher was the instructor for both groups who were informed about their participation in the research, consequently, a Hawthorne effect was possible between both groups. Therefore, it can be claimed that learners' beliefs and achievement seem to be related to teachers' actions in the classroom. Similar findings were found in the Graham and Macaro (2008) study with the HSG that received feedback by the researchers instead of the teachers. The teacher/ researcher is likely to present an extraneous factor that could have affected the results of the study, which the current study seeks to identify.

Another form of listening instruction under the learner-centred approach was developed mainly from the works of Vandergrift and his colleagues. It has been argued that metacognitive instruction is beneficial for learners to develop their listening performance and self-efficacy. Therefore, the next section presents the model underlying this type of listening instruction in addition to some empirical studies.

3.2.2 Metacognitive strategy training model

Metacognitive strategies in listening require directing attention towards the input and coordinating different cognitive processes. They generally "consist of strategies for planning, monitoring, and evaluation, and they can be used before, during, or after listening" (Goh, 2014, p. 74).

Planning strategies allow learners to develop awareness of what is needed to accomplish a particular task and adapt an appropriate action plan to overcome potential constraints that might hinder comprehension (Vandergrift, 2003). During this stage, learners decide on their objectives and the means to accomplish them (Goh, 2008). Planning includes advance organization and self-management (Vandergrift, 1997; Vandergrift, 2003; Vandergrift & Goh , 2012). The former helps learners to preview the anticipated learning task (Chamot & Küpper, 1989). In listening, listeners may decide to read over what they are supposed to do or think about the questions that the teacher is going to ask (Vandergrift & Goh, 2012).

Self-management encourages the learners to understand the conditions that facilitate the accomplishment of the task and maximize the use of previous knowledge about the input to control the performance in the task (Chamot & Küpper, 1989). In listening, for instance, the listener may decide to put everything aside and focus on what the speaker is saying (Vandergrift & Goh, 2012). Within self-management, the listener may decide to attend in general to the task and ignore irrelevant distractors (directed attention), or attend to specific aspects of language input and details (selective attention) like listening to key words and paying special attention to adjectives (Vandergrift & Goh, 2012).

As far as monitoring is concerned, it allows the learner to check, verify, and correct progress and comprehension in the course of a task (Goh, 2008; Vandergrift & Goh, 2012). (Schraw, 1998, p. 115) referred to monitoring as "[t]he ability to engage in periodic self-testing while learning"; this occurs when the listener can:

evaluate continually what they understand; check for consistency with their predictions, for appropriateness with world knowledge and for internal consistency: that is, the ongoing interpretation of the co-text; verify predictions and accept the fact that they do

not need to understand every word; assess their level of comprehension; verify progress in their comprehension of the desired information and necessary details; and determine whether the approach to understanding the text is working or not. (Vandergrift & Goh, 2012, p.107).

Monitoring is also known as the problem-solving factor in the MALQ that Vandergrift and his colleagues (2006) developed and validated. Monitoring enables learners to choose between different types of cognitive strategies like inferencing, elaboration, deduction and to revise them continually.

Evaluation refers to checking the outcomes of listening performance or the listening plan and evaluating the effectiveness of the approach used during and after the completion of the listening task against the internal measure of completeness and accuracy (Vandergrift & Goh, 2012). In other words, successful learners reconsider the process they went through when approaching a listening input, the difficulties encountered and their attempts to overcome these difficulties using different types of strategies. This phase allows listeners to plan effectively for future experiences to meet the task goals, according to their previous performance. It involves other strategies such as performance evaluation, wherein the listener may ask himself/herself the question "How close was I?" (p. 278) to determine the extent of the performance (Vandergrift & Goh, 2012). Evaluating strategy usefulness when the task is completed, identifying a problem and locating a point that contains essential information to be questioned (Graham & Santos, 2015), and finally substituting alternative approaches, plans and strategies to accomplish the listening task.

In this sense, learners' listening metacognitive awareness needs to be encouraged in the language classroom as it has been found to correlate significantly and positively with learners' listening success (Vandergrift et al., 2006). Vandergrift (2003) proposes a metacognitive pedagogical sequence to support learners along the listening process. It is based on the four stages of planning, monitoring, solving problems, and evaluating the whole approach for comprehension with support of the teacher and collaboration with peers (Goh, 2014). The sequence as presented in Figure 3.1 has been adopted in various studies which are presented next. The framework suggested allows teachers to vary activities flexibly according to the strategies they intend to teach (Goh, 2014).



Figure 3. 1 A metacognitive pedagogical sequence for listening (Goh, 2014, p.85).

Vandergrift and Tafaghodtari (2010) empirically investigated the role of the metacognitive approach of teaching L2 listening to 106 university-level students of French as a second language. The participants belonged to different language levels classes (two high-beginner and four low intermediate) in Canada. The metacognitive instruction adopted for the study was in a form of stages the students had to go through while listening. In the study, there was no explicit teaching of L2 listening strategies, but instead guided practice in the listening process, to raise students' metacognition of listening over a period of 13 weeks and to foster automatization during listening.

The study revealed that learners who were trained throughout the cycle improved their listening performance more than students in the control group. However, the lower proficiency students, those who scored low in a listening pre-test, seem to benefit more than the higher proficiency learners from the intervention, as was also found in the study by Goh and Taib (2006) with primary school learners in Singapore. The learners reported increase in using metacognitive knowledge mainly in problem solving and surprisingly in mental translation, which is viewed to be a characteristic of weak listeners and should be avoided (Vandergrift et al., 2006). The researchers attributed the results to the possibility that less skilled listeners acquired metacognitive knowledge implicitly and gradually through task performance, and the

good listeners needed the instruction offered by the intervention less as they had already developed this level of metacognition.

Metacognitive listening instruction in the previous study showed a contribution to learners' listening improvement, particularly to lower proficiency listeners compared with the more skilled listeners. Besides that, it builds listeners' self-appraisal and self-management and reduces their anxiety while listening (Goh & Taib, 2006). One shortcoming of the pedagogical cycle, however, which Vandergrift and Tafaghodtari (2010) acknowledge, is that it did not include any focus on bottom-up processing (attention to be directed to teaching phonological features of the input).

Following the metacognitive sequence used in the previous study (Vandergrift & Tafaghodtari, 2010), Rahimi and Katal (2013) conducted an experiment study on fifty students of two upper-intermediate English courses in Iran. This was in order to investigate the impact of metacognitive instruction on learners' metacognitive awareness of listening strategies, listening comprehension, and oral language proficiency. The instruction with the intervention group lasted for sixteen weeks, while the control group received the conventional listening instruction of pre-listening, listening, and post-listening without any focus on listening strategies.

To answer the research questions, the authors used the MALQ to assess the participants' metacognitive awareness and perceived use of listening strategies, besides the listening and speaking parts of a TOEFL test to assess learners' listening and speaking proficiency in English language. Subsequent to the quantitative analysis of the data, the results of ANCOVA (using the MALQ pre-test scores as a covariate) demonstrated that there was a significant difference between the intervention and control groups in terms of their results in the MALQ; in other words, learners in the intervention group demonstrated greater awareness of the metacognitive listening strategies.

Similarly, comparison between the scores of the two groups revealed improvement in the learners' speaking proficiency after the intervention. Whereas, though the results of the study showed improvement in learners' listening comprehension in the intervention group, a non-significant difference was found between the two groups concerning their listening performance after the intervention.

50

The results gained from the previous studies can be explained in relation to the nature of the pedagogical cycle itself. Learners seem to just acquire knowledge of the metacognitive strategies and not the actual application and use of those strategies that "oversee the process, directing the deployment of appropriate cognitive strategies...to interact with the input and achieve the final goal of comprehension" (Vandergrift, 2003, p. 485).

The metacognitive framework for listening provides learners with the opportunity to reflect on their past experience (mastery experience) and collaborate and get feedback from teachers and peers about approaching an aural input, and to see how other students process the input (vicarious experience). This experience is likely to have an influence on learners' sense of efficacy to engage in listening activities in and out of the classroom.

In this line of thought, Rahimirad and Zare-ee (2015) attempted to explore the extent to which metacognitive strategy instruction can affect EFL undergraduate learners' listening self-efficacy in Iran. The sample of the study consisted of 40 intermediate to upper level English female students of English literature. The researchers used British Council IELTS as the placement test for the homogeneity of the sample, and a listening self-efficacy questionnaire developed by Rahimi and Abedini (2009) to measure the learners' level of listening self-efficacy test was 0.73, as calculated by its designers.

The treatment group received the intervention for eight sessions; each session lasted for one hour, while the overall duration was one month. The metacognitive instruction was explicitly delivered by the teacher who was the researcher of the study, in which the learners were informed about metacognition and the processes they were supposed to undertake based on Vandergrift's (2003) pedagogical cycle for the teaching of listening metacognitive strategies. In each session of the study, the teacher introduced a strategy and showed students how to use it. For instance, from the first session to session five, the learners were trained in planning/prediction (advance organizers), directive and selective attention, self-management, monitoring strategy (verifying initial hypothesis), then evaluation and reflection (performance evaluation, strategy evaluation, and problem identification), respectively. The last three sessions were devoted by the teachers to combing all the strategies.

Before the intervention, researchers measured the participants' level of self-efficacy about listening and confirmed that all of them had equal levels. After the intervention, all the participants were handed the same questionnaire to measure their listening sense of efficacy. The data obtained were analysed using SPSS. Results from an independent sample t-test to compare scores in listening self-efficacy between the treatment group and the control group demonstrated a significant difference between the participants' scores in favour of the intervention group.

Arguably, Vandergrift and Goh (2012) postulate the pivotal role of metacognition in learner-oriented listening instruction and its effectiveness to encourage learners to engage with input efficiently while orchestrating the overall listening process inside and beyond the classroom. They highlight the goal of the metacognitive approach to listening instruction in the way that it improves learners who are self-regulated and aware of their learning development individually and collaboratively. The learners have also developed an effective use of a range of listening strategies and have greater motivation and self-efficacy to improve their listening proficiency and engage in oral interaction effectively.

Furthermore, Goh (2008) views metacognitive instruction in the social-cognitive framework of learning. She argues for the active and strategic role of learners to control their mental processes, in the sense that beginner listeners are more likely to be in need of instruction that develops their attention to words processing in the speech stream. According to her, this attention would develop gradually until it is automatized once learners develop their competence. In addition to that, collaborative work between learners and teachers seems to emphasize learners' cognitive and affective benefits.

In contrast to listening strategy-instruction in general, researchers including Renandya and Farrell (2011) doubt the effectiveness of such an approach, and rather favour the extensive approach to listening. Researchers have presented some reasons in opposition to strategy teaching, which can be summarized as perhaps not being appropriate for learners with low language ability, and instead adding extra effort for teachers.

It can be argued from the different empirical studies conducted earlier that extensive listening plays a role of a support to strategy instruction to practise listening inside and outside class. Teachers with a high sense of efficacy seem to be open to using new teaching methodologies and strategies to meet learners' needs and keep them motivated to raise their autonomy; while extensive listening may devalue teachers' capabilities and efficiency, and hence, learners' sense of efficacy and listening performance may decrease. To sum up, a number of researchers have investigated strategy-based instruction in L2 listening comprehension, due to its significant impact in developing learners' listening proficiency. However, most of the work has been conducted in Europe, Asia or America with mostly English or French languages as an L2. Additionally, it has been argued that metacognitive instruction is beneficial for learners to develop their listening performance and self-efficacy. Correspondingly, researchers like Goh (2014) recommended the integration of cognitive strategies along with the teaching of metacognitive strategies and training learners to use them efficiently. Moreover, Wenden (1998) underscores the significance of metacognitive control over strategy use in developing listening performance and learner independence. Yet, it is still unclear whether foreign language listening instructors, who play the crucial role in the instructional process, are aware of research findings, of how they perceive metacognitive strategy instruction and whether they accept it, and the extent to which they are prepared to implement it. Therefore, the need for teachers to develop knowledge and awareness of the teaching of listening in general is a vital factor for helping learners achieve listening success.

3.3 Language teacher cognition

It is believed that the relationship between teaching and learning is congruent, while teachers' quality is a crucial determinant in the pace of learners' achievement (Enow, 2016). In this sense, Borg (2005, p. 191) postulates on the nature of teachers as "active, thinking decision-makers who make instructional choices by drawing on complex, practically-oriented, personalised, and context-sensitive networks of knowledge, thoughts, and beliefs". In other words, it can be said that teachers' instructional practice is attributed to three main factors, their knowledge, thinking and beliefs about the subject; i.e., their cognition.

With the development of cognitive psychology, the interest of teaching research shifted from identifying effective teaching behaviours (observed behaviour); i.e., behaviours that may lead to great learning, to interest in investigating the relationship between teachers' behaviours in the classroom and their cognition (Borg, 2009). The traditional view of teaching (behaviourist) focuses on a causal and a systematic interaction between teachers' behaviour and the amount of students' learning and achievement, for instance, students' reading achievement and teachers' praise; in other words, the effective teacher is the one who uses more praise (Clark, 1979). This approach has been categorized by Clark (1979) as a quantitative approach of teaching. A qualitative approach, however, in which the cognitive

view is part of it, according to him, looks at 'what' behaviours and the reasons 'why' to adopt them, in which "teachers and students are seen as purposive agents whose thoughts, plan, perceptions, and intentions influence their behaviour and moderate the effects of behaviour" (p. 31). This view considers both teachers' and learners' agency in the classroom instead of being directed by external factors.

On this basis, Clark and Peterson (1986) provided a general definition of teacher cognition as the different hidden mental processes which underlie teaching behaviour. In a more specific way, Borg (2005) refers to it as denoting "what teachers know, believe, and think", (p. 190). These latter concepts are sometimes used interchangeably in the literature, while other authors view thinking and beliefs as different from knowledge (Tsui, 2011). Based on metacognitive knowledge and beliefs, Wenden (1999, cited in Graham, 2006) claims that beliefs are more subjective than knowledge, in the sense that the latter represents what one knows to be true, while the former explains what one holds to be true. Similarly, Pajares (1992) believes the constructs are daunting, whereas, beliefs are affected by emotions, knowledge is emotionally neutral evolving according to new experiences and situations. Conversely, Woods (1996) claims difficulty in differentiating between teachers' beliefs and knowledge within his study with eight teachers in Canada, when they were interviewed to discuss their decisions taken in the classroom.

3.3.1 Factors influencing teacher cognition

The concept of language teacher cognition has been defined by Borg (2006) as the networks of beliefs, knowledge, and thoughts that language teachers hold about their profession and classroom practice. The notion of teacher cognition and how it develops, interacts with teacher learning and classroom practice is summarised in Figure 3.2.



Figure 3. 2 Teacher cognition, schooling, professional education, and classroom practice (Borg, 2005, p. 192).

Teacher cognition as a central concept consists of several psychological constructs like teachers' knowledge, perception, attitudes, beliefs and others, about themselves as teachers, their students, the curricula, the teaching materials and teaching in general. The diagram demonstrates the nature of teacher cognition as being shaped by teachers' previous schooling experience as claimed by Almarza (1996) in the study described below, and their professional preparation programmes. This latter has been suggested to have less impact on teachers' cognition if it overlooks their prior beliefs (Borg, 2003). Besides, contextual factors are seen to affect both teachers' cognition and their action in the classroom, by allowing or impeding them to implement instruction, for instance, lack of resources, school culture, or prescribed curriculum (Tsui, 2011); hence, discrepancies between beliefs and practice occur. Subsequently, teachers' teaching experience is seen to contribute to build their cognition towards teaching ideas, and vice versa.

Correspondingly, Tsui (2011) referred to previous literature on L2 teacher cognition and its relation to other aspects, such as sources of teacher cognition, teachers' beliefs and classroom practice and decision making, in addition to the way teacher cognition can be changed through teacher education. Different studies demonstrated different results, for instance, the results obtained from Peacock's (2001) longitudinal study on 184 trainees of ESL teachers in Hong Kong revealed little change in their beliefs about ESL learning, over their three year training programme. The trainees' beliefs about teaching English was based on the idea that teaching should focus on grammar and vocabulary. This led the researcher to attribute the results to other factors mainly to their previous experience of being learners in schools; i.e., the way they have been taught.

Moreover, other studies showed some divergences in their findings; change in teachers' behaviour may not entail change in their cognition, or even change in their cognition may not result in change in their classroom practice. Almarza's (1996) ten-month longitudinal study at the University of London on four student foreign language teachers' knowledge and action, presents some insightful ideas about researching foreign language teaching. The analysis of the data generated from classroom observation, interviews, journals, and stimulated recalls demonstrated teachers' previous experience as language learners and the way they were taught were the main sources of conceptualizing their profession. The results also showed that the teachers' knowledge about the language (formal or natural) was a variable that impacted their action. Besides, although teachers had identical ways of dealing with the subject matter following the same teaching method, there were variations in their knowledge about language and the teaching and learning of languages. Ultimately, the researcher believes that regardless of the context, the content or even teachers' knowledge, teacher education had an influential role in shaping teachers' performance.

Teacher education

Language teacher education involves the different activities -behavioural, attitudinal, (meta)cognitive and emotional- that teachers engage in with the aim of professional learning (Borg, 2015). However, researchers (e.g., Muijs, Kyriakides, van der Werf, Creemers, Timperley & Earl, 2014) question the efficacy of such programmes on teachers' growth, especially if their content is generic, decontextualized and in the form of theoretical ideas. Borg (2015) refers to this conventional model of teacher education as a 'training-transmission' whereby an external trainer provides teachers with knowledge and ideas while their critical role as knowledge generators is neglected. Conversely, he argued for a more constructive model of teacher training where, on the one hand, teachers' beliefs, prior knowledge and experience are acknowledged, and on the other, it develops teachers' ability to modify

creatively their teaching based on the existing ineffective practices. Similarly, researchers (Burns, Freeman & Edwards, 2015; Kubanyiova & Feryok, 2015) stressed the significance of engaging with teachers' beliefs, knowledge and practice rather than trying to change them by imposing new theories, methods and materials.

Accordingly, the extent to which teacher education or professional learning can bring about positive and sustained effect on teachers received a consensus by researchers in several aspects. These include, among others, its relevance to teachers' and their students' needs, fostering collaboration among teachers and emphasising teachers' agency and reflection (Borg, 2015). However, different approaches and structures in teacher education programmes exist, for instance, input-based training, technology-based programmes, blended programmes and teacher-research programmes, but the relative effectiveness of each programme is an understudied area in language teacher education (Borg, 2015). In this line of thought, Macaro et al. (2016) argued that teacher education programmes with an underpinning of research knowledge contribute to teachers' development and to greater levels of achievement by their students. They also noted that this type of teacher education programmes fosters their sense of efficacy, in a way that it is supposed to provide relevant materials and getting help from teacher educators, or even observing peers accomplishing a particular teaching task (vicarious experience). However, this view is still theoretical, and paucity of empirical research in foreign language teaching in general and listening in particular is to be noted. Furthermore, studies that investigate foreign language listening teachers' knowledge and awareness about research needs more attention. Additionally, the kind of relationship between teachers' professional development, cognition, and self-efficacy in relation to foreign language listening is worthy of investigation.

3.3.2 Second and foreign language teacher subject and pedagogical knowledge

In language education, research in second and foreign language teacher cognition started to receive attention in the early 1990s, when the focus was on identifying teachers' knowledge or cognition of language subject matter, particularly grammar, while research on their cognition of language skills was still limited (Tsui, 2011). Richards, Li, and Tang (1998, p. 99) emphasised the importance of L2 teachers' subject matter knowledge for their practice, stating that "without a thorough knowledge of the content of teaching, teachers will have difficulty turning content into appropriate plans for teaching".

Different types of teacher knowledge have been explored in the literature. Ben-Peretz (2011), reviewing nine papers devoted to teacher knowledge over a period of 20 years (1988-2009), identified, first, professional knowledge (Grossman & Richert, 1988) consisting of knowledge of the subject matter to be taught, and knowledge of general pedagogical skills and principles. The difference between the concepts of professional and personal practical knowledge needed to succeed in a particular profession, whereas the latter was referred to their experience and practices (Tamir, 1991). Connelly, Clandinin, and He (1997) viewed teacher knowledge from a different perspective, in a way they referred to it as personal-practical knowledge that develops over time, believing in the important role of teachers' past experiences that are reflected in their present practices.

Research into teacher knowledge has tended to be generalised rather than subject specific; in other words, there is very little work related specifically to foreign language teaching. Furthermore, studies in language teaching are still limited though Tsui (2011) conceives the findings of those works as convergent with the ones found in the general teacher education literature. Correspondingly, Andrews (2007) argues for the necessity of second and foreign language teachers to possess an adequate level of teacher language awareness (TLA) as this is likely to be related to his or her teaching effectiveness. TLA, sometimes referred to as knowledge about language (KAL), is viewed to be metacognitive in nature. It involves cognitive reflection on teacher subject-matter knowledge and language proficiency for the sake of planning and teaching (Andrews, 2007).

Regarding the concern of the current research - teaching listening in a foreign language context - few studies have been conducted on teachers' knowledge or beliefs about foreign or second language listening, and the field lacks evidence concerning teachers' pedagogical beliefs (Graham, 2017). Moreover, previous work has demonstrated that teachers show little knowledge about the listening process, the way learners approach aural input, and how they can help them to overcome the different difficulties they encounter when listening to spoken language (Kaur, 2014; Vandergrift & Goh, 2012). Furthermore, the field lacks teacher education about the skill of listening as well. Generally, research on teaching listening is still in its 'infancy' compared to other language areas and needs to be developed.

3.4 Teachers' perceptions about listening

Listening was previously considered a passive skill that can be developed naturally, and little or no attention has been given to the systematic teaching of this skill in foreign language context compared to the other language skills of speaking, reading and writing. Recently, the listening skill has been an interest of some researchers, particularly in the field of second and foreign language teaching and learning though the teaching of the skill itself, to some extent, is still conventional in several contexts.

Researchers and even teachers agree on the fact that listening is an active skill that needs to be taught explicitly and directly in the language classrooms (Rost, 2011). Due to its complex nature, Rost (2011) views the teaching of listening as a conscious process that requires helping learners develop neurological, linguistic, semantic, and pragmatic types of processing. Hence, a good understanding of the nature of the listening process can help both teachers and learners - though playing different roles- practise the skill efficiently. Therefore, a close review of how teachers and learners perceive the listening skill in a foreign language is needed for the understanding of the listening pedagogy adopted in different contexts.

Few studies have dealt with the way teachers perceive the skill of listening and how they practise it in the language classrooms. For instance, Siegel (2014a) empirically found that teachers face challenges when dealing with listening classes. He attributes this view to the complex nature of the skill and to teachers' lack of training in leading a range of appropriate activities for helping learners better develop listening strategies and sub-skills. McAuliffe and Brooks (2017) concluded that, based on Rost's (2002) summary, activities in speech segmentation and providing situations to use other complementary skills like world knowledge are the main challenges for teachers when developing an L2 listening course.

Another study conducted by Graham et al. (2014) gives an overview of foreign language teachers' stated beliefs and stated practices concerning listening pedagogy in England. Drawing on questionnaire data from a mixed method study that used a questionnaire, lesson observations, interviews, and textbook analysis, the authors reported that teachers devoted less time to the teaching of listening compared to the other language skills. Furthermore, their stated beliefs concerning the teaching of listening seem to contradict their stated practice. For example, the majority stated that listening is a teachable skill and that the aim of doing so is to help learners listen effectively. By contrast, their responses to other items showed a heavy focus on task completion, as if they considered 'effective listening' as just obtaining information from the aural text and getting the right answers, instead of learning how to listen in the future. This approach to listening was termed by Field (2008) as the 'comprehension approach' to listening, where the actual practice in listening classes is to test learners' ability to comprehend spoken messages instead of teaching them how to become successful listeners.

Furthermore, the results obtained from the interviews and observations were discussed in Graham and Santos (2015) and were found to be largely consistent with the findings related to the questionnaires. Some teachers viewed listening as a difficult skill and the listening classroom as problematic. However, others believed that it is just a passive activity rather than a skill per se, and tended to use listening activities as a means to develop other skills like grammar and speaking rather than to view listening as being a focus in its own right, confirming what was found by Siegel (2014b). Moreover, while listening activities were also conceived to be opportunities for presenting new vocabulary, teaching learners to use effective strategies to improve listening beyond the classroom was scarcely considered by teachers. Rather they tended to frame their classes as preparation for examinations and assessment (Graham & Santos, 2015).

In a different context, with a small sample compared to the one in Graham et al. (2014), Bouziri (2007) explored Tunisian EFL teachers' attitudes towards the teaching of listening in four different universities in Tunisia. The researcher used roughly the same tools as Graham et al. (2014), including questionnaire, interview, observation scheme, and document survey; however, few details were given about these tools and the study procedures. Data collected from all the research instruments were categorised under three teaching tendencies: listening for speaking, listening to improve listening skills, and question oriented. As far as the first orientation is concerned, a considerable number of teachers considered listening as "an enabling skill" (p.198) to develop the learners' speaking skills. To develop listening, more than half of the teachers tended to direct their students to listen to native speakers as a technique, while teaching them listening strategies received little attention. Generally, listening sessions focused on comprehension activities.

A more recent study conducted by Zohrabi and Shokrzadeh (2017), used a case study approach to investigate the perceptions and practices regarding four listening instructional approaches with five experienced EFL teachers in a private language institute. The first approach, - text-oriented- involves students listening to a passage to discriminate sounds,
complete a dictation activity, and answer comprehension questions (Vandergrift & Goh, 2012). The second approach – communication-oriented- involves pre-listening, during-listening and post-listening stages, in order to prepare the learners for what they are going to listen to with a purpose of focusing on understanding the gist or details. The third approach - learner-oriented or strategy-based instruction- teaches learners listening strategies in order to use them to facilitate listening comprehension and help them become autonomous listeners. The last approach is metacognitive listening instruction. The third and fourth approaches constitute a 'process-based approach' to teaching listening. The metacognitive approach, however, places more emphasis on self-management and self-appraisal through experiencing, developing knowledge and reflecting on the socio-cognitive processes of listening while strategy-oriented has a narrower focus (Cross & Vandergrift, 2014).

In their study, the researchers adopted a mixed-method descriptive design using classroom observation, a listening instruction questionnaire (for teachers' stated practices and perceptions of the effectiveness of their practice), a lesson plan analysis task, and lastly a listening instruction belief inventory. They found that product-based listening instruction dominated listening classes, in the sense that communication-oriented listening instruction was the most used approach in comparison to the other types of listening instruction, then followed by text-oriented instruction. However, there was divergence between teachers' stated practice and perceptions regarding time devoted to process-oriented practices and the actual classroom practice for this type of instruction.

Previous studies further suggest that while teachers believe that listening is an important skill for learners to develop and to be taught systematically, they perceive it as a challenge for themselves. Teachers' difficulties in listening instruction may manifest themselves in the assessment-focused activities they use and the lack of guidance they seem to provide to learners. Teachers' difficulties might be a result of several factors such as, insufficient knowledge of the nature of the listening process (Sebina & Arua, 2014), their uncertainty regarding how to approach the skill in a principled manner (Vandergrift & Goh, 2012), lack of pedagogical knowledge and lack of teacher education in listening instruction (Siegel, 2014a), in addition to other personal factors like anxiety and self-efficacy.

3.4.1 Teacher self-efficacy

The principles of self-efficacy theory have been researched in different academic settings. Researchers claim that self-efficacy plays an important role in the teaching and learning process (Bandura, 1997), however, most of the studies conducted in second/ foreign language learning were interested in investigating learners' self-efficacy beliefs, as found in the work of Graham (2007), Pajares (2003), Rahimi and Abedi (2014), Raoofi, Tan, and Chan (2012) and others. The construct of teacher self-efficacy beliefs is under-investigated in the field of language teaching. Furthermore, few studies have paid attention to teachers' self-efficacy in the language classroom and how it can affect learners' self-efficacy and achievement. Therefore, there is a need to consider teachers' beliefs regarding their abilities in the language classroom and how they might be helped to improve their sense of efficacy for better educational outcomes.

Research in the area of language teacher self-efficacy is scarce but has started gathering pace (Wyatt, 2018). Previous studies point to the importance of teachers' self-efficacy beliefs in the classroom in general in terms of its impact on students. Teachers' sense of efficacy facilitates managing the classroom, organizing courses, and motivating students to learn and communicate effectively (Erdem & Demirel, 2007), however, the context of EFL lacks evidence on this potential impact (Hoang, 2018). Accordingly, the unique aspect of this context is the dual burden that teachers carry regarding the development of classroom activities for students that have to consider both the content and the language to deliver (Chiang, 2008).

Following the previous definition of general self-efficacy by Bandura (1986), Tschannen-Moran, Hoy, and Hoy (1998) describe teacher's self-efficacy as "belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233). Pertaining more particularly to language teachers, Wyatt (2018) suggests that language teachers' self-efficacy beliefs are concerned with their capabilities "to support language learning in various task-, domain- and context-specific cognitive, metacognitive, affective and social ways" (p.136). Self-efficacy convictions are thus related to teachers' beliefs about their teaching competencies to accomplish particular task requirements in a particular situation and domain. Furthermore, it is highly acknowledged that language teachers' self-efficacy beliefs play a significant role in identifying how their knowledge is reflected into classroom practice (Wyatt & Dikilitaş, 2019).

Teachers believing in their efficacy has noticeable impacts on their thoughts and feelings, choice of classroom activities, the amount of effort, and their perseverance when confronting with difficulties (Cantrell, 2003). Teachers' sense of efficacy has been a focus of different scholars with different interests. Teacher efficacy beliefs within social cognitive theory have gained interest within academic research; accordingly, it seems crucial to highlight the role of teachers' efficacy beliefs in the classroom. Pajares (2002) claims that teachers are challenged to improve the learning setting and learners' behaviour, by reconstructing classroom structure, improving students' emotional states, raising their self-beliefs, adjusting their way of thinking, and enhancing their academic skills and self-regulatory practices.

On the other hand, it seems interesting to identify what characteristics teachers with high and low self-efficacy beliefs hold. Hoy and Spero (2005) reviewed some variables that are associated with strong teaching efficacy beliefs. Teachers with a high sense of efficacy tend to be open to learn and use new approaches, methods, ideas, and strategies for teaching to meet their students' needs (Cousins & Walker, 2000; Guskey, 1988; Ross 1994, 1998; Stein & Wang, 1988). They are also enthusiastic about the subject they teach and exhibit good management and planning in the classroom (Allinder, 1994). Moreover, strong efficacy perceptions enable teachers to be less critical of students' failures, but work longer with them, give feedback, and encourage them to enhance their autonomy and build their self-perceptions of academic skills (Ross, 1994, 1998).

Concerning classroom instruction, highly efficacious teachers are likely to provide opportunities for all students to gain knowledge and participate in the learning process through working individually, in pairs, and in small groups for more individualized instruction (Tschannen-Moran, 2001). On the contrary, teachers with low self-efficacy tend to avoid teaching subjects in which they believe they are less efficacious (Riggs, 1995), face difficulty directing students along academic tasks, feel frustrated and threatened by students' misbehaviour, and spend more time in group work in contrast with to whole group instruction (Ashton & Webb, 1986). Thus, this suggests that teachers' self-efficacy is a complex and a multi-faceted concept, and a deep investigation of it in relation to the field of foreign language is required to enrich this area and to better understand teachers' action in the classroom.

In a Middle Eastern context, Mojavezi and Tamiz (2012) investigated the relationship between English teacher self-efficacy and students' English learning motivation, on the one hand, and the impact of teacher self-efficacy on students' achievements, on the other. The study was conducted in four different cities in Iran; both teachers and students participated in the study. To answer the research questions, two research instruments were used, the teacher selfefficacy questionnaire developed by Tschannen-Moran and Hoy (2001) and a students' motivation questionnaire. This latter contained four parts, the first and second parts adopted from Schmidt (1996), the third part from Gardner (1986), and the last one was developed by the researchers.

A Pearson product-moment correlation was conducted to investigate the relationship between teacher self-efficacy and students' motivation. There was a positive significant relationship between the two elements: teacher self-efficacy and students' motivation, which indicates that both variables could be important to each other. Within a more detailed analysis, teacher self-efficacy correlated positively with students' intrinsic motivation, attitudes towards learning English, and opinion of the teacher, while it correlated negatively with students' extrinsic motivation. Again, the results of the study indicate that a potential mutual interaction between teachers' sense of efficacy and students' motivation in the classroom.

Concerning the potential impact of teacher self-efficacy on students' achievement, the teachers were first placed into three groups according to their level of efficacy beliefs, in which group A included teachers with the strongest level of efficacy beliefs, then followed by groups B and C. The results obtained from one-way ANOVA demonstrated a significant difference between the groups according to their achievements. The post-hoc results revealed that students taught by teachers who belonged to group A got better scores than others in groups B and C. The results of this study support previous researchers' claims that teacher's self-efficacy is likely to influence learners' academic achievement and motivation though researchers in the study did not limit the students' achievement or even teachers' self-efficacy to one specific academic subject or skill, as self-efficacy is both task and situation-specific. Correspondingly, general measures create problems as they are obscure about what is being assessed (Pajares, 2002); thus, generalizations from this work need to be made carefully.

As for the concern of the current study, different studies have considered interest in learners' self-efficacy and listening comprehension, as in the work of Graham (2011), Muñoz and Jojoa (2014), Rahimi and Abedini (2009) and others. Research on teacher self-efficacy in

a foreign language listening comprehension is scarce. Given the challenges teachers experience with listening, and also in terms of how listening is a fundamental skill underpinning others, the gap in the nature of EFL teachers' listening self-efficacy and its impact on learners' listening self-efficacy and listening achievement is an important one to fill. Therefore, this study seeks to answer the following research questions:

- 1. To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy
- 2. To what extent does receiving listening strategy instruction improve:
 - a. Learners' listening proficiency
 - b. Learners' listening self-efficacy
- 3. To what extent is student listening performance predicted by their listening selfefficacy and teacher self-efficacy beliefs?
- 4. To what extent is student listening self-efficacy predicted by their listening performance and teacher self-efficacy beliefs?

CHAPTER FOUR: RESEARCH DESIGN & METHODOLOGY

4.1 Introduction

This chapter presents the design and methodology used in the current study. The research instruments used to answer the research questions posed are explained. This chapter also includes the study procedures undertaken, the results of the pilot study, data analysis procedures for both quantitative and qualitative, and finally the ethical considerations.

4.2 Research questions

- 1. To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy
- 2. To what extent does receiving listening strategy and metacognition-based instruction improve:
 - a. Learners' listening proficiency
 - b. Learners' listening self-efficacy
- 3. To what extent is student listening performance predicted by their listening selfefficacy and teacher self-efficacy beliefs and other variables?
- 4. To what extent is student listening self-efficacy predicted by their listening performance and teacher self-efficacy beliefs and other variables?

4.3 Research paradigm

The term research paradigm has been defined differently by several scholars though all the definitions carry similar overall meaning. Generally, a paradigm refers to a particular way of seeing the world (Coe, 2017) or a philosophical worldview assumption (Creswell, 2013). A research paradigm is regarded to be "a way of looking at or researching phenomena, a world view, a view of what counts as accepted or correct scientific knowledge or a way of working" (Cohen, Manion, & Morrison, 2011, p.5). The beliefs that the researchers bring to build their inquiry and the nature of the educational research continue to be problematic, mainly because

of conceptual confusion, the complexity of the educational context, the dichotomy of theory and practice and others (Waring, 2017).

According to Waring (2017) within the educational context, research is framed within interrelated assumptions that address four fundamental questions. First, the term ontology is used, which poses a question related to the form and nature of the educational world. Second, epistemology questions the way to make the researcher's assumptions related to education be known. Subsequently, methodology is related to the procedures to be followed for revealing reality. Lastly, the research methods are concerned with the techniques to be used for collecting the data. Therefore, a good understanding of a research paradigm would facilitate its design, the relevant use of research methods for collecting data and the precise interpretation of the data gathered.

Creswell (2013) identified four types of paradigms: post positivism, constructivism, transformative, and pragmatism. The latter was adopted for the current study as it is reflected in the study's methodology. Within pragmatism the researcher uses all available approaches to derive knowledge and best understand the research problem; besides this, they are free to make use of any research methods that serve the research aims (Creswell, 2013) . In other words, pragmatism integrates a mixed method approach to answer the research questions. It recognizes that the world is mixed rather than exclusively qualitative or quantitative (Cohen et al., 2011). Hence, it can be said that pragmatism takes the strengths of both quantitative and qualitative approaches to compensate for their flaws and give more validity for the data to be gathered.

4.4 Design of the study

A research design is the overall plan of a study that shapes how the research questions are going to be answered using particular tools and procedures (Punch, 2013). Besides, it includes four main elements, the strategy to be followed, the conceptual framework, the participants, and the tools and procedures to be used for data collection and analysis (Punch, 2013). This study adopted a quasi-experimental and mixed method design. Different data collection methods were used, and both qualitative and quantitative data were included. The total number of participants was 234 students and 10 teachers. 48 students were excluded from the study because of their absence in the pre-test or post-test procedures. Data from the main

study were collected along the period of four months in total. Table 4.1 below shows a summary of the overall process of the study procedures.

Phases	Timeline	Process	Participants	Activities
1	21 days	Preparation of the study		-preparing teaching materials -preparing lesson plan -finalising research methods
2	19 days	Pre-tests	186 students 10 teachers	 aural vocabulary test listening test students' questionnaire students' stimulated recall interview classroom observation teachers' questionnaire teachers' interview
3	2 days	Teacher training	5 teachers	 discussing teachers' beliefs and knowledge of listening discussing and presenting research findings explaining how the intervention should be applied, providing teaching materials
4	45 days	Intervention	97 students 5 teachers	 raising students' awareness of about the listening process and listening strategies teaching listening strategies (cognitive, metacognitive, social) teaching bottom-up aspects of knowledge (lexical segmentation, grammar, prosodic cues) keeping teaching log
		No intervention	89 students 5 teachers	 teaching listening following the usual methodology keeping teaching log
5	15 days	Post-test	186 students 10 teachers	 listening test students' questionnaire students' interview Classroom observation teachers' questionnaire teachers' interview

Table 4.1 Summary of the study plan

4.4.1 Mixed-methods research design

This refers to the use of a combination of both quantitative and qualitative approaches for the purpose of gaining a more complete understanding and accuracy of a social phenomenon than using one approach in a single research project (Arthur, Waring Coe & Hedges, 2012; Cohen et al., 2018) . However, the aspects in each approach may include data, methods, designs, epistemologies, ontologies, research purposes, and practical orientations (Arthur et al., 2012). Both qualitative and quantitative types of research methods in social sciences are typically interested in people's thinking and behaviour; however, qualitative methods are less likely to address behaviour directly, while, quantitative methods seem to fail to address the meaning of behaviour (Bryman, 2016). With the idea that all research methods had weaknesses, mixing both quantitative and qualitative research methods neutralize and minimise the bias and limitations of each form of data (Creswell, 2013).

The current study adopted the two types of research methods to explore and explain selfefficacy beliefs in EFL listening from the perspective of teachers and students, in addition to their listening behaviour and practice (teaching/learning). At a procedural level, this type of research design allowed the researcher comparing different perspectives regarding, for instance, teachers' stated understanding and stated practice of teaching listening (using a questionnaire), and their actual teaching (through a classroom observation). Furthermore, this design enabled the researcher explaining, for instance, the participants' self-efficacy drawn from quantitative data (their levels) with a qualitative follow-up data (nature and factors) drawn from interview.

Researchers in the field of education and social sciences (e.g. Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009) suggested various typologies regarding mixed method designs in relation to their purpose of use, timing, and point of integration. Creswell and Creswell (2018) argued for three core mixed methods designs: convergent, exploratory sequential and explanatory sequential. The first design involves collecting both quantitative and qualitative data, analysing them separately, then comparing the results to check whether the findings from each tool converge or diverge. The second design involves collecting quantitative data in sequence, starting first with qualitative data with small sample size then, collecting quantitative data with a larger sample size for the purpose of generalizing the findings. The final type of mixed method design reverses the sequence of collecting data in the second type. It involves, first, collecting quantitative data from a large sample, then collecting qualitative data using

purposive sampling. Furthermore, Cohen et al. (2018) argued that there is no single approach for mixed method research, however, each study has its own plan.

The design of the current study embodied the first and last types of mixed method design (*Figure 4.1*). Firstly, quantitative data were collected from both participants: teachers and students through questionnaires and a listening test for the students. A classroom observation (qualitative) was conducted separately with all teachers during their teaching classes, and the results obtained from this method were compared to teachers' stated practice of teaching listening as reported in the questionnaire (quantitative). Then, a purposive sampling was used - only at Time 1 - with both teachers and students after the first stage. Students' levels in listening comprehension and their sense of efficacy, as this latter was reported in the questionnaire, were the two criteria used to select students to be interviewed later through a stimulated recall (qualitative). 20 students out of 186 from different listening and self-efficacy levels were selected to be interviewed. Two students from each class were involved in the interview. Furthermore, this interview was conducted to gain more information on students' use of listening strategies while listening to a section from the listening test they undertook earlier; additionally, to have a better understanding of their knowledge and beliefs (including self-efficacy) of listening as reported in the questionnaire they completed previously.

Another purposive sampling was used with teachers based on their self-efficacy levels as reported in the questionnaire, in order to divide them into two groups: intervention and comparison. These terms were used in this study instead of 'experimental and control' groups in order to highlight the non-randomisation of the sample which is different from a true experimental design (McLeod, 2017). The selection of teachers was based on the criteria that any two teachers with relatively similar levels of self-efficacy were assigned to different groups, i.e., one to the intervention group and the other one to the comparison group. However, for teachers, there was no particular sampling for conducting the follow-up interview; as the number of teachers was 10 in total, all of them were interviewed to obtain in-depth understanding of their knowledge and beliefs (including self-efficacy) of listening as reported in the questionnaire. Afterwards, teachers in the intervention group received a teacher training regarding strategy and metacognition-based instruction so that they would adopt it in their practice. The comparison group instructed their classes in the conventional approach (no intervention). Lastly, data were re-collected from all participants. *Figure 4.1* shows the overall design of the study.



Figure 4. 1 Embodied mixed method design of the study

4.4.2 Quasi-experimental design

This study was quasi-experimental mixed method in nature. This type of research is widely used in educational studies (Cohen et al., 2011). It follows an experimental design, but it lacks random assignment of participants to conditions (Robson & McCartan, 2016). In addition to that, the full manipulation of the overall central variables, mainly the independent variable, by the experimenter in a quasi-experimental research is difficult (Coolican, 2014) which is a consequence of the non-randomized assignment of the subjects to the intervention and comparison groups. Quasi-experimental research, just like experimental research, involves both dependent and independent variables, and the researcher is trying to observe the effects of the independent variable on the dependent one (Haslam & McGarty, 2014), and hence, it is possible for the researcher to establish a clear causal relationship between the variables (Bordens & Abbot, 2014). Moreover, researchers in a quasi-experimental design use a control group to compare with an experimental group (Creswell & Creswell, 2018). However, the researcher using this design does not have control over the variables affecting behaviour. Therefore, caution should be taken when interpreting results obtained from this design (Bordens & Abbot, 2014).

In the current study, two groups were involved: an intervention (97 students and five teachers) and a comparison group (89 students and five teachers). The overall aim of the study was to explore whether there was a relationship between teachers' teaching listening self-efficacy beliefs and their students' listening self-efficacy beliefs, in addition to students' listening performance. Furthermore, it also investigated the extent to which listening strategy and metacognition-based instruction could affect the variables of listening self-efficacy and listening performance. Therefore, the main independent variable in the current study was the listening strategy and metacognition-based instruction, while the main dependent variables were teachers' listening self-efficacy, students' listening self-efficacy, and students' listening achievement.

4.5 Research methodology

It refers to the research tools to be used to gather data and the application of relevant research rules to solve a particular research problem and investigate individuals (Newby, 2014). The participants, the research tools, and the research procedures of this study are explained in the next sections.

4.5.1 Participants and sampling

The participants in the current study involved Oral Expression teachers and their firstyear undergraduate students preparing for their Bachelor's in English language at two different English Language departments in Algerian universities. Generally, students receive two sessions a week of Oral Expression, one for speaking skills and the other for listening skills. The same teachers teach both listening and speaking, and each session lasts for 90 minutes. The intervention was delivered within regular listening classes that were part of the Oral Expression module.

As it was mentioned earlier in Chapter 1, Algerian universities, and more specifically the English language departments, constitute a large number of students and a limited number of teachers. The teachers teach different modules even if they do not teach their area of speciality or interest. Additionally, the number of teachers of Oral Expression is small and the teachers might be of different qualification levels. In some departments only three teachers are in charge of teaching Oral Expression to all undergraduate students. Within the present study, in which resources and time were limited, it was not possible to work with a large number of universities. Therefore, two universities were selected with a total number of ten teachers, five from each using convenience sampling, in that participants were convenient to the researcher in terms of proximity and availability. This type of sampling is widely used in the area of language acquisition research (Dörnyei, 2007).

The participants were divided into two groups, the intervention and the comparison groups. Each group consisted of five teachers and their groups. Teachers were chosen mainly according to their self-efficacy scores calculated from their answers to the questionnaire, in addition to their willingness and availability to be trained and to conduct the intervention. The teachers participated in the study had different educational qualification, teaching experience

73

and age. Most of them were females and half of them had the Magister as the last obtained degree. This latter is considered as a postgraduate degree in the old Algerian educational system after studying four years for the bachelor's degree, then three years (taught and research). The Magister is neither equivalent to the Master's nor to the Doctorate. In the old educational system, the Master's did not exist. In terms of teaching qualifications, Table 4.2 shows that the majority of participants were trained teachers but were mainly trained for sectors below university level. Few had training in teaching listening; those who had mainly received it as part of in-service training.

		Frequency
	Male	03
Gender	Female	07
	Total	10
	Bachelor	02
Educational level	Master's	03
	Magister	05
	Total	10
	< 5yrs	04
English teaching experience	5 to 15yrs	04
	> 15	02
	Total	10
	No	02
English teacher training	Yes	08
	Total	10
	Middle school	05
	Secondary school	02
Educational sector training	University	01
	None	02
	Total	10
	No	08
Educational experience abroad	Yes	02
	Total	10
Pre-service training in teaching	No	09
listening	Yes	01
	Total	10
In-service training in teaching	No	06
listening	Yes	04
	Total	10

Table 4.2 Teacher demographic information

The total number of the students involved in the study was 186. Some students were excluded from the study because of their absence during the pre or post-tests procedures. Both male and female students were involved. The majority of the students were females (84.9%). They were of different ages although the majority (80.1%) were between 18 and 19 years old. The majority (78.5%) had Algerian Arabic as their mother tongue. As English is a compulsory foreign language, students received at least seven years (an average of three hours a week) of English instruction. Table 4.3 shows students' demographic information.

		Frequency	Percent %
	Male	28	15.1
Gender	Female	158	84.9
	Total	186	100.0
	18 to 19	149	80.1
Age	20 to 26	33	17.7
	\geq 40	04	2.2
	Total	186	100.0
	Arabic	146	78.5
L1	Tamazight	40	21.5
	Total	186	100

Table 4.3 Student demographic information

4.5.2 Research methods

The research methods refer to the tools to be adopted by the researcher as means or main sources of data gathering and analysing. The next section provides a detailed explanation on the instruments that were used in the current research project.

4.5.2.1 Questionnaires

Questionnaires are widely used in research. Researchers opt for questionnaires because of their flexibility in time and place to be completed, and when the aim is to reach a large number of people (Newby, 2014). Different types of questions (items) can be found in a questionnaire, including open-ended items, partly open-ended items, restricted items and rating scales (Bordens & Abbott, 2014). For the current study, two different questionnaires were used, one was addressed for teachers and the other for students involving different types of questions. Before administering any kind of questionnaire, researchers have to ensure that all the questions are clear and easy to answer as no one would be present to help the respondents explain what is required (Bryman, 2016). Therefore, piloting the instrument before it is eventually used is crucial. Respondents answering some types of questionnaires may not have the opportunity to elaborate their answers, and in some cases, they are likely not to answer questions which are boring and not important to them resulting a great risk of missing data (Bryman, 2016).

To minimise potential unreliable results from the questionnaires, a pilot study for the instruments was conducted. Moreover, the study used interviews to back up the questionnaires. The interviews helped the researcher to obtain the details she was interested to get from the participants' responses.

4.5.2.1.1 Teacher questionnaire

The teachers' questionnaire designed for the study included four sections. The first gathered teachers' demographic information; the second section covered teachers' stated understanding of listening. The third tackled their stated instructional practices about listening. The last section represented teachers' stated beliefs about their sense of efficacy in teaching listening.

Research on teachers' beliefs about second and foreign language listening teaching has received little attention in the literature. The construction of the current questionnaire was developed from reading of research literature on foreign language listening. The questionnaire was based on Graham et al. (2014) questionnaire used with 115 MFL (Modern Foreign Language) state secondary school teachers in England. The researchers were teacher educators in England, and they developed their questionnaire based on research literature in the field of second language listening and their observations of how listening was taught in their context. The final version of the questionnaire used in the current study adopted and adapted some items from the questionnaire to suit the aim of the study considering its context (Appendix E)

The second section of the questionnaire asked teachers about their understanding (agree/disagree) of the nature of listening, students' main areas of difficulties, and factors that influence listening outcomes. This part included 14 statements that were rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Part (a) in the third section asked

teachers how often they take into consideration particular aspects while teaching listening in their real practice in the classroom. This involved 15 statements in total that were rated on a four-point Likert scale from 1 (never) to 4 (always). Additionally, part (b) was a question in which teachers selected from a list the types of activities they used in the classroom. The list was varied in terms of the types of activities (comprehension, top-down, bottom-up, and metacognitive), allowing teachers to add others in order to uncover what kind of tasks were run in the classroom. The last part (c) of the third section intended to understand teachers' purpose of undertaking listening activities in the classroom. From a given list, teachers were asked to rank the items from the most important one to the least important. In section four of the questionnaire, teachers were required to reflect on their level of confidence in relation to teaching listening. Its aim was to measure teacher efficacy beliefs towards teaching listening. The development of this part is explained in the next section.

Teacher self-efficacy measurement

The literature contains few examples of measurements to assess teachers' listening selfefficacy. Therefore, the development of the current scale was based on literature about teacher self-efficacy in general and was adapted to the aim of the current study. The teacher selfefficacy scales reviewed were widely used by other researchers, including Bandura's unpublished scale (undated) which was the foundation of other scales. A 30-item instrument was constituted of seven subscales: efficacy to influence decision making, efficacy to influence school resources, instructional self-efficacy, disciplinary self-efficacy, efficacy to enlist parental involvement, efficacy to enlist community involvement, and efficacy to create a positive school climate. It was formatted on a nine-point scale from 'nothing' to 'a great deal'. The instrument received criticism from other researchers like Tschannen-Moran and Hoy (2001) for being too broad and lacking specificity; in addition to that, figures for its reliability were not available.

The other scale reviewed was the Ohio State teacher efficacy scale (OSTES), which was developed by Tschannen-Moran and Hoy (2001). The instrument has a long version of 24 items and a short version of 12 items, scaled in a similar way as Bandura's instrument. It is categorised into three subscales: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement. The reliability of this instrument has been examined in three separate studies by the researchers. For the long version (24 items), reliability

was $\alpha = .94$ and for the short version (12 items), it was $\alpha = .90$. The questionnaire is considered to be a measure congruent with self-efficacy theory (George, Richardson, & Dorman, 2015). It was used in several educational studies (such as Chacón, 2005; Ghasembolanda & Hashim, 2013 and others). Later, Tschannen-Moran and Johnson (2011) developed another questionnaire based on this questionnaire: the teachers' sense of efficacy for literacy instruction (TSELI) for a more situation-specific scale.

As an attempt to differentiate between teacher self-efficacy beliefs and teacher efficacy, the Teachers' Efficacy Beliefs System-Self (TEBS-Self), developed by Dellinger, Bobbett, Olivier, and Ellett (2008) as a new American measure, was also reviewed for the present study. The instrument was developed based on Bandura's self-efficacy theory, and it "assesses teachers' self-efficacy beliefs, or teachers' individual beliefs about their own abilities to successfully perform specific teaching and learning related tasks within the context of their own classrooms" (p. 751). Besides, it is useful "to evaluate the impact of professional development experiences designed to influence teachers' beliefs in their abilities and their subsequent behaviours in the classroom" (p. 763). The instrument consists of 30 items grouped under six subscales: communication/ clarification, management/ climate, accommodating individual differences, motivation of students, managing learning routines, and higher order thinking skills. Dellinger et al. (2008) estimated the reliability α of each of the previous six components as 0.86- 0.87, 0.85- 0.86, 0.85- 0.87, 0.78, 0.80, and 0.85- 0.86 respectively, and it was assessed in three independent studies with large samples (n= 2373) of K-6 elementary teachers. The items were scaled on a four-point scale, from very weak belief in capabilities to very strong belief in capabilities.

The self-efficacy beliefs for teaching listening inventory (SEBTLI), developed for the current study, consisted of 25 items, scaled from 0 % (I absolutely can't do this) to 100% (I absolutely can do this). The items were structured in relation to the three main aspects found in the OSTES and developed according to the purpose of the study. These aspects involved teachers' efficacy beliefs towards students, classroom management, and finally strategy and metacognition-based listening instruction. Furthermore, the questionnaire items were adapted from the previous reviewed scales to suit the current study and other items were developed by the researcher.

4.5.2.1.2 Student questionnaire

The student questionnaire contained four parts. The first part dealt with students' demographic information (e.g. age, gender, class). The second part was concerned about metacognitive knowledge in listening. Metacognitive knowledge consists of three main elements, person knowledge, task knowledge and strategy knowledge (Wenden, 1991). In listening, person knowledge refers to learners' awareness of themselves as listeners in terms of their characteristics and beliefs that help or impede listening comprehension. Knowledge about the nature, purpose, demands, and skills needed to perform a particular listening task refers to task knowledge. The third area is strategy knowledge which requires learners' awareness of the different types of listening strategies to be used according to the task demands. In part two of the questionnaire, only the first two types of metacognitive knowledge were included while the third one was excluded as it seems confusing to differentiate between the knowledge of the strategies and the actual use of these strategies. This part contained 15 items displayed in a sixpoint Likert scale from 1 (strongly disagree) to 6 (strongly agree). This scale was used by Vandergrift and his colleagues (2006) when designing the MALQ (Metacognitive Awareness Listening Questionnaire) which is widely used in the field of listening in relation to metacognition. Some items under this part of the questionnaire were adapted and adopted from previous works (e.g. Vandergrift et al., 2006, Zoghlami, 2015) and some were developed by the researcher to fit the aim of the study.

The third part of the questionnaire dealt specifically with the frequency of using listening strategies. It contained 20 items displayed within a four-point Likert scale (never, sometimes, frequently, always) where the mid-point was taken out as it "might correspond to either perceived intermediate acceptability or lack of confidence in one's own knowledge" (Sorace, 2010, p. 60). Respondents gravitate towards the midpoint as they may not be committed to the survey and they feel comfortable being in the average (Newby, 2014). The items were mainly adopted and adapted from the MALQ designed by Vandergrift et al. (2006), and some items were added by the researcher to fit the context of the study. The scale used for this part of the questionnaire was different from Vandergrift and colleagues' approach to explore learners' awareness of using the strategies. The one used in this study aimed to identify the frequency of using listening strategies by students, however in the MALQ a more attitudinal scale was used.

The last part of the questionnaire consisted of the students' self-efficacy beliefs for English listening inventory (SEBELI). It asked students to reflect on their perceptions of their abilities to perform successfully certain activities related to listening. It contained 13 items on a scale from 0% (I absolutely can't do this) to 100% (I absolutely can do this). The scale was based on Graham and Macaro work (2008) with a reliability of .86, and which was based on a study conducted on strategy use and self-efficacy in language learning by the US National Capital Language Resource Center (2000). Four items from the original scale were adopted and adapted, and nine were developed by the researcher to fit the study focus (listening strategies and metacognition). The final version of the questionnaire is presented in Appendix D.

4.5.2.2 Aural Vocabulary Knowledge Test

In order to control for differences in existing levels of vocabulary knowledge that might have influenced any impact from the intervention, vocabulary test was taken only at pre-test by all learners, and it was used in the study as a covariate to increase the accuracy of the intervention results. The test that was used in the study was the Aural Vocabulary Knowledge test (AVK) adopted from Cheng and Matthews (2016), to test students' "ability to perceive and produce 63 different target words from three levels of word frequency: 23 words from level one (0-2000 frequency range), 27 words from level two (2001-3000 frequency range), and 13 words from level three (3001-5000 frequency range)" (p.26). The students were required to listen to 63 different sentences recorded and read by a native speaker of English, then produce in written form one missing word for each sentence according to what they heard. The test was validated by the authors at different stages, ensuring that it assesses vocabulary knowledge rather than inferencing ability in that when piloted, two native speakers were unable to guess the missing words from the context or the surrounding words. The test lasted 10 minutes in total to be completed after students received instructions from the researcher about the test. A sample of the AVK test is presented in Appendix C.

4.5.2.3 Listening Comprehension tests (LCT)

Two listening comprehension tests were used in this study to measure students' listening proficiency, one at Time 1 before teachers delivered the intervention for the intervention group and one at Time 2, after the intervention. The scores of the test were used to identify a potential correlation between students' listening proficiency and, first, their listening self-efficacy, and second teachers' self-efficacy level. Furthermore, part of the test was used as a tool to evoke students' use of listening strategies through retrospection. In this study, a stimulated-recall interview was used.

Different tests were used at each time point in order to avoid a practice effect. Both tests were drawn from the same sources and were closely matched on key indicators (see Table 4.4). They were drawn from English language tests aimed at learners of the same proficiency level as the study participants. Each test had five sections and 35 marks in total. Each section required students to answer different types of questions and hence assessed a wide range of listening skills: understanding main ideas (e.g. part 5), understanding specific information (e.g. part 2) and 4), identifying attitudes, opinions, and purpose of the speaker (e.g. part 3), in addition to following the development of an argument (e.g. part 1 and 5). Part one of the tests was a multiple-choice task where the participants had to listen to seven short recordings and choose one correct picture from three for each recording. Part two required the students to listen to a conversation and fill in gaps of 10 statements with one word and/ or a number. Part three was in the form of yes/no/not given task where students were asked to listen to a conversation and react to six statements whether they are correct/ incorrect/ or not mentioned according to their understanding. For part four, the students were given a diagram and a flow chart to complete with two words and/or a number while listening to a conversation. In the last part, the students listened to three short conversations presented in a grid and had to recall the place (pre-test) or subject (post-test) of each conversation in one column and the problem discussed in the conversation in the other column. The students were free to answer using Algerian Arabic or English. The length of the passages varied from two minutes to five. The speech rate of the passages was between 121-176 words per minute. The topics discussed in the test versions were varied. More details about the listening tests features are presented in Table 4.4. The listening tests lasted 30 minutes in total to be completed. Before every section the researcher explained what, the participants were going to listen to and the procedures to complete the test. One minute and 30 seconds were given before and after each section so that the students could prepare and complete the tasks because they were not allowed to have a second listening. A sample of the listening tests is presented in Appendix A and B for pre- and post-tests respectively.

Listening tests parts	Source	Pre-test			Post-test		
		Length (min)	WPM	Frequency Band (%)	Length (min)	WPM	Frequency Band (%)
	Preliminary English Test			93.64 (K1)			92.69 (K1)
Part 1	(PET)	4.15	121	96.72 (K2)	4.35	146	96.65 (K2)
				97.30 (K3)			97.87 (K3)
Part 2	IELTS 10 and			92.28 (K1)			91.01 (K1)
	11 Test 1	4.33	141	97.10 (K2)	5.10	144	97.36 (K2)
				98.06 (K3)			98.68 (K3)
Part 3	Preliminary English Test			94.99 (K1)			93.12 (K1)
	(PET)	2.09	156	97.35 (K2)	2.00	153	97.18 (K2)
				97.64 (K3)			97.49 (K3)
Part 4	Collins English for Exams.			86.50 (K1)			87.63 (K1)
	Listening for IELTS	2.43	176	94.88 (K2)	2.15	173	92.10 (K2)
	IEL 15			97.54 (K3)			95.52 (K3)
				92.90 (K1)			92.62 (K1)
Part 5	Cutting Edge	4.30	165	96.45 (K2)	4.05	140	97.49 (K2)
				97.54 (K3)			98.83 (K3)

 Table 4.4 Listening comprehension tests characteristics

4.5.2.4 Classroom Observation

The purpose of using classroom observation as a research tool in the study was to compare teachers' practices as reported in the questionnaire, and their actual practice in the classroom. In addition to that, it was also used to ensure that teachers were conducting the intervention properly if they were part of the intervention group, and that those in the comparison group were not exposing their students to any listening strategy instruction. Observation allows researchers to investigate people, behaviours, events, and routines systematically (Marshall & Rossman, 2016), and it offers them the opportunity to collect 'live' or first-hand data from naturally occurring social situations (Cohen et al., 2018). Each involved class in both the intervention and comparison groups was observed once only during the pre-treatment stage. However, during the treatment stage, only classes belonging the intervention group were observed once to check the application of the intervention, meanwhile all teachers in all groups were using the instructional log to report on their practice to eliminate the impact of observation on the teachers' and students' behaviours.

However, observation as a research tool is by no means without limitations. The participants in any study may change their behaviour when they know that they are being observed. Additionally, what the observer records might be affected by personal judgments and preferences (Cohen et al. 2018). Therefore, to avoid such limitations in the current study, first, the researcher who had knowledge and experience of the phenomenon being investigated was the observer in all the ten classes to ensure consistency in recording the observations and their focus. Furthermore, the data obtained from the observation were triangulated to provide other evidence, for instance, causes and purposes of particular behaviour through data from the questionnaires, interviews and instructional logs.

The observation focused on how the teachers addressed listening in the classroom. More precisely, how teachers introduced the listening materials they wanted students to deal with. Additionally, how teachers and students interacted in terms of discussing the listening topic, whether they checked students' understanding, and whether they provided them with feedback, or what they provided their students with to help them improve their listening proficiency were also highlighted during the observation. The observation results were compared to teachers' statements in the questionnaire to see whether what they stated they did in the classroom matched their real practice in the classroom. In addition to that, it was focused on the implementation of the intervention. In other words, to check if the teachers are teaching students the listening strategies that were supposed to help them plan, monitor, and evaluate their listening process effectively, so that, comprehension can be reached. Correspondingly, if there was a misapplication or misunderstanding on the part of the teachers, or any difficulty that they may encounter, the researcher's role was to guide and direct the teachers on how the instruction was supposed to be executed.

A semi-structured observation schedule was developed by the researcher and used for this study. This type of schedule had a list of items, but the researcher gathered additional data to illuminate these items in a much less predetermined manner, i.e., in relation to what was observed. In this study, an observation schedule was used to note teachers' and students' behaviours and how the typical listening material was presented. The schedule was developed according to the three different stages of a listening lesson (pre-listening, during listening, postlistening). Each stage included other items that are related to the metacognitive approach of teaching listening strategies which was included in the intervention. This enabled the researcher to check whether they were used or not by teachers. Additionally, the schedule included parts (columns) to be filled by the researcher, involving the types of the activities used by teachers, students' motivation and engagement, and the teaching of potential strategies within each lesson stag (see Appendix F).

4.5.2.5 Interviews

The researcher's purpose in using interviews in this study was to gain more in-depth insights into areas covered in the participants' questionnaires and noted during observation sessions. As a qualitative research method, a semi-structured interview was used with both participants: teachers and students, for its flexibility to fit the purpose of this research project. This type of research method is widely used by researchers across disciplines as a key research instrument, and more particularly in applied linguistics research when designed to gain data on participants' opinions, beliefs and experiences (Appleby, 2017). Additionally, it allows interviewers to elaborate their questions while keeping an open mind on the areas that they are interested in understanding (Bryman, 2016).

Despite the fact that interviews allow for focused communication between the researcher and the participant, the participants' honesty and truth when answering the questions cannot be guaranteed (Hesse-Biber & Leavy, 2011). Therefore, the interviews' data were triangulated with other research instruments as data sources to verify the validity of these answers. In other words, the findings from each research tool were compared and discussed; where they converged, the results were validated and strengthened. However, where they diverged, a discussion of the different results obtained and the reasons behind that divergence from each data source is presented in Chapter Seven. No changes were made to any of the participants' answers in any of the tools.

Another limitation of using interviews in research is the difficulty to reach a large number of participants because of the constraint of them being time consuming. Furthermore, misunderstanding between the researcher and the participants may occur during the interview because of the participants' discomfort and anxiety (Kvale, 2008); for this, in the current study, the interviewer and the interviewees shared the linguistic and cultural perspectives which made the process easy for both, and where there were some unclarity during the interaction the participants were encouraged to ask for clarification. Moreover, the participation in the interviewes was voluntary and the participants provided their consent to be interviewed according to their availability.

4.5.2.5.1 Teachers' Interview

The interview used in the study was intended to obtain in-depth information and to clarify what teachers stated in the questionnaire used earlier. In other words, the interview was needed as an attempt to understand, primarily, how far teachers perceived themselves, as English listening teachers, their learners' difficulties in listening and their experience of teaching listening. Additionally, the interview attempted to understand their perceived ability to adopt innovation in teaching English listening in their classroom.

As it was unclear how teachers would respond to such questions, a semi-structured interview was used as a research instrument for its flexibility that allows the interviewer to pursue an idea in an interviewee's response in more detail, in order for the conversation to develop (Newing, 2010). Furthermore, this type of interviews, conducted both before and after the intervention, helped the researcher to gain insights into the participants' change in views at the two different time points. In other words, the questions to be posed changed from Time 1 (before the training and intervention) to Time 2 as the participant in the intervention group would have a new experience (training and intervention) to talk about, thus, new interview questions were generated.

During the pre-intervention interviews, teachers were asked, first, about their teaching background: teaching experience, educational level and their study and teaching speciality. Second, they were asked about their general beliefs and knowledge of listening in relation to what they reported earlier in the questionnaire. Subsequently, they also talked about their practice of listening in the classroom according to what they mentioned in the questionnaire and they were encouraged to add more information if they wanted. Teachers' answers to

questions related to their cognition and personal teaching practices were likely to facilitate the design of teacher training sessions that would underpin the implementation of the classroom intervention. Besides, it is believed that consulting teachers' beliefs assists their professional growth and strengthens their sense of ownership (Gabillon, 2013) in respect of changes implemented. Finally, the interviewees were given the opportunity to comment or clarify their choice of percentages in the self-efficacy inventory.

After the intervention, on the one hand, teachers in the intervention group were encouraged to talk about their experience teaching listening using strategy and metacognitionbased instruction; specifically, they were asked about the positive and negative aspects of the application from their perspectives and their students' perspectives. On the other hand, teachers in the comparison group were asked to add any information related to their experience teaching listening between Time 1 and Time 2.

Interview participants

The interview participants were all the teachers involved in the study. They were 10 in total; five belonged to the intervention group and five were in the comparison group. They were male and female with different teaching profiles. Because of the sampling technique used in the study, teachers' allocation to the intervention and comparison groups did not consider their teaching experience or gender, but just their level of self-efficacy and their willingness and availability to conduct the intervention for the intervention group. The interviewees were given random names to be referred to within the interview's analysis. Table 4.5 provides a summary of the interviewees' demographic information in each group.

Study group	ID	Gender	Teaching experience	Highest educational qualification	Employment status	Self-efficacy level at pre- test
	Aisha	Female	< 5yrs	Master's	Part-time	High (76.80%)
Intervention	Azzah	Female	< 5yrs	Master's	Part-time	High (82.40%)
	Celia	Female	< 5yrs	Master's	Part-time	Low (62.80%)
	Hana	Female	< 5yrs	Magister	Full-time	Low (42.40%)
	Zahra	Female	> 15	Magister	Full-time	Low (60.80%)
	Jacob	Male	> 15	Bachelor	Part-time	High (88%)
Comparison	Joseph	Male	5 to 15yrs	Bachelor	Part-time	Low (61.60%)
	Leena	Female	5 to 15yrs	Magister	Full-time	Low (57.20%)
	Sama	Female	5 to 15yrs	Magister	Full-time	High (66.80%)
	Zaky	Male	5 to 15yrs	Magister	Full-time	High (77.60%)

Table 4.5 Background information on the interview teacher participants

4.5.2.5.2 Stimulated-Recall Interview

The listening process is covert and complex in nature, hence, the aim of using stimulated-recall interviews was, first, to identify how students went about trying to understand what they heard. Second, it was also used to document students' self-efficacy beliefs on the one hand and their beliefs about listening and the difficulties they encountered on the other. This method was used before and after the intervention to explore whether any changes in their beliefs and strategy use had occurred due to the treatment for the intervention group.

A stimulated recall interview was used by Mareschal (2007) in Canada with students of French, alongside other tools (think-aloud, questionnaire, interview, classroom observation and listening note-books) to encourage students to reflect on their questionnaire responses concerning items related to motivation and confidence in FL listening. The interview was used immediately after the administration of the questionnaire, in order to provide detailed and comparative data on learners' perceptions of metacognitive awareness, listening strategy use, and self-regulatory abilities. Items related to strategy use were not tackled in the stimulated recall at the beginning of the study (Time 1), so that reflection on strategy use would not influence students' performance in the think-aloud session that took place a week later. The

researcher did not provide her participants with any training before the stimulated recall sessions, believing in the risk of influencing their reports.

In a recent study conducted in Thailand, Simasangyaporn (2016) used a listening task as the stimulus within a stimulated recall (SR) interview to identify EFL students listening strategy use. In this study, unlike the previous study of Mareschal (2007), to ensure the participants' understanding of the procedure, the researcher modelled it using another listening task. The stimulated recall interviews took place one to two weeks after the initial completion of the listening task and questionnaire, which formed part of the researcher's pre-test instruments. However, Gass and Mackey (2000) claim that, SR interviews should take place as soon as possible after the event that represents the focus of the recall in order to minimise memory loss. As far as training participants to interact with the stimulus is concerned, there is a lack of consensus in the literature, with some scholars (e.g. Ericsson & Simon, 1993; Gass & Mackey, 2000) suggesting that the participants should be minimally trained to make sure that they can carry out the procedure, particularly when on-line recall is needed. Though using stimulated recall as a research methodology is likely to help the researcher identify the type of knowledge, how it is organised, and when it is used by the learner when trying to solve problems, L2 cognitive processes, such as listening comprehension, are highly complex and reporting some processes may not be accessible at all (Mareschal, 2007). Therefore, considerations concerning training participants and time for conducting the interviews after the tests need to be taken.

In the current study, every effort was made to keep the time lag between the SRI and the listening test/questionnaire completion as short as possible to minimise the memory decay that was noted at the pilot stage, though there was some variation in the length of the time lag across participants (ranging from one to two days). Twenty participants in total (ten from the intervention group, ten from the comparison group) completed the SRIs. The interviews lasted approximately 20 minutes at pre-test and 15 minutes at post-test (a short explanation of how the interview would be conducted being included at the pre-test only). The brevity of the interviews also justifies the fact that they were conducted with 20 learners. Students were selected to participate in the SR interview according to their levels in listening proficiency and self-efficacy beliefs. They were placed in order for these two measures and divided into two groups: high and low. However, in some cases, some students were not willing to participate, especially those with a low level of proficiency. Therefore, volunteers were encouraged to participate, with the result that there were fewer lower proficiency learners. In the interview

analysis part, participants were given pseudonyms labelled with their teacher's name and either 1 or 2 to be referred to.

Study group	ID	Gender	Listening performance level	Self-efficacy level
	Aisha 1	Female	High 44.28	Low 59.23
	Aisha 2	Female	High 60	Low 59.23
	Azzah 1	Male	High 85.71	High 82.31
	Azzah 2	Female	High 80	High 82.31
	Celia 1	Female	High 64.28	Low 44.62
	Celia 2	Female	High 51.42	High 85.38
Intervention	Hana 1	Female	High 41.42	Low 50.77
	Hana 2	Male	High 65.71	High 73.08
	Zahra 1	Female	Low 31.42	High 83.08
	Zahra 2	Female	High 44.28	Low 53.08
	Jacob 1	Female	Low 2.85	High 66.77
	Jacob 2	Female	Low 17.14	Low 37.69
	Joseph 1	Female	High 60	High 77.69
	Joseph 2	Female	High 51.42	Low 40.77
	Leena 1	Female	High 82.85	High 93.85
	Leena 2	Female	Low 14.28	Low 57.69
Comparison	Sama 1	Male	High 54.28	High 90.77
	Sama 2	Female	High 80	Low 43.86
	Zaky 1	Female	High 72.85	High 83.08
	Zaky 2	Female	Low 17.14	Low 35.83

Table 4.6 Information on the student participants in the SRI

During the interviews, the students were given the choice to speak in whatever language they felt comfortable using (Algerian Arabic or English), in order to fully express and convey their thoughts in the stimulated recall interview. Participants were given, first, their listening answer copies to look at for few minutes as a stimulus, then they were asked to listen to an extract taken from the original pre or post-test listening test. The participants were asked to pause the recording at any time they felt they want to so that they could verbalise their thoughts on how they went about understanding the passage. If the student did not pause the recording after listening to a large chunk of input and without responding, the researcher would stop the tape at regular intervals, corresponding to natural speech boundaries so that the students could reflect on their thought processes. Subsequently, students were given their questionnaire copies to look at, and were asked to elaborate on their answers to the questions regarding their knowledge of listening and the difficulties they faced during listening. Moreover, they were also asked some general questions in relation to their attitudes to listening and listening classes. Lastly, they were probed to give more information and justify their rating on the self-efficacy inventory they completed.

4.5.2.6 Teachers' instruction log

The aim of using teachers' logs in this study was to gain insights into how teachers in both the intervention and comparison groups undertook the instruction in each listening session, the activities chosen, and the difficulties they encountered during the sessions. It was used by all teachers in both groups only during the intervention phase i.e., after data were collected for pre-test. Instructional logs increase the probability that teachers report their classroom practice accurately and that fidelity to condition is achieved, and though it might cause an additional burden on them (Rowan & Correnti, 2009). However, the teachers' log used in this study was not elaborate and just focused on main areas in the instruction such as the activities used in each stage of the listening lesson (see Appendix G). It also asked for the teachers' reflections on their role in managing the session. Only intervention teachers were asked to reflect on their practice after applying the strategy and metacognition-based instruction. This type of reflection involves teachers experiencing, for instance, a strategy instruction in the classroom and thinking about it after it happened (Gkonou & Oxford, 2019). This kind of reflection as part of 'teacher self-assessment' as termed by Gkonou and Oxford (2019), is essential in the process of optimising students' learning strategy use by identifying the impact of their teaching of strategies on each student in the classroom. In other words, assessing the effectiveness of the strategy and metacognition instruction after it was applied, in terms of how effective teachers thought they were teaching and modelling the strategies, and whether students could understand and use the strategies they were taught effectively, is likely to affect teachers' future teaching and hence, to help their students learn more effectively.

4.5.3 Study Procedures

First, ethical approval was obtained from the University of Reading, and the participants gave their written consent for participation in the study. This study went through four successive phases that are presented below.

4.5.3.1 Pre-Treatment Phase

The first phase involved pre-test procedures, lasting 15 days in total. Students took the Aural Vocabulary Knowledge test, followed by the listening test, then the questionnaire in one session of 90 minutes. Each lasted for 10min, 30min, and 15min respectively. Two students were chosen from each class to be interviewed (stimulated-recall interview), based on their listening performance and self-efficacy level at Time 1. During this phase classroom observations were conducted with all groups, one per class, at a time convenient to the teachers. Teachers were also given a questionnaire to complete online or in hard copy according to their preference. Finally, all teachers were interviewed about their answers to the questionnaire completed earlier. This lasted approximately 30 minutes.

4.5.3.2 Teacher Training Phase

Before delivering the intervention, the teacher participants in the intervention group received a training session from the researcher on how to apply the intervention procedures in their listening classrooms. This phase lasted for around three hours in one block because of the teachers' commitments in the university and outside. However, as the study was conducted in two universities, it was not possible to get all the teachers together for the training, rather, they were trained separately, i.e., three teachers in one university and two in the other one.

The content of the training was designed by the researcher after gaining data from the participants on their responses on the questionnaire, interview, and what was found in the observation. The obtained information helped the researcher to tailor the training content according to participants' understanding and knowledge concerning listening as reported in the questionnaire. In this sense, the researcher tried to get as much information as possible concerning teachers' initial understanding and knowledge of listening and their sources through discussing their answers to the questionnaire. For instance, the 'listening is a skill that develops by itself through exposure to spoken English' and 'it is possible to teach students how to listen more effectively' items from the teacher questionnaire were highlighted and discussed from the teachers' points of views in order to understand their thinking of listening and how they can enable their students develop it. Furthermore, answers to these items and others were also explored and discussed in relation to their actual practice in the classroom as noted during the observation. Later, findings from research regarding the learning and teaching of listening were

raised and discussed. Griffiths (2018) recommends that when training teachers to deliver strategy instruction, it is crucial to raise their awareness of the theoretical issues and the research findings in the field of learner strategies. Accordingly, this part of the training included, first, models to the listening process; i.e., how aural input is perceived by listeners and the requirements needed to reach comprehension. Secondly, the main difficulties learners encounter during listening to a foreign language as found by researchers in the field were also discussed, and finally attempts made by researchers to overcome these difficulties, focusing mainly on teaching students the strategies and training them to manage their listening process and use of the strategies (metacognition).

The last step in the training was devoted to the practical part in the training, i.e., teachers were shown and guided on how the intervention should be implemented, providing them with materials, examples and activities. The aims of the activities were highlighted to ensure teachers grasped their role in raising students' awareness of the strategies and modelling them effectively. However, they were given freedom whether to stick to the audio materials or use other ones according to their choice ensuring they cover the aims of the intervention by introducing the strategies and teaching them. Meanwhile, all the 10 teachers were asked to keep a teaching log to record their practice in the classroom including their instructional activity, topics covered in each session, teacher-student interaction, obstacles encountered while teaching (if applicable), teachers' reflections and so on. Teachers in the intervention group were asked not to share the new instructional procedures with the comparison group.

4.5.3.3. Intervention Phase

The application of the intervention was undertaken within six sessions across two months (including two weeks of spring holiday), each session lasted for one hour and a half (that is, nine hours in total). Listening strategies were taught within a metacognitive approach. First, a metacognitive approach to listening instruction aims at developing language learners' listening in a holistic manner, through strategic actions, collaboration with others, and individual reflection (Vandergrift & Goh, 2012). It is also believed that this approach can help learners improve their listening proficiency to approach aural input, increase their self-efficacy and motivation, use listening strategies appropriately, develop learning individually and collaboratively, and self-regulate their progress in listening (Vandergrift & Goh, 2012). In other words, this approach does not only address listening strategies separately, but also raises

learners' metacognitive knowledge about themselves as listeners through a metacognitive instruction sequence, and the cognitive and social characteristics of listening.

The teaching of listening strategies was included within the metacognitive processes that have been suggested by Vandergrift and Goh (2012). In order to construct meaning, these processes are considered to interact in multiple ways instead of operating in a linear or a circular way (*Figure 4.2*), depending on some factors such as listeners' metacognitive knowledge about L2/ FL and their planning efforts. For instance, while monitoring their comprehension, some listeners may go back to revise their previous plan if they recognise that their predictions were not fruitful and use other strategies instead of the previous one. Listeners' flexibility to move from one process to another, according to Vandergrift and Goh (2012), occurs automatically or in a less controlled manner that can be developed through a metacognitive pedagogical sequence.



Figure 4. 2 Metacognitive listening processes and their interaction (Vandergrift & Goh, 2012, p. 106).

The metacognitive pedagogical sequence has been used before in different contexts, and most of the studies reported positive results of the metacognitive instruction on listening performance (e.g. Rahimi & Katal, 2013; Shabani & Heidarian, 2015; Vandergrift & Tafaghodtari, 2010 and others) and self-efficacy (e.g. Rahimirad & Zare-ee, 2015). Despite the findings obtained, the adopted pedagogical sequence has been criticised as lacking cognitive strategies and bottom-up processing activities (Siegel, 2014b), while focusing on higher-level understanding (top-down information). Besides, the instruction embodied in the cycle does not teach top-down strategies explicitly, but rather expects them to be acquired implicitly. In this

line, Graham and Santos (2015), based on their work (2011), recommend that more explicit and guided instruction from teachers, learners can develop greater self-management.

Dimassi (2016), for instance, in his PhD thesis adopted the pedagogical sequence outlined in Vandergrift and Tafaghodtari (2010), in which he combined both cognitive and metacognitive strategies, for the intervention group, to teach young female university students in the UAE (United Arab Emirates), while the control group received just the cognitive strategies in a more conventional listening classroom (pre-listening, listening, and post-listening). The cognitive strategies used in his study were prediction, making inferences, elaboration, note-taking, and summarisation. His study confirmed what has been found in previous works using metacognition in teaching listening, in which the intervention group outperformed the control group. Furthermore, the difference between the listening scores of the two groups in a listening test (post-test) was significant (p < .001).

Despite the fact that, in this study the researcher included some cognitive strategies, the study lacks attention to bottom-up activities. The researcher used script-sound recognition stage in the intervention by including the transcripts of the listening text, but its aim was to learn the pronunciation of some words instead of explicitly teaching them or raising their awareness of sound-spelling correspondence. This is arguably an important omission given that scholars such as Field (2003) assert that low-level errors are the main causes of many high-level misunderstandings. Therefore, L2 listeners need to be trained in strategies that compensate for gaps in word recognition in connected speech and lexical segmentation.

The strategies selected to be taught in the current intervention were chosen from reviewing previous studies. The strategies were addressed explicitly and in clusters rather than individual as it was claimed by Graham and Macaro (2008). For instance, Macaro (2006), a strategy theorist, argued that for effective learning, strategies must be combined when used simultaneously or in sequence according to the context and, in the case of listening, to the type of the listening text or the variations in the listening task demands (Goh & Kaur, 2013). The use of strategy clusters is a way to prevent the misuse of these strategies in isolation as it was found in the study conducted by Tsui and Fullilove (1998). However, Macaro added that, the strategy clusters might not be effective if they are not orchestrated appropriately. Therefore, raising learners' metacognitive awareness about the listening task at the planning stage and the strategies needed to achieve tasks demands were highly recommended for this study. The strategies included planning (directed attention, selective attention, prediction), monitoring and

problem solving (prediction verification, inference, elaboration), bottom-up (lexical segmentation, focusing on prosodic and grammatical cues), in addition to fostering collaboration and interaction between students through pair and small group work for evaluation.

All the strategies presented in the list (Appendix L) were introduced by the teacher in the first session of the training in order to raise the students' awareness of the different types of listening strategies that they might use when listening. As mentioned above, the strategies were taught in clusters and not individually and they were embodied within the listening tasks in order for students to apply them then receive feedback and assistance from the teacher on their practice. The strategy of planning was first taught paying more attention to directed attention, selective attention and prediction. Then, the focus of the next session was on the strategies for listening for the main idea and listening for details, followed by a review of the prediction verification strategy Then, more emphasis was given to monitoring, verifying previous hypotheses and problem-solving strategies. At this stage, inferencing, elaboration and grammatical cues were covered. During the last sessions, students were instructed to make use of all the strategies that were taught earlier. Correspondingly, reflection was encouraged at the end of each listening activity in order to enable students to learn from each other regarding how they arrived at comprehending parts of the audio that were difficult. Furthermore, the bottomup aspects of the language in listening passage were reinforced at the end of each audio in order to develop students' word perception ability.

From reviewing the existing literature on successful language strategy instruction trainings in general, researchers (e.g., Griffiths, 2018; Rubin et al., 2007) outlined the main effective elements and stages to be included in these programmes. First, raising learners' awareness of available strategies so that learners can choose what suit them according to their individual characteristics and task requirements. Second, the explicit teaching of the strategies (teacher modelling) in order to enable learners to transfer the strategies they learnt to different listening tasks. Thirdly, providing opportunities for learners to practise the strategies they learnt in different listening tasks and providing them with feedback, then fostering their autonomous use through gradual removal of teachers' scaffolding. Finally, encouraging learners to evaluate the effectiveness and usefulness of the strategies used according to their needs and goals. A sample of a lesson plan is presented in Appendix M.

The training and the instructional intervention stages are summarised as follows:



4.5.3.4 Post-Treatment Phase

Lastly, after the treatment had been applied in the classrooms, data were collected through post-tests. During this phase the researcher used the methods used earlier in the pretreatment phase, except for the vocabulary test, to check whether the implementation of the treatment made a difference to the teachers' awareness and practices in respect of listening, and to students' listening proficiency, their knowledge of listening and their strategy use. The students took a post listening test and completed the questionnaire. The teachers completed the questionnaire as well and the teaching logs were collected. Both students and teachers were interviewed as a final procedure for the study.
4.5.4 Pilot Study

A pilot study is considered as a trial study for proposed procedures, methods and materials with a small number of subjects, in order to test the feasibility of the research tools and unveil potential problems that might occur in the real study and address those difficulties before conducting the main research (Mackey & Gass, 2005). Conducting a pilot study can help the researcher to save time and money, clarify instructions, and determine the validity and reliability of the methods (Bordens & Abbott, 2014).

The pilot study for the current study was conducted in the first semester of the academic year 2017/2018 with nine teachers and 62 students in an Algerian university. The participants received information sheets about the study and consent forms to sign before the study was started. The researcher attended two sessions for observation. 62 students took the listening test and completed the questionnaire. Among those students, three of them were interviewed four to five days after taking the listening test. An interview was conducted with one teacher.

4.5.4.1 Questionnaires Piloting

Reliability of instruments being measured refers to their consistency, dependability and replicability over time (Cohen et al., 2011). The internal reliability was calculated for both teachers' and students' questionnaires using SPSS version 24 and using Cronbach' Alpha Coefficient (α). This test is the most frequently used index of instrument reliability (Loewen & Plonsky, 2016), however interpretations of this index are scarce in published work in the field of applied linguistics (Plonsky & Derrick, 2016). Cohen et al. (2018, p.774) suggest the following guidelines: < 0.60 unacceptably low reliability, 0.60–0.69 marginally/minimally reliable, 0.70–0.79 reliable, 0.80–0.90 highly reliable, and > 0.90 very highly reliable. However, they added that some researchers consider reliability level α > .67 is acceptable. In L2 domain, Brown (2014) suggests that the reliability coefficient .51-.70 is considered fair, 71–.89 is moderate; and > .90 is substantial.

Concerning the teacher questionnaire, piloting revealed that many changes were needed. In the last part of the questionnaire, teachers were confused -according to the interview pilotingbetween the options 'Not Applicable' and '0%', in the sense that, the 'Not Applicable' option was understood by some teachers as 'they do not apply it in their classroom'. Therefore, this option was deleted in the final version of the questionnaire to avoid confusion. Statement 7 in the last section was deleted because it lowered the reliability of the questionnaire (from $\alpha = .83$ to $\alpha = .73$). The statements 24, 25, and 26 were also deleted as they were covered under statement 17. The reliability of the questionnaire was raised to $\alpha = .91$ when item 20 was also deleted. Therefore, this latter was deleted as it could be covered in both statements 2 and 3. The table below shows the value of α in each numerical part of the questionnaire before and after changes were made. The overall Cronbach' Alpha for the final version of the teacher questionnaire was $\alpha = .91$.

	Before			After			
Part	No. of Items	Cronbach's Alpha	Part	No. of Items	Cronbach's Alpha		
2	14	.76	2	14	.76		
3.a	20	.91	3.a	20	.91		
4	30	.73	4	25	.92		

Table 4.7 Reliability statistics of teachers' questionnaire

Changes were also needed for the students' questionnaire. All the parts of the questionnaire were edited and then re-piloted with 23 students, as piloting showed low alpha levels for these sections. The items that lowered the alpha level were removed from the questionnaire sections; some editing regarding wording was also undertaken. Some changes also occurred at the level of the scales used in section four, in the sense that the 'unsure' option was also removed from the self-efficacy inventory. The two sections 3 and 4 in a form of open-ended questions concerning the difficulties students encountered during listening and the different ways they followed to overcome them in the initial questionnaire were removed in the final version of the questionnaire. First, because some of the difficulties were tackled in the second section, and secondly, it was time consuming to complete the two sections. The table below shows the value of α in each numerical part of the questionnaire before and after changes were made. The alpha level for the revised questionnaire as a whole was .72.

_		Before			After	
	Part	No. of Items	Cronbach's Alpha	Part	No. of Items	Cronbach's Alpha
	2	09	.51	2	15	.78
	5	25	.52	3	20	.69
	6	13	.83	4	13	.83

Table 4.8 Reliability statistics of students' questionnaire

4.5.4.2 Listening Test

A section of the IELTS (International English Language Test System) listening test was planned to be used as a listening test for the study. It was delivered to the students in the piloting stage. Results were obtained, and the internal reliability Cronbach's Alpha was calculated for the whole and sub-parts of the test. The results revealed that the overall reliability was $\alpha = .79$.

Part	No. of Items	Cronbach's Alpha
1	10	.58
2	10	.29
3	10	.47
4	10	.68

Table 4.9 Reliability statistics of the initial listening test

As the table shows, the reliability of the test sub-sections (1, 2, 3, 4) of the test is low. The reason for this might be because of the level of the language used in the test was higher than students' actual level as the majority scored below the average. From the students' scores in the test, it appears that they had an intermediate level that was between 4 and 5.5 which is equivalent to B1 \geq B2 in the Common European Framework of Reference (CEFR) and between 140 and 170 in the Cambridge English Scale. Therefore, in the main study, sections of other listening tests were used in with a level chosen to suit the students' level better (see Section 4.5.2.3).

4.5.4.3 Interviews

One teacher and three students volunteered to be involved in the pilot of the interview schedules. One student was interviewed five days after taking the listening test and answering the questionnaire, while the two others were interviewed after four days. Only one-day difference between the participants affected their verbalisation. The closer the stimulus recall interview was to the questionnaire and listening test completion, the more the participants were able to recall how they were listening. Therefore, it was decided that in the main study interviewing students should be conducted as soon as possible after completing the previous procedures. Regarding the teacher interview, no particular difficulty in terms of the questions was found, but the pilot provided the researchers with useful experience in conducting an interview.

4.5.4.4 Classroom observation

A first version of the observation schedule was trialled with two teachers in two different listening classes. Slight changes were made on the schedule to be used for the main study mainly on wording. In general, the scheme was reconstructed under three main titles (phases): pre-listening, during listening, and post-listening which were not found in the first version of the observation schedule. The first phase included planning and some related procedures that teachers may undertake during this phase, for instance, introducing the topic of the listening passage and predicting some related vocabulary or information. The second phase of the schedule included the procedures teachers might follow once they played the audio. These covered the frequency of playing and repeating the passage, in addition to what teachers did between each listening, for instance, whether there was some interaction between students or whether teachers introduced some strategies to guide students during the coming listening. The last phase included the evaluation part to check whether there was any type of reflection about the difficulties that students experienced during listening. Finally, the section of teacherstudent interaction in the first schedule (column to be filled) was removed and was included within students' motivation and engagement section in the last version as they were found to target similar concepts.

4.6 Data Analysis Procedures for the main study

As stated before, both types of data, quantitative and qualitative, were collected to answer the research questions. The quantitative data were obtained from teachers' and students' questionnaires, students' listening and vocabulary tests. The qualitative data were obtained from teachers' interviews, classroom observation, teaching logs, and students' stimulated-recall interviews. The procedures for analysing the quantitative data are presented first.

4.6.1 Quantitative Data Analysis

4.6.1.1 Marking Scheme

The marking of the vocabulary and the listening tests was performed and revised by the researcher so that consistency could be retained. The tests were also scored by another teacher to avoid bias. The inter-rater reliability of the pre-test and post-test listening was calculated as .99 and .98 respectively, and it was .99 for the vocabulary test. Where marks were different between the teachers a discussion was held to resolve them.

The vocabulary test that was used in the study was the Aural Vocabulary Knowledge test (AVK) adopted from Cheng and Matthews (2016). The test aims to identify students' ability of recognising words from speech. As the students were instructed to produce written words in the blank spaces after listening to each sentence, Matthews, O'Toole and Chen (2017) did not consider the test as a spelling test where the students need to provide complete correct-spelled constructs, rather, it deals with the recognition of the phonological form of the target word in connected speech. Therefore, the scoring of the test follows Matthews et al. (2017, p.30) rubric including that markers should give:

[F]ull credit to responses which are written in the correct orthographic form. The rubric also assigns full credit to responses which include minor spelling errors which in no way impede the scorer's ability to recognise the target word. Half marks were assigned for words which could be readily recognised by the scorer, despite a degree of ambiguity introduced due to errors in the representation of the target word.

Besides, no mark was given to unanswered items and where significant phonemic change occurred leading to difficulty in recognizing the target words. In the current study, for the target word 'terrific', for instance, some participants provided the following answers: 'terrifique', 'tarrific' and 'traffic' which were scored as 1, 0.5 and 0 respectively as the first word was easily identified by the scorers while its spelling was French rather than English. The second word contained a spelling mistake by replacing the vowel 'e' with 'a' and which created

101

a slight confusion concerning the recognition of the word. For the last word, the meaning was completely different from the target word, therefore no credit was given.

For the listening tests, a description of the tests format is given in section 4.5.2.3. The scoring for the listening tests was based on the principle that each correct answer corresponded to one point in all parts of the tests. Minor spelling mistakes were given full credit. For the fifth task, the overall mark was six; each complete correct answer was given full credit. However, if the students were recalling using English words in the same way as they occurred in the recording, their answers were excluded as they denoted that they lacked comprehension. Half marks were given when they showed some but uncomplete comprehension to answer the required parts.

4.6.1.2 Preparation for analysing student questionnaire data

As mentioned earlier in section (4.5.2.1.2), the student questionnaire consisted of three main parts besides the first part of demographic information: the listening metacognitive knowledge using a six-point Likert scale, listening strategy use using a four-point Likert scale, and listening self-efficacy using a percentage from 0% to 100% using bands of 10%. Each part of the questionnaire was used in order to identify different areas in the student listening experience; therefore, each part was analysed separately. For the first part of the questionnaire, both person knowledge and task knowledge were grouped together consisting of 15 statements.

All the three parts were in numerical format. IBM SPSS version 24 was used to analyse the data. In parts two and three, some items referring to negative beliefs and behaviours were reversed for the consistency of the data calculation. The Cronbach's alpha for the whole questionnaire and its sub-parts was calculated during the pre-test and post-test and it is presented in Table 4.10 below. The Alpha (α) value for the overall questionnaire and its subsections was high. The scale for section 3 at pre-test showed a relatively low but not hugely problematic level of internal consistency. This result could be affected by the relative homogeneity of the participants' responses to this scale (Cohen et al., 2018; Loewen & Plonsky, 2016; Pike & Hudson, n.d).

102

	Cronbach's alpha	Cronbach's alpha
	Pre-test	Post-test
All sections	.80	.87
Section 2 (metacognitive knowledge)	.70	.74
Section 3 (strategy-use)	.62	.73
Section 4 (self-efficacy)	.83	.91

Table 4.10 Cronbach's alpha of the student questionnaire

4.6.1.3 Preparation for analysing listening tests data

Data from the listening tests were collected at two time points, before and after the intervention was applied. The total score that students could achieve in the listening tests was 35, but the scores gained were transformed into percentages to be easily read when inserted into SPSS and for further calculations. Table 4.11 presents the Cronbach's Alpha of the tests for all the main study sub-sections together and for each individual section. The Alpha (α) value for the overall listening test at pre-test and post-test in addition to their sub-sections was relatively high.

	Cronbach's Alpha Pre-test	Cronbach's Alpha Post-test
All parts	.90	.86
1	.74	.73
2	.73	.71
3	.71	.71
4	.75	.74
5	.75	.70

Table 4.11 Cronbach's alpha of the student listening tests

4.6.1.4 Preparation for analysing Vocabulary test data

Data from the vocabulary test were collected only at the beginning of the study, i.e., before the intervention was applied. The total score that students could achieve in this test was 63. Similar to the procedures conducted for the listening tests data, the scores obtained were transformed into percentages. Before the test was delivered to the students, it was piloted on 21 students to check its reliability. Cronbach's alpha for the test was calculated, and it was $\alpha = .93$.

4.6.1.5 Preparation for analysing teacher questionnaire data

The data from the questionnaire were collected before and after the intervention was applied. The questionnaire was divided into four main parts as was mentioned in section (4.5.2.1.1). It included teacher demographic information, stated understanding and practice about listening in general, and lastly self-efficacy beliefs. Table 4.12 shows Cronbach's alpha value of the questionnaire at pre-test and post-test. The Alpha (α) value for the overall teacher questionnaire at pre-test in addition to its sub-sections was relatively high, only for section 2 at pre-test was relatively low. This value could be affected by the relative homogeneity of the participants' responses to this scale (Cohen et al., 2018; Loewen & Plonsky, 2016; Pike & Hudson, n.d).

	Cronbach's alpha	Cronbach's alpha
	Pre-test	Post-test
All sections	.93	.92
Section 2 (understanding)	.61	.69
Section 3 (stated practice)	.73	.76
Section 4 (self-efficacy)	.95	.93

 Table 4.12 Cronbach's alpha of the teacher questionnaire

In the coming section, just the last three sections of the questionnaire are reported as the first section (demographic information) of the questionnaire was mentioned in Section 4.5.1. Section two of the questionnaire included 14 items ranked on a five-point Likert scale about teachers' understanding of the teaching of listening skill and learners' difficulties. Before inserting the data into SPSS, the negative statements were reversed. The third section was related to teachers' general practice of teaching listening in the classroom. With the aim of analysis, this section of the questionnaire was divided into three sub-sections according to the scale used in each one as a preparation for its analysis. The first sub-section ('a' in the questionnaire) dealt with the frequency of using some listening instruction aspects in the classroom. It included 15 statements ranked on a four-point Likert scale. Items referring to negative behaviour were also reversed in the SPSS for analysis. The second sub-section (labelled as 'b' in the questionnaire) focused on the type of activities teachers used in the classroom. Teachers were provided with a list of six types of activities and they were asked to choose the ones they usually used in the classroom. In this sub-section the data were coded and labelled in SPSS as 'used' and 'not used' to facilitate the analysis process. Finally, the

sub-section 'c' in the practice section in the questionnaire focused on the purpose of using listening activities in the classroom during listening classes. The teachers were provided with a list of six options of activity-purpose and were asked to order them according to their importance. Data were coded in SPSS from 1 (the most important) to 6 (the least important).

The last section of the questionnaire included 25 items related to teachers' perceived self-efficacy about teaching listening considering classroom management, listening strategy and metacognition-based instruction and the student factors. The items were scaled from 0 % (I absolutely can't do this) to 100% (I absolutely can do this) using bands of 10%. The data were immediately inserted as percentages in the SPSS for analysis.

Before analysing the data for answering research questions, some statistical procedures were performed. These included checking the normality of the data distribution and other descriptive statistics to facilitate the choice of the appropriate tests to be used. Full details are discussed in the findings chapter (Chapter Five).

4.6.2 Qualitative Data Analysis

4.6.2.1 Thematic analysis of teacher interview data

Interviews were held with the teachers both before and after the intervention. The interviewees were given the choice to speak the language they felt comfortable using, in order to fully express and convey their thoughts; however, most of them preferred to switch between English, Algerian and French while the rest preferred just English. As long as the interviewer was the researcher who shared the same social background and the different linguistic styles as the interviewees, it was easy for them to communicate flexibly and successfully. The interviews lasted approximately 30 minutes and were audio recorded.

Interview transcription and coding

There were overall 20 interviews: 10 from the pre-test and 10 from the post-test. The interview recordings were transcribed by the researcher who collected the data. All the interviews were transcribed in English using MS Word 2016. Those which were not conducted completely in English were translated and given to an Algerian colleague who shares the same

linguistic and cultural backgrounds with the researcher and the participants to check and review the accuracy of the translation. No problematic differences were found between the two translations, except for some grammatical features. The decision for the translation was made to ensure consistency and rigour in the coding.

The analysis of the interviews was conducted using thematic analysis as it is one of the most widely used qualitative method of analysing data through the identification of patterns of meaning and themes in relation to research question (Braun & Clarke, 2013). Thematic analysis refers to a descriptive method to qualitative research that focuses on what is said instead of how it is said. It is an appropriate method to use with interview data when the research questions demand an understanding of participants' experiences and perceptions rather than a semiotic examination of the discourse itself (Howitt, 2016). It is a realistic flexible method that does not rely on a particular pre-existing theory, and which provides a systematic approach to identify, analyse and report themes within a dataset (Braun & Clarke, 2013). However, this is also offered as a critique of the method because there are no criteria to determine the themes (Howitt, 2016). In the case of this research, this freedom from pre-determined criteria was an important part of the research design because pre-conceived ideas would have prevented identifying adequately describing themes concerning what was shared by the participants which maybe particular to the context of the study.

According to Howitt and Cramer (2014), the fundamental processes involved in thematic analysis are transcribing textual material, analytic effort and identifying themes and sub-themes; however, in practice they do not follow this firm order, rather they overlap considerably. First, the transcription process assists the researcher in familiarising themselves with the data at an early stage, preparing them to understand it and, hence, analyse it later. In this study, the data were collected and transcribed by the researcher, and later read and re-read a number of times to have a closer and intimate knowledge of them. Second, analytical effort denotes the different processing the research conducts with the text to reach the final themes. This process involves several components: familiarisation with the data, generating detailed codings and conceptualisations for each line or group of lines of the transcript, processing and reprocessing of the data to ensure the fit of the analysis to the data, resolving difficulties during analysis and finally, checking the fit of the analysis to the original data. Correspondingly, the researcher organised, collated and coded the data into small chunks using the software NVivo 12. It helped build up a list of initial descriptive nodes that were later grouped in a separate table to be refined and grouped under different categories to examine the relationships and

106

connections between them, and hence to identify potential patterns or themes (Bryman, 2012). Table 4.13 shows the initial nodes from early coding of the interviews before and after the intervention. The nodes in the table were presented in a form of describing the potential emerging codes from the data. However, during the coding process there were some repetitive codes in terms of their content, i.e., the same content was allocated under different nodes as they were somehow confusing. For instance, teachers' beliefs about listening and teachers' teaching of listening (i.e. practice) denote different concepts, but according to the participants' responses, they just indicated that their beliefs were reflected in their practice (i.e., they approached listening according to their belief and knowledge of the skill). Therefore, they were eventually merged together in one theme entitled 'conceptualisation of listening'.

Time 1 Nodes					
Belief about listening	Challenge choosing materials	first time teaching OE			
Belief about listening strategies	Challenge students' language level	Individual teaching			
Teaching listening	Challenge students are anxious	Lack of curriculum			
Focus on developing speaking	Challenge students' vocabulary	Limited time			
Focus on developing language repertoire	Heterogeneous classes	Not their speciality			
Focus on exposure	Difficulty controlling the session	Obliged to teach OE			
Focus on pronunciation and accent	Difficulty motivating students	teaching materials			
Focus on repeating expressions	Student motivation	Cooperation with teache			
Focus on topics	Students are not independent				
Focus on words and vocabulary	Students' attitudes affect teacher practice				
Focus on developing speaking	Students do not appreciate the efforts				
	Students do not make efforts				
	Students lack background knowledge				
	Students are not exposed enough to the language				
	Students were obliged to study English				
	Students are uninterested				
	Students are unmotivated				
	Students are unresponsive				
	Students lack confidence				
	Need for setting language requirements				
	Time 2 Nodes				
Ability to control the session	Difficulty applying	Developing critical thinking			
Opportunity to learn and use the strategies	First time teaching	Listening improvement			
Awareness of listening process	Teacher doubt ability to teach effectively	Students' awareness of strategies			
Awareness of nature of listening	Teacher doubt ability to evaluate	Student interaction			
Awareness of strategies	Teacher doubt ability to listen effectively	Student motivation			
Teaching focus		Students feel comfortabl			
		Some students did not			
		improve			

Table 4.13 Initial nodes from early coding of teachers' interviews for Time 1 and Time 2

An example of how teachers expressed their belief and practice of listening would be Celia's claim:

I believe the more students listen the more they will develop their listening. So, I allow them to listen more than once to enable them to understand the listening passage.

The last process suggested by Howitt and Cramer (2014) refers to the identification of themes and sub-themes in the data. Researchers differ in terms of refining the themes to be presented in the final reports, i.e., they would end up roughly with different emerging themes and sub-themes when looking at the same data "because they differ in terms of how diligent their analyses have been or how closely they have stuck to the principles of good thematic analysis" (Howitt, 2016, p. 166). In this realm, Braun and Clarke (2006) argue that a theme represents something important and meaningful about the dataset in relation to the overall research question, and it does not rely on quantifiable measures, i.e., it does not represent the most frequent appearing pattern in the data, rather, it has a central organising concept that unifies the data excerpts (Braun & Clarke, 2013). Accordingly, the researcher at first, organised the data around one single theme, during pre-intervention, that was entitled 'teachability of listening' which included other tentative sub-themes such as, teaching focus, awareness of listening strategies and teaching constraints. However, during post-intervention interviews, the main theme was about the impact of the intervention. Hence, the different codes were grouped and allocated under these tentative themes which were also examined against the original data (Howitt, 2016).

After the themes are identified, the processes of reviewing and refining them is crucial. According to Braun and Clarke (2006), a theme should contain enough data to support it in a coherent and meaningful way. Therefore, reviewing themes requires the identification of a coherent pattern between the collated excerpts for each theme, and in case they do not fit together, there would be a possibility to rework the theme or discard some extracts which simply do not fit and create a new theme for them. Additionally, refining themes requires ensuring the validity of individual themes in relation to the entire dataset, in other words, the identified themes should capture the meaning and spirit of the entire un-coded dataset, while themes need to be distinctive and make sense on their own (Braun & Clarke, 2013). Wherefore, the previous identified themes were revised and re-structured in relation to the areas covered in the questionnaire parts. Other themes also emerged during the interviews, which facilitated the understanding of the findings.

4.6.2.2 Student stimulated recall interview data

The stimulated recall interview (SRI) was used twice in the study, before the intervention and after. It was divided into two parts: in the first part, the listening test was the stimulus for participants to verbalise their use of strategies; during the second part of the interview the self-efficacy part in the questionnaire was the stimulus to probe interviewees' sense of efficacy in listening. The SRI was conducted to "add qualitative refinement to quantitative analysis of data" (Chaudron, 1986 in Griffiths, 2018, p. 70) gathered from the questionnaire. In addition, stimulated recall methodology is frequently used in concurrence with other methodologies, as a means of triangulation or additional exploration (Gass & Mackey, 2000). Participants may, for example, indicate in a question that they use a certain strategy; if they then report using it in a stimulated recall, or think aloud interview on an actual task, the reliability and validity of their questionnaire response is strengthened. Within the interview analysis, the interviewees were given pseudonyms to be referred to (see Section 4.5.2.5.2).

Interview transcription and coding

The interviews were audio recorded, then, they were transcribed by the researcher in the same language as they were recorded. Later, they were translated into written English to ensure consistency and rigour in the coding. The translation was later sent to a colleague, who was proficient in both English and the language of the participants, in order to check its accuracy and fidelity to the participant's interview discourse. No major differences were identified between the two translations, except for some grammatical features which were discussed.

Concerning the first part of the interview, data from the participants regarding their recall of strategy use were inserted in NVivo software to be coded and grouped into nodes. The identified codes (strategies) by the researcher and the frequency of each strategy use from 40 interviews (20 from pre-test and 20 from post-test) were reviewed later by a colleague to be compared and to ensure reliability. An inter-coder reliability rate was also conducted and

calculated as percentages on both coding processes using SPSS; for the pre-test it was .90 and .92 for the post-test. Where the coding was different between the two researchers a discussion was held to resolve differences. In addition, the taxonomy was later sent to an expert in order to check the appropriateness of the codes and their definitions.

The priori coding method was used for this part as the codes were determined beforehand using a preordained taxonomy (Saldaña, 2012). The codes were derived from two taxonomies developed by Santos et al., (2008) and Vandergrift and Goh (2012). For the researcher of the current study, the two taxonomies focus on one-way academic listening which is the case for this study, and both can be used in an eclectic manner as each covers a wide-range and detailed listening strategies

Firstly, the strategies presented in the first taxonomy used in the study (Santos et al., 2008) listed an overall range of strategies employed by L2 learners without grouping them into different categories. This taxonomy was derived from the work of O'Malley and Chamot (1990), and Vandergrift (2003). Similarly, the taxonomy from Vandergrift and Goh's (2012) work was derived from other main works and sources in the field, including Goh (1998, 2002b), O'Malley and Chamot (1990), Vandergrift (1997a, 2003a), and Young (1997).

The strategies in this second taxonomy were grouped according to the role they play in facilitating listening comprehension rather than the traditional way of presenting the different types of strategies, such as cognitive, metacognitive, socio-affective and so forth. Hence, the taxonomy is structured in accordance with the purpose of the current study for encouraging learners to use the listening strategies in a holistic manner and not separately, to bridge the gap in their comprehension following the metacognitive approach that emphasises "learning as an individual cognitive enterprise and learning as a social enterprise" (Vandergrift & Goh, 2012, p. 93). Appendix O presents the final version of the adapted strategy taxonomy and the strategy definitions used in the present study, combining those of Santos et al. (2008), Vandergrift and Goh (2012) with some other new strategies that emerged from the data.

However, there were some overlapping strategies within the taxonomy which made it difficult for the researcher to decide on which strategy was being used at certain points. For instance, there was a slight overlap between *elaboration* and *linguistic contextualisation* as both strategies require building meaning using one's own knowledge based on some items heard in the passage. A decision, however, was made as to how to code such instances based on what the student said by way of explanation. For instance, a student commented: "When he mentioned - I think- 'artefacts', I thought of museum because we generally find them there",

111

this statement was categorised as *linguistic contextualisation* and not *elaboration* as the student referred to the context where the word is usually found.

Additionally, *double-check monitoring, monitoring for sense* and *monitoring against the passage* were all grouped under the strategy of *comprehension monitoring* as this latter, according to Vandergrift et al., (2012, p. 278) refers to "checking, verifying, or correcting understanding" which covers the other three strategies, as they all involve the consideration of previous and in-coming information in the passage and the attempt to verify and check understanding. However, for Santos et al., (2008), *comprehension monitoring* strategy was defined broadly as establishing whether the listener has or has not comprehended. In addition, the *hypothesis confirmation* strategy was also merged under *hypothesis monitoring* as this latter is concerned with checking whether the hypothesis formed earlier is to be confirmed or contradicted.

As far as the last part of the interview is concerned, the last part of the questionnaire was used as support to trigger students' reflection upon the answers they had given previously. The questionnaire asked about learners' self-efficacy for listening in relation to certain aspects of comprehension, by asking them to rate their confidence using a percentage from 0% to 100%. During the pre-test interview participants were asked to explain their choice of percentage. During the post-test interview participants were asked to explain any change that had occurred in some aspects between the two time points. For example, one participant in the comparison group indicated 100% for his ability to "... continue listening even if I find difficulties understanding" at pre-test, however, at post-test he indicated 60%.

Data from this last part of the interview were also coded using NVivo software and were analysed using Thematic Analysis similar to the method used with teachers' data. At the pre-test, as the two groups – intervention and comparison – had not yet received any particular treatment, their data were analysed altogether. The main themes that emerged during this time were related to their conceptualisation of listening, in addition to four main aspects in the listening process. These included their sense of efficacy in planning for listening, using sources of information to help understanding, persisting during listening, and evaluating their listening. However, the findings were grouped into four categories of participants according to their listening proficiency level and their reported self-efficacy beliefs in listening. This categorisation was done as the data showed interesting findings in relation to proficiency level and self-efficacy. In addition, it seemed of interest to explore different participants'

perceptions of their ability to listen in each group. Table 4.14 shows the coding of students' interviews at two times.

Time 1 themes						
Themes	Representation					
Conceptualisation of listening	Students' beliefs and knowledge about					
Language exposureLearning vocabulary	listening, including the purpose of listening classes.					
- Practising speaking						
 Listening self-efficacy beliefs Passionate group (high level in listening and self-efficacy) Ambivalent group (high level in listening and low level in self-efficacy) Aspirant group (low level in listening and high level in self-efficacy) Oblivious group (low level in listening and se efficacy) 						
Time 2	themes					
Comparis	on group					
Self-efficacy beliefs	Students' beliefs about their ability to listen					
Low self-satisfactionLack of motivation	effectively in relation to certain aspects.					
Interventi	on group					
Awareness of listening	Students showed awareness of listening, its importance and how it should be approached					
Improved motivation	Students showed improvement in their motivation in listening in relation to certain factors.					
Self-efficacy beliefs	Students' beliefs about their ability to listen effectively in relation to certain aspects.					

Table 4.14 Coding of students' interviews for time 1 and time 2

At post-test, data were analysed differently from the pre-test as the participants had different experiences, i.e., the findings from each group (intervention and comparison) were analysed separately. As it was mentioned in Section 4.5.2.5.2, the interviews at post-test focused on any change in their responses since the pre-test. As a consequence, for the intervention group, awareness of listening and changes in motivation and self-efficacy beliefs were important themes emerging from the intervention group data. By contrast, two main themes emerged from the comparison group data which included lack of motivation and low self-satisfaction, combined with an unchanged conceptualisation of listening.

4.6.2.3 Classroom observation analysis procedures

The classroom observation used in the current study was outlined earlier in section 4.5.2.4. The observation schedule was divided into first, the conventional listening class stages - pre-listening, during listening and post-listening- and in each stage some lesson procedures in relation to strategies and metacognition were noted by the researcher in order to check whether teachers included them in their classes or not. Any procedure used by the teachers corresponding to the ones in the observation grid was noted by a 'Yes' option. This structured part of the observation, involving closed questions, was analysed by counting the frequency of each item with reference to each teacher (class) (Cohen et al., 2018). Concerning the analysis of the less structured parts in the observation, i.e. where the researcher had to write notes in the columns in the observation schedule, such as the observed teachers' own procedures to conduct listening classes involving for instance the types of activities used, these were summarised, as suggested by Cohen et al. (2018).

4.6.2.4 Teacher's instructional log analysis procedures

A description of teachers' log was presented earlier in section 4.5.2.6. Teachers in the intervention and comparison groups were asked to keep the instructional log and complete it after each listening class following the three stages of a listening class (pre-listening, during listening and post-listening). This was done after data were collected at Time 1. The log was in a format of field notes where teachers provided written notes on their classroom practice and reflected on this practice in relation to students' engagement and their own feeling of the class and whether there would be any changes for the next class as a consequence.

A summative type of content analysis was used on the logs. This analysis, according to Cohen et al. (2018), focuses on keywords reported by teachers -in the case of the current studybased on the area of interest of the research. Accordingly, the focus of using the teacher log in the current research was, firstly, on exploring the listening activities used by teachers in each group. Secondly and more importantly, the focus was on identifying teachers' -in the intervention group- reflection on applying the intervention to check the extent to what teachers could or could not apply what they learned from the teacher training session. The data gained from the logs were then summarised.

4.7 Ethical Considerations and Approval

A research project that involves collecting data about people or from people requires the researcher to address some ethical considerations as a protection for the participants (Creswell, 2013). As a professional scientist seeking truth from the participants, it is necessary to respect their rights and values as they might be threatened by the research procedures (Cohen et al., 2011). However, conducting a pilot study is helpful to unveil some potential effects of the research procedures on the participants so that, considerations should be taken before the start of the main research (Cohen et al., 2011).

Prior to beginning the study, formal procedures were necessary and strictly followed. Application for research ethics was done and ethical approval was received from the Institute of Education Research Ethics Committee before collecting any data. A copy of the ethical approval form is presented in Appendix K. As the study was conducted in the English Language and Literature Department at university level, under the jurisdiction of the Ministry of Higher Education and Scientific Research, permission was sought and given from the heads of departments. Information sheet and consent forms given to the head of departments are presented in Appendix H.

Concerning the participants of the study, they were university teachers, over 25 years old. There were also undergraduate students aged of 18 years old and more. A consent form was sent to the participants before the study begins. The form included information about the study procedures and its objectives, assurance of confidentiality, benefits and risks for participating and the researcher. They were also asked to give consent, voluntarily, about being interviewed and audio recorded, in addition to being observed. All participants were informed that they could withdraw at any time during the study without any repercussion, and they were

given the contact information of researcher's supervisors in case of enquiry and additional information. Information sheets and consent forms for teachers are presented in Appendix I and those for the students are presented in Appendix J. Furthermore, after the completion of the intervention, teachers in the comparison groups were provided with teaching materials to use them with their students for the sake not to disadvantage these groups of not participating in the study.

CHAPTER FIVE: FINDINGS (I)

5.1 Introduction

This chapter presents findings from the analysis of teacher and classroom data, that is, in relation for the first Research Question. Chapter Six presents findings from the learners, that is, in relation to Research Questions 2 to 4. As an introduction to both chapters, this chapter begins by giving details of the statistical tests, reliability of scales, normality of distribution, and descriptive and inferential statistics from all the participants. Then, the analysis of teachers' data from the questionnaire and interviews is presented. Second, the analysis of classroom observation and teachers' instructional logs are also presented.

5.2 Restating the research questions

- 1. To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy
 - 2. To what extent does receiving listening strategy and metacognition-based instruction improve:
 - a. Learners' listening proficiency
 - b. Learners' listening self-efficacy
 - 3. To what extent is student listening performance predicted by their listening self-efficacy, teacher self-efficacy beliefs and other variables?
- 4. To what extent is student listening self-efficacy predicted by their listening performance, teacher self-efficacy beliefs and other variables?

5.3 Reliability of scales

Before the data were analysed, it was crucial to check the reliability of each test instrument used in the study. One purpose of checking the reliability is to ensure similar results when identical conditions are made on repeated measurements or tests (Bordens & Abbott, 2018). Reliability across different items (internal consistency) is most frequently assessed through Cronbach's alpha, that analyses essentially the correlations between each item included in an instrument (tests, questionnaire, survey) to check that they are measuring the same variable (Loewen & Plonsky, 2016).

First, Cronbach's alpha was calculated using SPSS entering variable-related items of each instrument. The overall internal consistency of each instrument was calculated in addition to each section within them. The research instruments: teacher questionnaire, student questionnaire and their listening test were completed at pre and post-test, therefore their internal reliability was calculated for each time point. Vocabulary test was used only at pre-test and its internal consistency was also calculated. Table 5.1 shows the internal reliability of the instruments at pre-and post-tests (except for the vocabulary test that was used only once). The alpha levels for the understanding of teaching listening section in the teacher questionnaire at pre-test and the strategy-use section in the student questionnaire at pre-test were relatively low in comparison to other sections, that is, below .7. However, this was not considered to be very problematic as the acceptability of a Cronbach's alpha value lower than .7 is supported by a number of authors, especially for instruments like questionnaires that do not represent 'high-stakes' assessment, including Csizér and Kormos (2009), and Dörnyei and Taguchi (2010).

Instrument	Part	Pre-test	Post-test
	Understanding	.61	.70
	Practice	.90	.90
Teacher questionnaire	Self-efficacy	.95	.93
	Total	.93	.91
	1	.74	.73
	2	.73	.71
Student listening test	3	.71	.71
	4	.75	.74
	5	.75	.70
	Total	.90	.87
Student vocabulary test	Total		93
	Metacognitive knowledge	.70	.74
Student questionnaire	Strategy use	.62	.73
	Self-efficacy	.83	.91
	Total	.80	.87

Table 5.1 Cronbach's alpha of the research instruments

5.4 Normality of distribution

The assumption of normality assumes that data points on each variable should be distributed around the centre of all scores, symmetric and characterised by a bell-shaped curve. To proceed with the analysis of the data their distribution should be checked. Normality can be assessed via skewness and kurtosis values, normality tests and graphically through histograms and Q-Q plots (Pallant, 2016). However, the data are not required to be 100% normally distributed and when the sample size is large (usually defined as > 30) the normality matters less according to the central limit theorem (Field, 2018).

There are two commonly used normality tests: the Kolmogorov-Smirnov and the Shapiro-Wilk that determine the distribution of datasets with the same mean and standard deviation (Field, 2018). If the results of the tests are significant (p < .05) this indicates that the distribution of the sample deviates from normal distribution. However, the use of these tests can be misleading as "in large samples they can be significant even for small and unimportant effects, and in small samples they will lack power to detect violations of assumptions" (Field, 2018, p. 248). Therefore, the numerical measures should be accompanied with graphical measures to assess the distribution of a given dataset. In Table 5.2, the results from Shapiro-Wilko test are reported as it is considered more accurate and has more power to detect differences than the Kolmogorov-Wilko test (Field, 2018). The results showed that the S-W test values for the student listening test at pre-test and post-test were significant (p < .05) in addition

to student self-efficacy scores at pre-tests. On the other hand, graphical measures in the form of histograms and Q-Q plots showed that the data were reasonably symmetric. Outliers among the data presented in the table below were detected from boxplots. Very few outliers were found. Within the student data the outliers were retained but rescored so that they were not different from the cluster of scores (Pallant, 2016), i.e., the outliers were given different scores from their actual ones (lower scores if they were higher than the cluster or higher scores than the actual ones if they were lower than the cluster) which allow for using particular statistical tests to analyse them.

Instrument	Part	Condition	S-W	test	Number of	of outliers
		-	Pre-test	Post-test	Pre-test	Post-test
		intervention	.85	.13	0	0
	Understanding	comparison	.48	.07	1	0
		Total	.42	.07	0	0
		intervention	.38	.30	1	0
Teacher	Practice	comparison	.41	.10	0	0
questionnaire		Total	.20	.19	0	0
		intervention	.74	.09	0	1
	Self-efficacy	comparison	.71	.78	0	0
		Total	.81	.55	0	0
		intervention	.05	.03	0	1
Student listening test		comparison	.04	.02	0	1
		Total	.01	.05	0	1
		intervention	.2	1	1	[
Student vo	cabulary test	comparison	.60		0	
		Total	.1	1	2	
	Metacognitive	intervention	.98	.98	0	1
	knowledge	comparison	.99	.99	1	1
		Total	.99	.99	1	0
		intervention	.29	.10	1	1
Student	Strategy use	comparison	.63	.23	1	0
questionnaire		Total	.18	.13	2	0
		intervention	.04	.12	0	0
	Self-efficacy	comparison	.25	.45	0	0
		Total	.03	.27	0	0

Table 5.2 Normality distribution of the quantitative research instruments

5.5 Homogeneity of variance

This is also referred as homoscedasticity or equality of variance which indicates that the groups involved in a study have equal variance (Field, 2018). In other words, the data from each group should be roughly spread out in the same way around the mean. The homogeneity of variance within a dataset can be estimated through Levene's test that can be generated using SPSS or by conducting a one-way ANOVA. If the results of the test are significant (p < .05) this indicates that the variance tests between the groups is not equal. Table 5.3 shows the results of homogeneity of variance between the intervention and comparison groups in relation to the different variables included in the study at pre-test. The *p*-value for Levene's test is greater than .05 for all the variables indicating that the variance between the intervention and comparison groups is equal.

Instrument	Part	Levene's test		
	Understanding	.90		
Teacher questionnaire	Practice	.55		
	Self-efficacy	.74		
Student listening test		.65		
Student vocabulary test		.25		
	Metacognitive knowledge	.98		
Student questionnaire	Strategy use	.55		
	Self-efficacy	.56		

Table 5.3 Homogeneity of variance of the study variables

5.6 Statistical tests

The choice of the statistical tests to analyse the data is potentially the most difficult part of the research process, however, this depends on the type of the research questions (relationships, group differences, structure, etc) and the nature of the data collected (Pallant, 2016). In this study, as the students were nested within different classes, a null model was firstly built to determine how much of the variance in self-efficacy lay between the 10 classes in the sample. This model included no predictors (an intercept-only model); it indicted that there was not significant variance to be explained within classes either at pre-test (Wald Z = .45, p = .65) or at post-test (Wald Z = 1.60, p = .11). Moreover, a null model was also built to determine how much of the variance in listening scores lay between the 10 classes in the sample. This likewise indicated that there was not a significant variance to be explained within classes either at pretest (Wald Z = 1.13, p = .26) or at post-test (Wald Z = 1.71, p = .09). The mixed-model results indicate that the class in which students were situated had no effect either on their listening selfefficacy or on their listening performance. Therefore, the analysis of the data to answer the research questions was carried out using other statistical tests that are outlined in the next section.

5.6.1 Parametric tests

This type of statistical test makes stringent assumptions about the data, such as its normal distribution, and each test that falls in this category follows additional principles and assumptions (Pallant, 2016). As the current study investigated group differences (intervention and comparison) at two-time points (pre- and post-tests) for the dependent variables of student listening performance and their self-efficacy, metacognitive knowledge and strategy use, a mixed ANOVA test was used. This test assumes approximate normal distribution of the data, equal variance and covariance between the groups; the dependent variables must be on a continuous scale, with no existence of significant outliers and independence of observations (Pallant, 2016). This test allows exploration of a single and joint effect of two independent variables on an outcome or dependent variable; in this study, time, group and the interaction between them for each of the aforementioned dependent variables.

Another mixed ANOVA was run with self-efficacy and listening performance as dependent variables controlling for other variables. These variables were considered as covariates to reduce within-group error variance while assessing the difference between group means more sensitively. Additionally, the covariates were used to eliminate confounding results of an intervention which might be affected by other variables (Field, 2018). The covariate included in the listening model was vocabulary level at pre-test. For the self-efficacy model, listening at pre-test was included. The use of a covariate is not affected by the treatment. In this study, the covariates mentioned above were measured before the intervention was conducted. The second assumption deals with the homogeneity of regression slopes; in other words, the relationship between the dependent variable and the covariates should be similar for the two groups (Field, 2018).

Reporting effect size is highly encouraged (Field, 2018, Plonsky & Oswald, 2014) in order to provide a meaningful indication of the effectiveness of the instructional treatment. Additionally, calculating the 95% confidence interval is recommended in order to establish 'the true value' (Pallant, 2016, p. 139) of mean effect sizes. For the repeated measures ANOVA, the eta squared (η^2) effect size was calculated following Kerlinger's (1964, in Norouzian & Plonsky, 2017)) classical formula: $\eta^2 = \frac{SOS_A}{SOS_{TOTAL}}$, where SOS_A refers to the sum of squares of an effect A and SOS_{TOTAL} refers to the total sum of squares ($SOS_{Total} = SOS_{Time} + SOS_{Group} + SOS_{Time} * Group + SOS_{error for Time} + SOS_{error for Group}$). The eta squared values were interpreted as follows: small \leq .20, and large \geq .50 (Plonsky & Ghanbar, 2018). For the post-hoc effect sizes, Cohen's *d* and *d*_A (Adjusted d for ANCOVA) benchmarks are interpreted for within groups as follows: small = .60, medium = 1.00, large = 1.40; and for between groups, they are interpreted: small .40, medium = .70, large = 1.00 (Plonsky & Oswald, 2014).

Cohen's *d* was calculated using Cohen's formula: $d = \frac{\bar{x}_1 - \bar{x}_2}{(SD_1 + SD_2)/2}$; and the adjusted Cohen's d_A was calculated following the same formula using adjusted means and adjusted standard deviation values, however, SPSS output does not report SD_A for ANCOVA but only the *SE* (Standard Error). Nevertheless, the *SD* can be calculated by multiplying the *SE* by their respective square root of the sample size *N*: $SD = SE * \sqrt{N}$; therefore, $d_A = \frac{\bar{x}_{A1} - \bar{x}_{A2}}{(SD_{A1} + SD_{A2})/2}$ (Gignac, 2019).

Another type of statistical test was used in this study to analyse students' data. A hierarchical multiple regression was used to investigate the relationship between the study variables mentioned earlier as predictors of student listening performance and their self-efficacy. This test "is a more sophisticated extension of correlation and is used when you want to explore the predictive ability of a set of independent variables on one continuous dependent measure" (Pallant, 2016, p.108). Plonsky and Oswald (2017) criticised the huge reliance of L2 quantitative research on ANOVA-based results. The nature of the ANOVA test involves a single categorical independent variable (e.g., intervention condition) and the means of a single dependent variable across these categories; however, the use of this test ignores the multivariate nature of second language learning and use and the existence of relationships between the independent variables.

The hierarchical (sequential) type of multiple regression can be used to identify the unique influence of each IV on a DV (Plonsky & Ghanbar, 2018). The test assumes a large sample size in relation to the number of predictors. There has been some controversy over the required number of cases for running multiple regression. Tabachnick and Fidell (2014, p. 159), for instance, provided a formula for calculating the required sample size: N > 50+ 8m (where *m* is the number of predictors). In the current study, the maximum number of predictors is five, so that the formula becomes 50 + 8 (5) = 90. On the other hand, Field (2018) argued that there should be for each predictor in the model 10 or 15 cases. As the number of the participants in this study was N =186, this assumption was also met when the participants were combined for five predictors (5 x 10 = 50; 5 x 15 = 75). In view of the different formulae that exist, the sample size was considered to be within an acceptable range when the groups where separated (experimental group, N = 97; comparison group, N = 89).

Other issues that need to be addressed when conducting multiple regression are the normal distribution of data and the absence of outliers within the dependent and independent variables. As stated in Section 5.4, all the student-related variables were reasonably normally distributed with very few or no outliers. The outliers were retained but rescored so that they are not different from the cluster of scores (Pallant, 2016). Although the teacher self-efficacy scores at pre-test and post-test were not perfectly normally distributed, they were included in the model. Gorard (2017) claimed that violating some assumptions may not be fatal to the validity of the work in any real research project requiring multiple regression as only the intercept is sometimes affected, and the coefficients can be used with care.

Independence of residuals, linearity and multicollinearity assumptions should also be checked when running multiple regression. The assumption of independence would require that each measurement or participant data must not be influenced by another measurement. This assumption was met in this study as each participant was working individually to complete the tests. The assumption of linearity of the IVs with the DV can be checked through scatterplots demonstrating a straight-line relationship of each individual IV with the DV. Additionally, the assumption of multicollinearity suggests that the IVs should not be highly correlated (r = .90 and above), however, it is advisable to check the bivariate correlation when it is .70 or more between two variables before including them in the same model (Tabachnick & Fidell, 2014). However, perfect collinearity is rare in real-life data, but an increase in collinearity can cause problems of limiting the size of R and assessing the importance of predictors (Field, 2018). In this study correlations between the IVs were checked, as outlined in sections 6.1.5 and 6.1.6.

Furthermore, the order of entering the IVs to the regression equation is determined by the researcher according to theory and logic (Tabachnick and Fidell, 2014). The regression models for each group were developed separately at the two time points in order to avoid any type of statistical error.

5.7 Quantitative data analysis

5.7.1 To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy beliefs?

The quantitative data collected from teacher questionnaire were only analysed descriptively because of the small number of teachers, using SPSS version 24. The results are presented in the following section. The self-efficacy inventory was presented in the last part of the teacher questionnaire. It was administered at the beginning and the end of the study. Both the intervention and comparison groups completed it. It included 25 items that teachers rated from 0 to 100%. As internal consistency for the test was good at pre-test and post-test, a total self-efficacy score was calculated. Table 5.4 demonstrates descriptive statistics of teachers' reported self-efficacy scores at pre and post-tests for the intervention and comparison groups. The median scores were used instead of the mean scores because of the small number of teachers.

		Pre	e-test			Po	st-test	
Condition	Median	SD	Min	Max	Median	SD	Min	Max (%)
	(%)		(%)	(%)	(%)		(%)	
intervention	62.80	15.61	42.40	82.40	71.20	9.08	66.80	89.60
Comparison	66.80	12.51	57.20	88.00	69.60	14.80	56.40	94.00
Total	64.80	13.62	42.40	88.00	70.40	11.63	56.40	94.00

Table 5.4 Descriptive statistics for teacher self-efficacy scores

At the pre-test, the comparison group had a higher median score than the intervention group. At the post-test, both groups demonstrated increase in their self-efficacy beliefs; however, the gain score of participants in the comparison group was only 2.8 percent while it was 8.4 percent for the intervention group. Furthermore, the intervention group had a higher median score than the comparison group. Additionally, the standard deviation (*SD*) for the

intervention group declined at post-test, suggesting greater homogeneity achieved through the training; however, it increased for the comparison group. The results indicate that teachers' sense efficacy for teaching listening improved after receiving a research-based teacher training. Figure 5.1 shows the different development of self-efficacy in the two groups.



Figure 5. 1 Development of teacher self-efficacy.

5.7.2 Effect of teacher training on their understanding of teaching/learning listening

The participants' understanding of listening and factors affecting students' listening was elicited through a questionnaire adapted from Graham et.al (2014) which the teachers completed at pre-test and post-test. As outlined in Section 4.5.2.1, the second section probed listening understanding through 14 statements that were rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Two statements held negative meaning and were recoded to positive statements. Therefore, all the statements carried positive meaning. Table 5.5 shows the descriptive statistics of teachers reported understanding of listening for the intervention and comparison groups at pre-test and post-test.

		Pre-test			Post-test				
Condition	Ν	Mean	SD	Min	Max	Mean	SD	Min	Max
Intervention	5	3.83	0.40	3.29	4.29	4.10	0.42	3.57	4.50
Comparison	5	3.66	0.40	3.29	4.29	3.60	0.32	3.36	4.14
Total	10	3.74	0.39	3.29	4.29	3.85	0.44	3.36	4.50

Table 5.5 Descriptive statistics for teacher understanding of listening teaching and learning

The results in the above table shows that at the pre-test the intervention group had a slightly higher mean score than the comparison group regarding their level of understanding of listening and factors influencing students' listening. The findings demonstrated that teachers had a moderate level of understanding of listening. At the post-test, the mean values show that across all participants combined, a slight increase by 0.11 was found; while the level of listening understanding for the intervention group increased, it decreased slightly for the comparison group; indicating that teachers in the intervention group developed their understanding of listening and factors affecting it in comparison to the comparison group. Figure 5.2 shows the differences in the level of listening understanding for the two groups at pre-test and post-test.



Figure 5. 2 Mean scores of teachers' understanding of the teaching/learning of listening

4.7.3 Effect of teacher training on their stated instructional practice of the listening in the classroom

The participants' stated practices for listening in the classroom were elicited through the questionnaire adapted from Graham et.al (2014) which the teachers completed at pre-test and post-test. As outlined in Section 4.5.2.1, the procedures undertaken to teach listening in the classroom were presented in the third section (a) of the teacher questionnaire and it included 15 statements rated on a four-point Likert scale from 1 (never) to 4 (always). One statement held negative meaning and was recoded to a positive statement. Therefore, all the statements carried positive meaning and scores for each were added together to give a combined score for reported practices that would be addressed in the intervention. Table 5.6 shows the descriptive statistics of teachers' reported practices for teaching listening for the intervention and comparison groups at pre-test and post-test.

Table 5.6 Descriptive statistics for teacher instructional practices for listening in the classroom

		Pre-test			Post-test				
Condition	Ν	Mean	SD	Min	Max	Mean	SD	Min	Max
Intervention	5	2.53	0.66	1.87	3.60	3.09	0.38	2.67	3.53
Comparison	5	3.01	0.68	2.13	3.73	2.99	0.63	2.27	3.60
Total	10	2.77	0.68	1.87	3.73	3.04	0.50	2.27	3.60

The results in the previous table demonstrate that at the pre-test the comparison group reported a higher mean score than the intervention group regarding the frequency of conducting key instructional practices. The results indicate that those in the comparison group reported guiding students throughout listening more frequently than those in the intervention group. At the post-test, the mean values of these practices show that the scores of the intervention group increased, while they were almost stable in the comparison group. When the scores of all participants were combined, an increase of 0.27 was found. Figure 5.3 shows the differences in the frequency of reported listening instructional practices for the two groups at pre-test and post-test.



Figure 5. 3 Means of teacher stated instructional practices for teaching listening in the classroom

5.7.4 Type of activities used in the classrooms

The data for this part were presented in a nominal format to check the type of the listening activities teachers addressed in classrooms. The six statements were coded in SPSS as 'used' or 'not used' by the participants. Table 5.7 shows the frequency of each listening activity as reported by the participants before and after the intervention for the intervention and control groups.

Activity	Condition	Frequency			
		Pre-test	Post-test		
	intervention	03	04		
Listen for predicted words	Comparison	02	03		
	Total	05	07		
	intervention	03	04		
True/false statements	Comparison	05	05		
	Total	08	09		
Listen for how words change	intervention	01	04		
in connected speech	Comparison	03	03		
	Total	04	07		
Identify tone of	intervention	02	05		
voice/emotion	Comparison	05	03		
	Total	07	08		
	intervention	01	05		
Identify word boundaries	Comparison	03	03		
	Total	04	08		
	intervention	01	05		
Working out the meaning of	Comparison	03	04		
unknown words	Total	04	09		

Table 5.7 Frequency of using listening activities at pre and post-tests

The table shows variation across the frequency with which different types of activities were used by the teachers. True and false activities were the most used at pre-test. Additionally, looking at the intervention group separately, the participants used prediction and true/ false activities most frequently at pre-test, while for teachers in the comparison group true/ false activities and identifying tone of the speakers' voice were the most frequently reported activities. At post-test, true/ false activities involving working out the meaning of unknow words. All participants in the intervention group reported using all the activities provided most frequently. On the other hand, their counterparts in the comparison group reported a more frequent use of true/ false activities with their students in comparison to other categories.

In the following up open-ended item, some teachers provided other types of listening activities that they usually used in the classroom. At pre-test, these activities included gap-filling, answering comprehension questions, repeating particular expressions heard in the audio and finally summarising what students heard orally. At post-test, other activities were reported by teachers and mainly from the intervention group. These included: listening for speakers' opinion and attitudes, listen and count words in a particular passage, listen for general idea and dictation.

5.7.5 Purpose of carrying out listening activities

For this part, the data were presented in an ordinal format regarding the participants' ranking of the importance of carrying out six listening activities from 1 (the most important) to 6 (the least important). Table 5.8 shows that, at Time 1, teachers reported that improving students' speaking skills and teaching them how to listen effectively were the most important aims of using listening tasks in the classroom. However, assessing how well they can listen and extending their vocabulary were reported being the least important aims. At Time 2, some changes occurred; improving students' speaking skills was reported being less important in comparison to Time 1. Teaching students how to listen more effectively was reported being the most important aim.

In the follow up open-ended part in the questionnaire, at Time 1, some teachers reported encouraging students to learn expressions used by native speakers in different situations as the only other aim of using listening activities in the classroom. However, at Time 2 teachers in the comparison group did not report any other aims of using listening activities, while only two teachers in the intervention group reported developing students' awareness of spoken language and encouraging critical thinking.

		Ranks	
	Condition	Mean	rank
	_	Pre-test	Post-test
	Intervention	3.80	4.20
Extending students' vocabulary	Comparison	4.20	3.80
	Total	4.00	4.00
	Intervention	4.60	4.60
Assessing how well students can listen	Comparison	2.60	2.60
	Total	3.60	3.60
	Intervention	3.80	1.80
Increasing students' opportunities to	Comparison	3.00	3.20
practise listening	Total	3.40	2.50
	Intervention	2.80	4.20
Provide students with a model of pronunciation	Comparison	3.80	3.80
pronunciation	Total	3.30	4.00
	Intervention	3.60	1.20
Teaching students how to listen more effectively	Comparison	1.80	2.00
more encentrely	Total	2.70	1.60
	Intervention	2.40	5.00
Improve students' speaking skill	Comparison	2.60	2.60
	Total	2.50	3.80

Table 5.8 Mean ranks of the importance of listening activities at pre-test and post-test

Regarding the intervention group, at pre-test, the findings show that teachers reported conducting listening activities in the classroom more importantly to improve students' speaking skill and providing them with a model of pronunciation. Assessing how well they can listen was ranked as the least important purpose for using listening activities. However, at post-test, the priorities of importance seemed to change in comparison to Time 1. The results in the table show a noticeable shift in considering improving students' speaking skills less important than other purposes. Teaching students to listen effectively as well as increasing their opportunities to practise listening were ranked first.

As far as the comparison group is concerned, and unlike the intervention group, participants reported prioritising teaching of effective listening at the two time points, placing less importance on extending students' vocabulary size and providing them with a model of pronunciation. Additionally, no particular change was remarked from Time 1 to Time 2.

5.8 Analysis of Qualitative data

5.8.1 Teacher interview

The interviews were conducted with teachers to understand their teaching approach for listening in more detail. The interviews were conducted twice - before the intervention and after the intervention, - therefore, the analysis of the data was divided into two parts according to the corresponding time. The findings demonstrated three main themes at Time 1, in addition to other sub-themes, while five main themes were generated at Time 2. These are illustrated below in Table 5.9. The different themes identified at Time 2 are attributable solely to the experimental group. The teachers in that group were explicitly asked at Time 2 to reflect on any differences they noticed in their teaching approach compared with Time 1. No change in the views of the comparison group teachers emerged between the two time points.
Time 1 themes					
Themes	Representation				
1. Conceptualisation of listening	Teachers' beliefs and knowledge about listening,				
- Language exposure	including the aims of teaching listening.				
- Topics dominance					
- Developing vocabulary					
- Developing speaking not listening					
- Listening as a comprehension task					
2. Teacher subject knowledge for teaching listening	Teachers' awareness/unawareness of listening				
strategies - Unawareness of listening strategies	strategies.				
- Misconceptions about listening strategies					
- Limited knowledge of listening strategies					
3. Listening self-efficacy beliefs	Teachers' beliefs about their ability to teach listening				
- Individual factors	effectively and to improve students' performance,				
- Contextual factors	including the factors affecting their practice.				
Time 2 themes					
1. Enhanced teaching focus	Alteration in teachers' focus from reinforcing other				
	aspects of language to teaching listening in its own				
	right.				
2. Students' enhanced awareness and use of listening	Students become more aware of listening strategies				
strategies	and how they should use them.				
3. Enhanced Student motivation	Students become more motivated				
4. Improved Student listening performance	Students showed improvement in their performance.				
5. Listening self-efficacy beliefs	Teachers' beliefs of their ability to teach listening				
	effectively and to improve students' performance,				
	including the factors affecting their practice.				

Table 5.9 Emerging themes from teacher interview analysis

5.8.1.1 Pre-intervention

a. Conceptualisation of listening

In relation to how participants conceptualised listening and the teaching of listening in a foreign language, it seemed that there was no consensus on a particular definition or orientation among the participants on what listening involves and how it should be incorporated in the classroom. Some of the findings of the interviews diverged with those of the questionnaire, especially those related to the purpose of conducting listening activities. In the questionnaire, for instance, teachers showed agreement that listening activities were used most importantly to teach students to listen more effectively than to extend their vocabulary. However, it was evident that all participants saw listening as a means to target and serve other aims rather than itself being the main focus itself.

Language Exposure

The interview data indicated that most participants considered the listening session as an opportunity for their students to be more exposed to the language. The participants claimed that students were not exposed to the English language outside the classroom because of various factors; mainly the status of the language in the Algerian society where it is not widely used, but just in schools. Therefore, the listening session taking place in the language laboratory was an opportunity for them to have more exposure to English. For instance, Leena commented:

"Some students are not exposed enough to the language...... they do not practise listening outside the classroom. So, the teacher has to provide them with as much listening opportunities as possible to listen. The exposure makes them listen".

This shows that the understanding of teaching listening was confined by some teachers to 'the more students listen the more they understand', and their role is to present as much recorded English as possible to engage students in constructing comprehension. Interestingly, it seems that their view of the listening process was that it is automatic, with comprehension not requiring anything more than exposure to the input.

Topics dominance

Another alternative response from the teachers was to see the purpose of listening activities as a way of presenting various themes or topics for the students. All the participants mentioned that at the beginning of the academic year the English department provided Oral Expression teachers with certain themes they needed to tackle along the year, however, it was the teacher's job to prepare the teaching materials. For instance, Jacob stated:

"The administration provides me with the themes, and they told me to choose the materials you like to suit your students. So, each time I look for exercises online that are related to each theme, then I use them in the classroom".

This shows that the teacher responsible for the module was more interested in the topics that would be delivered for students rather than on how the module should be taught, consequently, other teachers would focus on what they were instructed to cover. On the other hand, the majority of teachers stated their discontent with sticking to the topics provided by the department as they were not appropriate to the students' interest or their educational level which might cause demotivation and boredom. For instance, Aisha commented:

"I did not feel comfortable. I wanted to get rid of those topics as if the students are in high school. I wanted something interesting and innovative".

According to the participants, the topics being suggested to them should be administered to beginners and not to university level students. This indicates that the level of the content was not adequate to the university level, and hence, it had an impact on teachers' willingness to deliver the topics. However, most of them stated that they kept referring to the same themes during their practice.

Developing vocabulary

One of the most frequent and common references among participants was to the term vocabulary, which implies that they viewed listening as an opportunity for students to gain more content vocabulary. It is evident that vocabulary is crucial in listening comprehension, however, teachers seemed more likely to perceive listening tasks as motives for eliciting or extracting as much vocabulary as possible. For instance, Zaky confidently expressed his belief that vocabulary development is the ultimate objective of using listening materials, saying:

"When students are exposed to a passage, the objective is to afford the words, for us it's just making the students aware that this is the most appropriate or adequate vocabulary describing a certain theme.... Our objective is not spelling or pronunciation, the aim is vocabulary. It is the core".

In line with the same belief, another teacher referred to the importance of learning new words and expression in a different way through listening to how they are used by native speakers and repeating them to build their language repertoire. For this Azzah commented:

"Repeating particular expressions is useful in order to enable students develop their English language repertoire".

This indicates that teachers did not consider listening as a skill that needs to be developed per se, rather it was a source for introducing and learning various themes-related vocabulary.

Developing speaking not listening

Another aspect of teachers' conceptualisation of listening was 'listening serves speaking'. Listening was seen by many participants as a source of input to encourage students to develop their speaking skills. For this, Azzah claimed:

"In the context of a foreign language learning the aim of listening is to speak. What is the purpose of listening to people? Isn't it to interact with them?".

Similarly, other participants considered that the ultimate aim of listening to recorded passages in the classroom is enrich students' language repertoire, so that they can use it to speak. They mentioned that listening aided them to present a model of English native speakers whom students can learn from through different follow-up speaking activities. Hana, for instance, stated: "I believe that listening serves speaking....., listening is to train students to develop their pronunciation, learn new vocabulary, help them to develop their speaking, and to use what they heard in a speaking task".

In many views on language acquisition, listening does feature as a source of input that then develops productive skills. However, the above findings suggest that the majority of the participants demonstrated their disregard of listening as a skill which needed to be developed per se. For them, the vocabulary used in the listening passages, the speakers' pronunciation, intonation and accent should be imitated and used at the end of each listening session in order to acquire native-like spoken language. This suggests that teachers do not value students' capacity to take part in dialogue as part of learning to use English as dialogue would include both speaking and listening. It also shows that teachers have a rather behaviouristic, audiolingual view of language teaching, i.e., one where learning happens just by imitation. Thus, it also demonstrates that teachers lack subject knowledge of the module they were teaching.

Listening as a comprehension task

One specific focus of the participants in teaching listening was testing students' listening comprehension through follow-up comprehension questions. Students were asked to listen to a passage, then answer some questions according to their understanding of the passage. After that, students shared their answers; if any question was missed or answered wrongly, teachers gave another listening opportunity for them to look for the answer. Hence, the whole listening session was, to some extent, a series of listening comprehension activities to be completed.

"Teaching listening is to set activities and tasks, then students listen and look for the answers and respond", Jacob said.

Similarly, Leena illustrated her approach to teaching listening, insisting on the fact that there was no particular methodology to demonstrate to teachers how listening should be taught, therefore every teacher was using his own method:

"The students listen then they answer the questions about what they have heard. I use generally videos. Students try to listen attentively especially when they are under test conditions, I ask them to listen while I give them papers to fill in the gaps in the activity, and answer comprehension questions. There was no particular methodology how to teach, but it is up to the teacher".

From the above, it is evident that each teacher was approaching listening in their own way and focusing on different aspects. All participants argued that there was no curriculum for teaching the module and no teaching materials were provided for them. In addition to that, it is very likely that teachers who taught the module for the first time and those who were not specialised in the field were not provided with an appropriate training that could guide and direct them to teach listening in a principled way; which confirms their responses earlier in the questionnaire. Thus, it can be said that the English language department did not give much importance to the module in terms of developing its teaching although it was designated to be one of the fundamental modules for first year students. Zahra remarked:

"Teaching the Oral Expression module is just 'du bricolage' [i.e. do-it-yourself]. The department does not give much importance to the module. It's general English teaching, no curriculum or teaching materials are provided, besides it's my first time teaching the module. I was obliged to teach it".

b. Teacher subject knowledge for teaching listening strategies

The interviews revealed participants' knowledge, awareness and the extent of their involvement in teaching listening strategies. Few teachers demonstrated any awareness of such strategies; however, some were, but were not aware that they could be taught, and others misconceived the nature of these strategies.

Unawareness of listening strategies

Three participants expressed their uncertainty of what a listening strategy refers to. For some this was because it was their first time teaching the Oral Expression module, while for others the module was not their speciality, so that they were not knowledgeable about the fieldrelated concepts and methodology.

"Honestly, I am not aware what are listening strategies", Hana said.

"I do not know what strategies I should teach or even what a listening strategy means", Celia said.

"I am not aware of strategies. It is my first year teaching this module and I do not know how to teach it", Zahra said.

These findings confirm that teachers did not receive any training about the module they were supposed to teach. In addition to that, teachers' educational background seem not to have given them the necessary subject knowledge regarding the teaching and learning of listening.

Misconceptions about listening strategies

Another important point that was revealed from the data is how teachers conceptualised listening strategies. Some participants referred to their own procedures of delivering the lesson as strategies to help their students understand better. In other words, they were referring to teaching strategies. For instance, Jacob responded according to his previous regular meetings with the English language inspector as an English teacher in high school:

"I had many seminars with the inspector of English about listening strategies and listening techniques, for example before setting a task, students beforehand should be given the purpose of that task". Jacob believed that providing students with the purpose of the listening task is a listening strategy that helps them develop their listening. Subsequently, he elaborated on his response, saying:

"The strategies are when the students would imitate the teacher or the speakers in the listening passage in terms of their pronunciation and take expressions they used and develop their own way of speaking English".

For this teacher, he believed that he was developing students' listening, however, it is evident that, he completely neglected developing listening and focused on developing speaking which reflects his approach to teaching listening.

Additionally, Joseph believed that listening strategies to help students develop their understanding of a listening passage were related to the way the instruction is presented.

"Teaching listening strategies is to show a picture about the topic before informing them what it is, then I expose the students to the listening audio and ask them to answer the questions".

Limited knowledge of listening strategies

Half of the participants showed some knowledge of listening strategies whether from their personal experience of listening to English or to training they received as teachers or students. However, this knowledge was limited to concentration, listening for every single word, or listening to details or gist. For instance, Sama talked about her own way of developing listening through strategies when she was a student:

"When I was a student the teacher did not show us how to listen, it was my own effort. The most important strategy for me is that students should listen for specific reasons or try to get the general understanding. I don't tell them today's strategy is, it occurs through practice". Sama associated listening strategies with the purpose of listening, i.e., to listen for details and for the main idea and considered them as the most crucial strategies, but she believed that these strategies should be developed by students with no interference from the teacher. On the contrary, she argued that these strategies develop automatically through exposure.

In line with the above argument, Leena claimed that demonstrating listening strategies for students is a kind of forcing them to follow a particular approach to listening, which would be inconsistent with their different processing abilities:

"As a teacher I do not have particular techniques, but we are different, we are not all the same in terms of capacities, so I cannot impose things on them which they do not know".

An interesting argument came from a participant who perceived himself as an advocate among other teachers of Oral Expression because his research interest lay in this area. Zaky mentioned that he had received training abroad on teaching listening strategies, however his belief in the importance of listening strategies was tempered by his belief that students did not need to be taught these explicitly. Rather, he thought, students should develop these for themselves, therefore, he rather directed his teaching towards, for instance vocabulary development, but not the strategies:

"I was trained abroad about the different strategies that the students should work on in order to improve their listening. It means always the problem of the listening activity is exposing the student to a dialog maybe filling the gaps, the identification of some words, but the student is not equipped with the strategies....., they should at least know six or seven strategies to make them able to tackle the listening, but at the very beginning I start teaching them from scratch". Last but not least, another group of teachers demonstrated their restricted understanding of listening strategies to just concentration and focusing on every single word in the passage.

"is to ask students to listen carefully to every word to answer the comprehension questions" Aisha said.

"I ask students to focus, because concentration is the key", Azzah said.

From the above, it is evident that participants' knowledge of the benefits of listening strategies was limited. Although they seemed to be aware that strategies aid students to develop their listening, they were not aware of their teachability, or their role as teachers in supporting the development of listening strategies, because they believed that it is an individual effort that students need to develop on their own.

c. Listening self-efficacy beliefs

Teacher self-efficacy beliefs for teaching listening was a central focus in this research, and themes arose related to this in addition to the themes already discussed. The participants' beliefs about their ability to improve students' listening outcomes and to teach listening effectively from different aspects were discussed during the interview in accordance with their responses in the questionnaire they completed beforehand. The main elements discussed in the interview included: their perceived sense of efficacy in relation to students' motivation and their listening performance; in addition to teachers' understanding and knowledge of listening. The respondents linked their beliefs and practice to other factors which they considered as determinants to their teaching. Some of these factors were individual and others contextual.

Individual factors

As it was mentioned earlier, the participants involved in the study, and who taugh the Oral Expression module, were from different educational backgrounds. It was also mentioned in the first chapter that unqualified teachers in the university were recruited in haste because of the limited number of teachers in the English departments. Besides, it was also previously mentioned that some teachers were recruited to teach the module of Oral Expression to university students had only experience in middle or secondary schools, and also those who did not have expertise in teaching the module. According to the respondents, their English teaching experience, teaching position, and specialism were direct factors influencing their self-efficacy beliefs and practice of teaching listening whether positively or negatively.

Teaching and learning experiences

All teachers believed that there was no alternative way to teach listening other than their own way because they followed the same teaching method used by their own teachers. In other words, they taught listening the way they were taught. This seemed to give them confidence about their adopted method of teaching listening. For instance, Joseph stated:

"I believe that I am teaching listening the way it should be and the more the students listen the more they can develop their ability to understand...... I don't think there is another way to address the lab session except this way, and I think all teachers do the same thing. I was taught the same way".

In addition to that, only three teachers demonstrated high self-efficacy in some aspects of their teaching, including lesson planning and student motivation; these teachers were mainly more experienced in teaching English in comparison to others. They also mentioned that they did not have any problems with students' motivation and attendance, and other general classroom management procedures. For instance, Zahra said:

"Generally, I have no problem with students' motivation and attendance in the listening class...., due to my experience of teaching, I am confident to choose materials which suit all students' language levels; I mainly choose materials in the middle level, and I am also confident to use the allocated time for listening activities appropriately".

Furthermore, this claim suggests that such teachers viewed the teaching of listening as chiefly an issue of general classroom management issues rather than a skill that requires focus and development of its own pedagogy.

Limited subject knowledge

In addition to what was mentioned earlier, teachers acknowledged some other individual factors that caused some difficulties and challenges for them in their teaching. These factors included their temporary position and lack of experience and specialism in teaching listening which, consequently, limited their sense of efficacy. For instance, Jacob who taught English for more than 15 years (in secondary school where listening is not a teaching focus) stated his inability to co-operate with other teachers because he did not have a permanent teaching position, so he could not meet or even know those who were teaching the same module to share their experience. He mentioned:

"I cannot collaborate. Actually, I work alone, and I prepare my own lessons and I do not even know the teachers who are teaching the same module as I work as a part time teacher".

In addition to that, half the participants mentioned that they lacked experience in teaching listening, and they taught it for the first time. Therefore, they were unsure about their abilities to teach listening effectively. For instance, Zahra, who had taught English for a long time, but was teaching listening for the first time, said:

"It is the first time I teach this module...... I was obliged to teach it. I did not know how I should teach; I even asked some teachers who taught it in the previous years but, they were hesitant as they did not have a particular method. Honestly, I was lost".

Likewise, Hana asserted the difficulties she encountered during her teaching regarding selecting the teaching materials, planning the lesson, improving students' listening and evaluating their performance. She insisted on doubting her capability to teach listening efficiently because it was her first time teaching the module and she was not aware how to do so, saying:

"As you know, this is the first time I teach the Oral Expression module, I do not know on what basis I should choose the materials, sometimes they do not work and each time I keep changing my mind about what to use.....I cannot evaluate them, it is my first time teaching, I do not know how, I just say whether the answer is correct or wrong..... I know that I cannot improve their comprehension".

Another factor highlighted by some participants was their lack of specialism in the area they were designated to teach. Participants considered their lack of specialism as a constraint to teaching listening effectively because they lacked the knowledge and methodology about it. For instance, Leena clarified:

"As a teacher I do not have the techniques to teach listening, simply because it is not my area of interest. I teach literature and history.... I am not sure I can improve their listening comprehension".

On the other hand, another teacher Sama who had the same teaching specialism as Leena claimed that she would devote more time for her own research and the other modules she was teaching in her field of study rather than on teaching listening. In other words, she seemed uninterested in making the effort and spending time on planning an effective lesson plan or even helping students develop their listening, preferring rather to focus on her personal interests. She mentioned:

"This module is not of a priority for me because it is not my field of research. I taught this module last year, so I almost use the same teaching materials that I used before...... I cannot improve students' listening proficiency because I believe it depends on their will to learn".

Sama's last words, attributing her own lack of expertise in teaching listening to students rather than to anything she might have control over, were taken up by many other teachers, as explained in the next section.

Contextual factors

According to the participants, context-related factors had a huge impact on their teaching in terms of choosing the materials, motivating students to develop their listening proficiency. The contextual factors that emerged from the data involved students' and departments' factors.

1. Student factors

The participants cited various student-related constraints that affected directly their practice in the classroom. These factors suggest a great deal of 'helplessness' on the part of teachers, almost blaming the students. These constraints involved: their linguistic level and attitudes.

Student proficiency in English

All the participants mentioned that first-year students' language level was poor. They claimed that this level in English was low in relation to the course they were appointed to, which was English language and literature, at university level. The linguistic level the participants mentioned caused some difficulties for them in relation to how they should manage the listening session. For instance, Jacob stated:

"The challenging thing in teaching listening is what we call in French 'le prérequis' of the students, the previous knowledge of the students of English. Sometimes I am in a situation where the students do not have the required level. Students obtain the baccalaureate exam then they are oriented towards the English department and in many cases, they have nothing to do with English".

Furthermore, other participants cited that they were surprised and disappointed with the low language level of the students that they did not expect to encounter, which consequently caused a challenge for them to choose the appropriate teaching materials. Joseph illustrated:

"The problem lies with the students. When I started teaching, I found them unresponsive. Sometimes I just feel lost how to deal with them as I did not expect this to happen. I felt lost what as well to prepare as a lesson and what level I should opt for. Their level is low, and it is hard to run the session with this level. I feel like I need to use the materials for younger pupils and not for a university level".

Similarly, other participants believed that vocabulary was the most important element that can help students understand a listening passage, however students' vocabulary was limited which made them believe teaching listening was a challenging task. For instance, Celia argued:

"I believe teaching listening is challenging, and I find it difficult when students do not have the vocabulary related to the topic we are discussing. Students do not have a good repertoire of vocabulary, their vocabulary is limited".

Therefore, one of the respondents suggested the necessity for universities to set language requirements in the four language skills, rather than only in reading and writing, before being accepted to pursue university studies in English language. Azzah mentioned:

"For me, the challenge is how to choose the materials...., they can't get what people are saying in the audio recording. I think before they enter university, they should have a minimum requirement in all language skills".

Student motivation

A substantial student-related factor cited by the participants was their motivation. The majority of teachers insisted on how students were demotivated in the classroom which made it difficult for them to engage all of them in the lesson and make them interact with their peers or with the teacher. On the other hand, they attributed their demotivation to certain factors like anxiety, low self-confidence about their language level, and other external factors.

Azzah, for example, believed that students' motivation in the classroom is crucial, but students with limited proficiency were the most demotivated:

"It is challenging, not all of the students are really motivated because they do not really have the adequate language level to enable them to understand what native speakers are saying or even me as a non-native speaker teacher...., I try my best to get my students engaged and motivated. So, I try to bring interesting topics to the classroom".

Celia, for instance, expressed the difficulty of persisting with unmotivated students although she tried to get them involved using different listening genres:

"I have noticed that some students are not really interested. Motivating students and engaging them in the tasks is difficult even if there are some good listeners but I think they might be anxious..... it is difficult to persist with unmotivated students. Some students just don't care..... even if I use songs which they are normally interested in but, some of them are just bored no matter what type or topic of the songs".

Furthermore, Aisha highlighted students' low self-confidence which inhibited them from interacting and responding to her instruction:

"...... They get nervous and uncertain about their answers when it comes to assessing their level. I think it has to do with their confidence.... they just keep being unresponsive which had an effect on me controlling the session. Besides, they sometimes just rely on their classmates' answers to respond".

Another reason causing students' demotivation was the fact that they were obliged to study English; it was not their will or choice. For instance, Jacob said: "Students are oriented towards the English department and in many cases, they have nothing to do with English and English is not their favourite subject, they found themselves obliged to study English though they do not like it".

As a result, the participants believed that students' lack of motivation and interest in the classroom was also reflected outside. For instance, Azzah mentioned how students would not give importance to practise listening or even do their listening homework:

"I would say that they have little exposure to the language outside the classroom and they don't have enough time as their schedule is full. If they have time, they would do other written homework rather than practising listening or speaking".

Interestingly, some participants pointed to the influence of students' reluctance on their own motivation and practice; they explained that their own low self-efficacy impacted on their capacity for persisting with students. Celia commented:

"I cannot really control the session. I do my best, but they do not appreciate my efforts and they do affect my practice. Those with lower language level would not take into consideration extra work or homework unless it is a marked".

In addition to this, Leena also mentioned the mutual impact of student and teacher motivation in the classroom on their practice. She argued that students' lack of interest and motivation affected teachers' motivation and self-efficacy to teach in a negative way and the other way around; if she felt distracted and students noticed this, they would be affected as well and become indifferent.

"Some students are all the time passive and I just become like them, then I feel like I just want to work with the interested and motivated ones, I would not care anymore because they do not. And I feel that that they do not appreciate my efforts..... I can't motivate the whole classroom. I feel like I have nothing to do with unmotivated students. I consider myself 'nulle' [hopeless and worthless] in this situation. I can't persist, if I do, I'll lose my motivation and when I lose my self-confidence and motivation I can't teach. The students get affected if the teacher is not motivated".

Lack of Student Autonomy

A substantial student-related factor that was mentioned by the participants, and which made the teaching of listening challenging, was students' lack of autonomy. Although the English language is not widely used in Algerian society, students kept distancing themselves from listening in English beyond the class and they did not make efforts to develop it. For instance, Sama said:

"What I find challenging is to motivate my students to listen outside the one hour and a half. This is not enough for them, but they would not do that. They do not make efforts; they do not spend much time in learning how to listen effectively".

In addition to that, teachers believed that students' lack of autonomy was a result of their previous learning experiences when the teacher was the centre and had the major role in the classroom. As a result, students were used to this kind of learning environment and they found it difficult to develop independence. Hence, whenever they were instructed to listen and respond they became hesitant and less confident. For instance, Aisha said:

"I use variety of listening activities, but when it comes to listening and answering the questions, they get nervous and uncertain about their answers....., I feel like their confidence is not permanent because they were not taught to be independent by their previous teachers".

Moreover, the teacher Zaky confirmed what was suggested earlier by Aisha that previous learning experiences had an effect on students' autonomy. According to him, the way human sciences in school, including languages, were taught trained students to be uncritical and lack strategic thinking; by contrast, the way scientific fields were taught urged and encouraged students to develop and adapt the strategies needed to solve problems. He argued: "Language students are used to a certain way of learning. I teach English for science students; they are completely different. Even if they come across a new word, for example, they manage to understand the meaning as they are already equipped with problem-solving skills throughout their education career, but language students do not even try to make efforts to understand it".

2. Departmental factors

In addition to the factors mentioned earlier, teachers added other factors that had a potential contribution to their practice in teaching listening. These factors were categorised under the institution body which included the importance of the module, teaching materials, curriculum, between-teacher collaboration and others. These elements are illustrated in the coming section.

Curriculum and teaching materials

All participants in the study admitted that there was no curriculum designed for the teaching of Oral Expression module including listening. As mentioned above, the English language department seemed to give less importance for teaching this module, therefore no curriculum was set for it. Hence, every teacher had their own teaching methods and materials. As also stated previously at the beginning of each academic year the department suggested some themes or topics that the teachers might consider during the sessions, which indicates its focus on the product or outcomes of learning rather than the process itself. However, although the department, apparently, considered the teaching of listening as an easy task, some teachers considered the lack of curriculum and teaching material as a source of challenge for them. For instance, Leena argued:

"..... It is challenging because we are not provided with the techniques and the methods. We have to be provided with the required methodology how to teach this skill". Similarly, Celia commented:

"As an unexperienced teacher and with lack of the teaching materials I am sometimes undecisive how and what should I choose as activities, and whether they are relevant or not".

Heterogeneity of classes

Besides the lack of curriculum, all the participants insisted on the challenges they faced because of the differences between the students in terms of their language level. All the classes included high, medium and low language-level students which indicates that the department did not consider these differences before allocating students to different classes, and with no clear or particular standards for doing this. This fact caused a difficulty for teachers to manage the session with these differences, including motivating students and choosing the teaching materials to suit all levels. For instance, Aisha mentioned:

"The challenge is that the students are not at the same level, some of them would interact and get the idea easily while others need up to four or five times listening. Sometimes they just rely on their classmates' answers to give an answer without comprehending...... Some students are motivated, but they lack background knowledge of the English language and their proficiency level is not good".

In addition to that, Azzah described how different the students were in terms of their language knowledge and practice, which made it difficult for her to manage the session and help students develop their listening:

"Listening comprehension develops in different students in different ways. Some say we listen outside, but they understand nothing; others have some linguistic background but understand little and those with good language they lack knowledge about the culture. That is why I could not decide on what to teach. Honestly, sometimes what I prepare works and sometimes does not".

Cooperation among teachers

A subsequent theme that emerged from the participants' discussion was collaborating with other teachers who were teaching the same module. It was mentioned above that the department did not provide teachers with curriculum and teaching materials, and created heterogeneous classes, and hence it was evident that teachers were in a dilemma about how to teach listening. However, they mentioned that there was a lack of cooperation between teachers to discuss and share knowledge or experiences on how to provide students in all classes with an identical or similar input. All participants mentioned that there was no interaction between each other, and some did not even know each other.

Some teachers expressed their will to collaborate with other teachers, whereas others were reluctant. For instance, Azzah argued:

"I like meeting with teachers and discussing the area of teaching Oral Expression, but unfortunately teachers at the university do not cooperate and I do not even know or meet the rest of the teachers of Oral Expression...... Each one of us is using his/ her own method and materials".

On the other hand, some teachers, especially who worked as part-time teachers, did not show their interest or even thought of collaborating with their colleagues just because their job was temporary. For instance, Joseph mentioned:

"Actually, I work alone, and I prepare my own lessons and I do not even know the teachers who are teaching the same module as I work as a part time teacher".

In the same vein, one teacher expressed her negative impression as an unexperienced teacher at the university when she asked for guidance from another experienced teacher in how to teach the module. She did not feel comfortable using what the teacher imposed on her while he/she did not offer an opportunity to discuss the content of the material. Aisha said:

"It's good to cooperate with other teachers, at least I can get more information how to teach, but it's hard. I was obliged to use some materials developed by one teacher in the same university which I found them kind of boring using these topics as if I am teaching secondary school pupils. I tried to use them, then I did not feel that I am creative and motivating my students......besides, I found it hard to cooperate with some teachers because they would judge for my experience and age. So, I feel like whether I stick to what they impose, or I am not wanted".

On the other hand, another teacher admitted the importance of working in collaboration; however, he considered other teachers as unwilling to collaborate because they did not make effort or even try to offer contributions to elaborate the teaching of the module. Therefore, it was his decision not to collaborate. Zaky said:

"Frankly speaking, when it comes to discussing with other teachers, most teachers consider oral expression to be easy to be taught. For me it is the other way around, I devote more time for that, but I don't find collaboration, we do not work in collaboration..... It's my nature. I always stand down from working with others, I think it is personal, but it's better. I believe working in collaboration makes the process of teaching better, I cannot deny it".

Another important claim by Zaky – in the final sentence in the above extract - also suggests tension among some teachers, between a realisation that collaboration can be beneficial but a reluctance or inability to do so.

In conclusion, the findings from teachers' pre-intervention interviews provided crucial insights on their understanding of the teaching of listening and the impact of this on their self-efficacy. It was evident that developing students' listening per se was not the ultimate aim of teachers' classroom approach, rather their focus was directed towards other different aims, mainly emphasising the role of vocabulary and developing speaking. First and foremost, the English language department did not attach importance to the teaching of the Oral Expression module and considered it as general English. Furthermore, the provision of certain themes or topics to be tackled during the sessions without a curriculum or teaching materials made life

extremely difficult for the participants. In addition to that, teachers' educational background was not taken into consideration and no training was provided for them to facilitate the teaching process. Thus, most teachers' beliefs and perceptions about the teaching of listening skills indicated poor self-efficacy that stemmed from the complex range of factors that are summarised in the figure below.



Figure 5. 4 Main barriers affecting teacher self-efficacy beliefs in teaching listening

5.8.1.2 Post-intervention

All teachers were re-interviewed after the intervention was conducted. Teachers in the comparison group showed no difference in terms of their responses from Time 1 to Time 2. On the other hand, teachers in the intervention group who received research-based teacher training and who conducted the intervention commented on the impact of the intervention on their cognition and practice. Only data from the intervention group teachers were considered at posttest. The interviews were analysed thematically, in a similar way as previously. This time five themes emerged from data for the intervention group teachers: enhanced teaching focus,

students' enhanced awareness and use of listening strategies, enhanced students' motivation, improved students' listening performance and teachers' listening self-efficacy beliefs. These are discussed in the next section.

Enhanced teaching focus

One of the most remarkable impressions expressed by all the teachers was the alteration in their focus for the teaching of listening. Teachers showed awareness that listening needs to be addressed and to be given as much importance as any other language skill. For instance, Zahra was comparing the old way of teaching to the new one:

"Before, listening was in a format of a block, not for example to stop the audio on particular extracts to discus and verify...... This is new, and it gives a chance for the students to learn. I feel now that I am really teaching not trying to trap or test students' understanding...... I have learned that I do not have to relate listening to speaking and I do not have to focus on the topics rather, on guiding the students how to listen".

Zahra's stated that the teaching of listening strategies provided students with an opportunity to learn instead of being tested. Additionally, she expressed her satisfaction towards her novel practice and helping students improve their understanding by focusing on the aim itself rather than other purposes.

Similarly, Hana pointed to her previous belief of listening, saying:

"I had the belief that the listening skill serves the speaking skill, then after this experience I found out that listening is an independent skill that needs attention to be developed.... So far, I feel that I got an idea how the listening session should be targeted".

This demonstrates that previously she was inhibited by lack of training and lack of subsequent subject knowledge. Using the intervention had increased her self-efficacy because she better understood what she should be doing in terms of teaching strategies to support listening. Interestingly, her experience of being trained and taught listening strategies raised her awareness of the importance of teaching listening as such.

This was also confirmed by Celia, who said she used to direct her attention towards raising students' awareness of the different accents and pronunciation to develop their speaking:

"Before I thought it is an easy task. I have focused on pronunciation and the different accents. Now I am focusing on listening itself. Before it was 'listen to speak', and now it is 'listen to listen'".

Students' enhanced awareness and use of listening strategies

First, the participants reported that they noticed some change in their students' attitudes in the classroom due to receiving the strategy instruction. For instance, Aisha commented on this, saying:

"Before when I ask students to listen, they just put on the headsets without doing anything, some of them keep looking at me until I repeat my instruction, or even when they are listening, I can see them staring out of the classroom windows. But later, I can see that they have changed, they started getting prepared, taking notes and concentrating...".

Aisha's reflection demonstrates the difficulty she faced earlier on getting her students involved in the task without having any clue about how to deal with the situation. However, the new teaching method seemed to solve this problem as students became more aware what was required from them before listening. Afterwards, she demonstrated how one of her students became aware of the strategies, in contrast to his confusion before the intervention: "For example, student X, before he couldn't process what he was exposed to and he couldn't get the idea even if I ask him questions, he was lost and he always asked for the third and fourth listening, but now, he started participating. I asked him: how do you feel now? do you think that your listening has improved? He replied that now he is more aware of what to do, before he was lost and he had nothing to do but now he feels that he can control his listening and he knows what is needed and what he has to do to reach the goal".

In addition to that, Zahra also emphasised on the impact of the instruction on students' attitudes in the classroom. She said:

"In general, I can see satisfaction among the students. Involving group and pair work during the session is encouraging. I think it has a positive impact on the students when they check their answers then verify them together, for instance, I can see them discussing 'I heard this, and you didn't hear it' ...".

According to Zahra's remark, it seems that strategy instruction increased interaction between students, and provided them with a chance to discuss the way they approached a listening passage by checking and verifying their answers together. This result uncovered the social aspect of listening which was neglected in the conventional approach to teaching listening.

Furthermore, Azzah mentioned that using strategy instruction increased students' interaction in the classroom which was missing during previous sessions.

"I have noticed that my students were more excited especially when it comes to how they got their answers, and I see how different students understand the same idea using different ways to reach the meaning. In addition to that, the interaction between them has increased". She then explained that she was impressed by how students discussed their understanding of some passages, and how they tried to develop the ability to analyse the content of an audio text using listening strategies. She mentioned:

"I remember once, I have provided them with a multiple-choice task and two students provided different answers and they started analysing how they reached them. One was saying "keep focusing until the end, the speaker used the expression 'but then I found that' which means he changed his mind". I can see even that they have developed kind of critical thinking not only relying on their background knowledge or knowledge of the structure but using another if possible, I can call it "an ability" which not any simple person can use it without being trained".

This example demonstrates the impact of strategy instruction on students' processing of listening input. It seems evident in teachers' eyes that the training that was provided to students was likely to be beneficial, and they were perceived to be able to use the strategies in order to facilitate the understanding. Besides, the verification stage in the instruction (see Appendix N) seems crucial because it allowed students to reflect on their listening process and to give them a chance to learn from each other.

Students' enhanced motivation

Student motivation was one of the aspects of teaching listening strategies that was noticed by the participants. They stated that students' attitudes in the classroom had changed in comparison to how it was under the previous teaching method. According to teachers, students demonstrated their interest, motivation and confidence in the classroom as they were more aware of the purpose of each task and what was required from them. For instance, Hana said:

"My students used to be nervous and anxious. Now, I can see that they are more motivated when I used this method of teaching the strategies and they are more encouraged to participate". Zahra, however, insisted on the crucial role of verification in making students feel less stressed. She mentioned:

"I feel like I am giving more to the students and I am making them more at ease feeling comfortable and helping them to learn.....The students felt at ease because they had time to check and verify their understanding in pairs".

Improved Student listening performance

A subsequent impact of teaching listening strategies was presented in students' listening performance. All participants claimed that they noticed improvement in students' understanding with less replaying times needed than was the case previously. For instance, Celia commented:

"I believe this new method was effective. I don't see that student require to listen more as previously, some of them would get the general meaning from the first time and others require a second or even third listening, while before I used to play the audio up to five times".

Additionally, another teacher expressed her conviction about the effective impact of the intervention on developing students' listening proficiency. Zahra said:

"To some extent I am convinced that the students have made a step forward in developing their listening comprehension. In general, I think it worked well.... I can say that this method of teaching really helped some students even those who were struggling to keep on listening, they are now improved".

On the other hand, another teacher claimed that although the intervention was beneficial to some students, there were also others who did not improve because of their previous attitudes towards the language. Aisha stated:

"....., however, some students' level didn't improve because of their attitudes towards the language, for example the student X was obliged to study English".

Teachers' Listening self-efficacy beliefs

Teaching listening strategies was a new method for the teachers who participated in the teacher training, therefore, they seemed unsure of whether they would succeed in teaching them or not. After the application of the intervention, the participants demonstrated their awareness of listening and how it should be approached. However, participants acknowledged that they encountered some difficulties applying it effectively during actual classroom teaching. All teachers mentioned that it was not easy for them as it was their first-time teaching in this way and guiding students through the session. For instance, Aisha said:

"Teaching students the strategies is training myself as well. So, whenever I prepare a listening task, I try to test myself as well because till now I feel like I still have some weaknesses concerning listening".

Aisha admitted that even though she was a teacher, she doubted her listening proficiency. So, training students on using listening strategies was an opportunity for her as well to train herself on using them.

In addition to that, Celia also reflected on her difficulty managing the session as she found that she was concentrating on explaining the strategies more than giving her students the chance to practise. She illustrated:

"Sometimes I missed things while teaching the strategies as it is new to me. I took more time repeating and explaining more than giving opportunities for practice".

Moreover, Hana questioned her ability to teach listening strategies effectively because of her low self-efficacy beliefs. She also doubted her ability to evaluate students' listening mainly from her lack of mastery experience in teaching the language in general. She admitted: "I believe I can set their frame of mind and help them to concentrate and on what they need to focus on using the strategies, but I am not sure I can do it in an effective way.... When it comes to evaluation, I know I am not good in all the areas of the language not only in listening".

Similarly, Zahra referred to her teaching background and highlighted the importance of teacher knowledge and skills in the subject. She emphasised:

"I would say, not anyone can teach listening. There are some things that the teacher should master to teach listening and they should keep a continuous mentoring of each student to reach the effectiveness of its teaching. I can improve students' listening a little bit but not with a big difference.... I think there are some gaps concerning my teaching. I personally do not master the strategies".

According to Zahra, the department should be accountable for recruiting and allocating knowledgeable and qualified teachers in the area of Oral Expression to teach the module in order to ensure effective learning. Therefore, she seemed unsure about her efficacy to teach listening because she did not have the adequate skills needed to teach it.

As a consequence, all participants claimed that it was not sufficient to have intensive training and that a continuous training was needed, if they were to become more efficient in teaching listening. They felt that the training they received for this study was not enough for them because they had no previous knowledge of listening strategies. For instance, Hana said:

"I did not know how to teach listening; I just teach the way I have been taught. I realised too many things about listening which I was not aware of before, but I think I need more training on teaching the strategies....For the next year, if I'll be teaching the same module, I believe I'll do better, there will be an improvement".

Hana reflected on how she benefited from receiving the training and teaching the strategy instruction. She also expressed her willingness to adopt the same method for the next academic year which indicates her satisfaction with its impact on her and her students.

To conclude, it was evident that the strategy instruction had a positive impact on teachers' cognition and practice. Besides, students' performance and motivation were also noticed by their teachers which indicates its success at both levels. Research-based teacher training raised participants' awareness of the nature of listening and how it should be targeted which appeared later in their practice the classroom where their interest altered to focus on teaching strategies to develop listening per se. Despite the awareness and knowledge gained from the training and the teaching of strategies; however, the participants did not show high level of self-efficacy to teach listening effectively, but acknowledged that they encountered some difficulties during the application of the intervention as it was not an easy task for them. They attributed this to their lack of knowledge and use of the strategies throughout their educational experience. Hence, they suggested an on-going training would be more effective for the future.

5.8.2 Classroom Observation analysis

Observation as a research tool was used before the intervention, first, to explore the way teachers approach listening classes, and second, to compare between their stated practice in the questionnaire they completed and their actual instructional practice. The observation schedule was developed according to the listening lesson stages (pre-listening, during listening and post-listening). The Yes or No columns were analysed by counting the frequency of each item with reference to each teacher (class); as far as the less structured parts in the observation is concerned, they were summarised as suggested by Cohen et al. (2018).

The observation was also used once during the intervention with both groups – intervention and comparison – in order to ensure that the application of the instruction with the first group was conducted, and to check the instructional practice in the second group and to ensure that students in this group did not receive any strategy instruction. Additionally, to eliminate the effect of the observation on the participants during this stage, teachers in both groups were given a teaching log to record their practice in the classroom outside of observed lessons.

5.8.2.1 Pre-intervention

During the pre-intervention phase, all teachers were observed once using the observation grid. However, there was no particular sequence for the observation to be conducted in relation to the other research instruments, sometimes it was conducted before delivering the other research tools and other times after. The observation data are shown below according to the different stages in the listening lesson.

	Yes or No	What has been done	Type of listening activities	Teaching strategies (if any, what are they?)	Students' motivation/ engagement
Pre-listening Planning (contextualisation) - introducing the topic - discussing text genre - discussing cultural information - information/words prediction - possible answers discussion - introducing strategies (modelling)	イイ	 Teacher asking general questions about the theme of the session Teacher asking to read the audio/video-related questions 	Guess the topic from a picture	None	- Provide some theme-related vocabulary
During listening				None	Individual work
1 st listening (verification) - peer-discussion - planning		- Listen and take notes - Listen to general idea	- Filling gaps		
2 nd listening (verification) - class discussion (about pertinent details or answers) - students' reflection on they arrived at the meaning of some words, or part of the text	√	- Listen to details	- Filling gaps - True and false statements	None	Answer comprehension questions
3 rd listening (final verification) - using transcripts (e.g. demonstrate sound-symbol differences) - model listening strategies to be used in future activities to solve comprehension problems		- Listen to confirm the answers and complete what was missing	- Filling gaps - True and false statements	None	 Answer comprehension questions Ask teacher about individual difficult words
Post-listening Evaluation (reflection) - students reflect on the difficulties encountered in the previous activity - students set goals on how to listen for the next activity using listening strategies		 Read the audio dialogue from scripts listen to the speakers' accents Testing students' knowledge of figures of speech 	 Listen then repeat Teacher selecting some idiomatic expressions from the audio script then students provide their 	None	 Practise the dialogue in pairs for the sake of encouraging speaking Low level of engagement

Table 5. 10 Summary of main data from classroom observation for all participants at Time 1

Pre-listening phase

During this phase, most teachers were observed to introduce the subject of the audio before playing it. This was carried out by showing subject-related pictures and asking students to guess the theme, asking general questions about the topic, or asking about subject-related vocabulary and expressions to prepare students for the audio. On the other hand, some teachers did not prepare students at all for the content or subject of the audio they were going to listen to, but they immediately played the audio. During this stage, students were observed to be motivated in the classes where the preparation for the audio took place. As far as the teaching or modelling of strategies is concerned, none of the teachers demonstrated this.

During-listening phase

During this phase, it was noticed that different subjects or themes were introduced in each class; among the 10 classes none covered the same theme. Additionally, all teachers were noted to use two or three different audio passages in one session, and most audios were themerelated. Moreover, the listening opportunities for one audio differed from one class to another, as it was observed that some teachers played each individual audio twice or three times successively without a pause. Simultaneously, in almost all the classes students were asked to listen and complete a fill in the gaps-activity or listen and take notes to answer the general comprehension questions about what they were listening to. Extra repetitions of the audio were given for students to check their answers and complete what they did not catch during the previous listening. There was no peer discussion, rather it was an individual work. Besides, students were observed to interact only to answer the comprehension questions and sometimes to ask the teacher or their peers about the meaning of difficult words. Afterwards, no discussion or reflection about how students arrived at particular answers took place.

Post-listening phase

Concerning the last phase of the lesson, all teachers focused on two aspects of the language: vocabulary and speaking. On one hand, they tended to play the audio once and stop it whenever there was new, difficult vocabulary, or idiomatic expressions from the audio and ask students to get their meaning without showing them how to work it out themselves. Also, students were asked to use the vocabulary learnt during the session in writing, then read aloud

what they had written. On the other hand, students were instructed to listen to individual words and mark how they were pronounced by different native speakers (different accents) in order to raise their awareness of the correct pronunciation of words. Moreover, all teachers were noticed to prompt students to share their general knowledge and personal ideas about the subject dealt during the session in order to encourage them practise their speaking skills.

5.8.2.2 During the intervention

As far as the comparison group is concerned, the instructional practice in all classes was found to be similar to those during pre-intervention. Concerning the intervention group, the five teachers were provided with a list of the main listening strategies to be taught during the intervention (see Appendix L) and to be shared with the students. The researcher observed the first session with all teachers to ensure they introduced and presented the strategies clearly for the students (awareness raising); in some cases, the researcher's assistance was required particularly when providing examples for the strategies.

5.8.3 Teacher log

Teachers in both groups completed the teaching log, for six sessions rin the comparison group and five sessions for the intervention group (excluding the first session of strategy introduction). For the comparison group, the classroom logs were checked regarding the lesson content and whether any listening strategy was taught. The content of the logs collected from this group was similar to those found in the observation and no listening strategy was found to be taught. Concerning 'learners' response' section in the logs provided, all the participants reported that there was engagement and interaction between students, and they showed motivation during the lesson. Teachers, then mentioned their satisfaction about the lesson because they achieved the goals they set beforehand by undertaking all the listening tasks. In the 'any changes for next time' section, they reported introducing another theme so that students would be exposed to as much themes as possible.

Regarding the intervention group, the participants also completed the classroom log at the end of each lesson. The researcher provided the participants with some sample listening lessons they could use in the classroom, and they were given the freedom whether to adhere to these samples or design their own materials ensuring that the teaching of strategies would take place. The following table summarises the main data gained from the intervention group.
Activities used How did you feel it Phase Learners' Any changes for next went? Why? time? response - Look at the picture on the screen - Work in pairs, - Quite good and - Not to spend too satisfied because and *predict* what it is about. then whole class much time on this Pre-- Look at the different pictures, and - Involved and most students were phase read the provided answer for each highly motivated engaged missing question or vice versa, then - Not to give them too listening - Ready and *predict* what is the missing sentence many details about prepared from the in each picture (e.g. what did the beginning of the the content of what mother tell her daughter?) session they are going to listen, rather give them the opportunity to predict by themselves - Listen and take notes -Listening - More demanding than the previous - Listen and focus on stressed and attentively repeated words, and the background method and - Challenge students sounds (if any) to identify the theme - Interacting and sometimes they had by reducing the of the passage. sharing what they to repeat the number of listening - Discuss answers in pairs and heard instruction several times. While whole class - Taking notes times - Listen and verify the answers by focusing on the speakers' tone of listening - Beneficial for the voice to identify their attitudes and teacher as well, there opinions about something were things they - listen and count number of words were not aware in each statement before. - listen and use background - It is effective as it knowledge to identify the item keeps the students' described in each conversation attentive. - multiple choice questions (focusing on transition words/expressions) - multiple choice questions (focusing on minimal pairs) - 'Listen and say it' game - Those with low - A totally different - More challenging (competition between 2 or 3 proficiency level method from the activities. students, using the strategies taught, Postwere reluctant to previous one. participate in the to compare who had a better understanding) listening and listening - Listen and read the audio speaking game (during the first transcripts (script-sound recognition in connected speech) lessons) - Listen and complete the crossword - Motivated. puzzle with the missing word. interested, and excited.

Table 5.11 Summary of main data from classroom logs for the participants in the intervention group

The table above shows a summary of the main data reported in the classroom logs by participants in the intervention. It is evident that there was a greater variety of listening activities in comparison to those used before the intervention. Besides, it seems that teachers tried to raise their students' awareness of how to approach listening by showing them what they needed to

do in order to reach comprehension. It is also found that all teachers reported students to be highly motivated and engaged during three listening phases, which converges with what was found in teachers' and students' interviews regarding the change in students' motivation. Moreover, the participants reflected on, first, the effectiveness of the strategy-instruction method on students' listening, and second, on them as they considered it as an opportunity for them to learn and practise. This was the case even though they reported that this method of teaching listening seemed demanding for them in comparison to the previous one.

CHAPTER SIX: FINDINGS (II) – STUDENTS

6.1 Quantitative data

6.1.1 Effect of strategy and metacognition-based instruction on students' reported metacognitive knowledge

The participants' metacognitive knowledge of listening was elicited by the adapted MALQ and Zoghlami's SQFIL (Students' Questionnaire on Factors Influencing Listening) that the students completed after they finished the listening test at Times 1 and 2. As mentioned in Section 4.5.2.1.2 metacognitive knowledge was presented in the second part of the student questionnaire and it included 15 statements rated on a six-point Likert scale from 1 (strongly disagree) to 6 (strongly agree). Some of the statements held negative meaning which were then recoded to positive statements. Therefore, all the statements carried positive meaning. As internal consistency for the test was good at pre-test and post-test, a total metacognitive score was calculated at each timepoint, and tests of normality conducted on each. Table 6.1 shows the descriptive statistics of students' reported metacognitive knowledge of listening for the intervention and comparison groups at pre-test and post-test.

	Pre-test					Post-test				
Condition	Ν	Mean	SD	Min	Max	Mean	SD	Min	Max	
Intervention	97	3.87	0.55	2.47	5.00	3.90	0.56	2.33	5.13	
Comparison	89	3.73	0.58	2.13	5.07	3.53	0.57	2.33	5.13	
Total	186	3.80	0.57	2.13	5.07	3.72	0.59	2.33	5.13	

Table 6.1 Descriptive statistics for student metacognitive knowledge

The results indicate that at the pre-test the groups reported almost similar levels of knowledge regarding listening and themselves as listeners to English. The findings demonstrated that students had a moderate level of metacognitive knowledge about listening. At the post-test, the mean values showed that the scores of the intervention group increased slightly while the comparison group decreased. Despite the change, students in both groups still held a moderate metacognitive knowledge of listening. When the scores of all participants were combined, a decrease of .08 was found. To check the impact of the intervention on student

metacognitive knowledge and the differences between the intervention and comparison groups before and after the treatment, a parametric mixed ANOVA test was used. Time was the withinsubjects factor (pre and post-test) and group (intervention and comparison) was the betweensubjects factor. Both groups had equal variances at pre-test (p = .98) and (p = .78) at post-test in addition to equal covariances (p = .32). The results demonstrated a significant small main effect of time, F (1,184) = 4.859, p = .029, $\eta^2 = .005$. There was a significant main effect of group, F (1,184) = 11.835, p = .001, $\eta^2 = .046$, with a small effect size. There was also a significant small interaction effect for time and group, F (1,184) = 7.745, p = .006, $\eta^2 = .008$.

This interaction was then explored through post-hoc tests with Bonferroni correction which indicated that the groups were not significantly different at pre-test (p = .09) but were significantly different at post-test to the advantage of the intervention group (M = 0.37, 95% CI [.20, .52], p < .001, , d = .66), with a medium effect size. Further, the intervention group did not show a significant change from the pre-test to the post test (p = .68). On the other hand, the comparison group declined significantly from the pre-test to the post-test (M = -0.2, 95% CI [-0.3, -0.08], p = .001, d = .35), with a small effect size.



Figure 6. 1 Means of student metacognitive knowledge

6.1.2 Effect of strategy and metacognition-based instruction on students' reported strategy use

The participants' reported strategy use in listening was elicited by the adapted MALQ completed by the students after the listening test at Times 1 and 2. As mentioned in Section 4.5.2.1.2, strategy use appeared in the second section of the student questionnaire and it included 20 statements rated on a four-point Likert scale from 1 (never) to 4 (always). Some statements held negative meaning which were then recoded to positive statements. Therefore, all the statements carried positive meaning. As internal consistency for the test was good at pretest and post-test, a total strategy-use score was calculated for the two timepoints, and tests of normality conducted on each. Table 6.2 shows the descriptive statistics of students' reported strategy use for listening for the intervention and comparison groups at pre-test and post-test.

Table 6.2 Descriptive statistics for student strategy use

	Pre-test						Post-test			
Condition	Ν	Mean	SD	Min	Max	Mean	SD	Min	Max	
Intervention	97	2.54	0.32	1.55	3.15	2.66	0.38	1.50	3.40	
Comparison	89	2.56	0.35	1.60	3.30	2.46	0.33	1.70	3.15	
Total	186	2.55	0.34	1.55	3.30	2.56	0.37	1.50	3.40	

The results indicate that at the pre-test the groups reported a similar level regarding the frequency of using listening strategies. At the post-test, the mean values show that the scores of the intervention group increased slightly, approaching a mean of 3 which would represent frequent use. By contrast, mean scores decreased for the comparison group, indicating sometimes to frequent use. When the scores of all participants were combined, an increase of 0.01 was found.

To check the impact of the intervention on student strategy use and the differences between the intervention and comparison groups before and after the treatment, a parametric mixed ANOVA test was used. Time was the within-subjects factor (pre and post-test) and group (intervention and comparison) was the between-subjects factor. Both groups had equal variances at pre-test (p = .55) and (p = .07) at post-test in addition to equal covariances (p = .29). The results demonstrated no significant effect of time, F(1,184) = .297, p = .59, $\eta^2 = .00$. However, there was a small significant main effect of group, F(1,184) = 3.89, p = .05, $\eta^2 =$.016. There was also a small significant interaction effect time and group, F(1,184) = 21.56, p < .001, $\eta^2 = .022$.

This interaction was then explored through post-hoc tests with Bonferroni correction which indicated that the groups were not significantly different at pre-test (p = .75) but were significantly different at post-test to the advantage of the intervention group (M = 0.2, 95% CI [.09, .30], p < .001, d = .57), with a small to medium effect size. Further, the intervention group showed a significant increase from the pre-test to the post test (M = 0.12, 95% CI [.05, .18], p < .001, d = .34), with a small effect size. On the other hand, the comparison group declined significantly from the pre-test to the post-test, (M = -0.1, 95% CI [-0.16, -0.03], p = .005, d = .29), with a small effect size.



Figure 6. 2 Means of student strategy use

6.1.3 To what extent does receiving listening strategy instruction improve learners' listening proficiency?

Section 4.5.2.2 explained that the vocabulary test, taken only at pre-test by all learners, was used as a covariate to reduce within-group error variance while assessing the difference between group means more sensitively. The assumptions of including covariates (independence from the treatment and homogeneity of regression slopes) in the study were met. Figure 6.3

confirms the second assumption. Table 6.3 gives the descriptive statistics for the vocabulary scores while the mean scores are presented as percentages.



Figure 6. 3 Scatterplot of relationship between vocabulary scores with listening scores for the intervention and comparison groups before the intervention.

Table 6.3 Descriptive statistics for student vocabulary test

Condition	Ν	Mean (%)	SD	Min (%)	Max (%)
Intervention	97	59.93	14.44	18.25	88.09
Comparison	89	59.59	15.93	17.46	93.65
Total	186	59.76	15.13	17.46	93.65

Table 6.3 shows that the highest and lowest vocabulary scores were both found in the comparison group. However, the mean scores in both groups were almost equal with some differences in the standard deviation values, although both groups demonstrated a large degree of variability for students' level of vocabulary.

The listening test was delivered twice, at pre-test and post-test for both the intervention and comparison groups. As the internal consistency of the tests was good a total listening score at pre and post-test was calculated, and test of normality conducted on each. Table 6.4 shows the descriptive statistics for the listening tests. The maximum score the students could achieve was 35 though the mean scores are presented as percentages. At the pre-test, the intervention group had a higher mean score than the comparison group. At the post-test, the score of the intervention group increased while the comparison group decreased. When the scores of all participants were combined, a small pre- to post-test increase of 0.82 percent was found.

		Pre	-test		Post-test			
Condition	Mean (%)	SD	Min (%)	Max (%)	Mean (%)	SD	Min (%)	Max (%)
Intervention	42.62	18.16	8.57	85.71	47.14	15.58	17.14	87.14
Comparison	39.53	18.41	2.85	82.85	36.32	16.96	5.71	91.42
Total	41.14	18.29	2.85	85.71	41.96	17.10	5.71	91.42

Table 6.4 Descriptive statistics for student listening tests

To answer the first sub-question of the second main question, and as the variables met the assumptions for the test used, a mixed ANOVA was conducted with time as the withinsubjects factor, group as a between-subjects factor, and vocabulary as a covariate. There was a significant small effect of time, F(1, 183) = 6.807, p = .01, $\eta^2 = .004$ with performance at posttest higher than at pre-test. A significant small main effect of group was found, F(1, 182) =12.11, p = .001, $\eta^2 = .053$. There was however a significant small interaction effect of time and group, F(1, 183) = 26.58, p < .001, $\eta^2 = .018$. This interaction was then explored through posthoc tests with Bonferroni correction which indicated that the groups were not significantly different at pre-test (p = .185) but were significantly different at post-test with a medium to large effect size (M = 10.65, 95% CI [6.71, 14.52], $p < .001, d_A = .78$). Further, the intervention group showed a significant improvement from the pre-test to the post test with a small effect size $(M = 4.54, 95\% \text{ CI} [2.49, 6.58], p < .001, d_A = .32)$. On the other hand, the comparison group declined significantly from the pre-test to the post-test with a small effect size (M = -3.23, 95% CI [- 5.36, - 1.09], p = .003, $d_A = .23$). In summary, even after controlling for initial vocabulary levels, learners in the intervention group made significantly more progress in listening than the comparison group did.



Figure 6. 4 Means of listening comprehension scores

6.1.4 To what extent does receiving listening strategy and metacognition-based instruction improve learners' listening self-efficacy beliefs?

The self-efficacy inventory appeared in the third part of the student questionnaire and was administered to both groups at the beginning and the end of the study. The inventory included 13 statements for which students were asked to indicate their level of confidence, ranging from 0 to 100%. As internal consistency for the test was good at pre-test and post-test, a total self-efficacy score was calculated for each timepoint, and tests of normality conducted on them. Table 6.5 demonstrates the mean scores of students' reported self-efficacy scores at pre-test and post-test for the intervention and comparison groups.

			Pre	-test		Post-test			
Condition	Ν	Mean (%)	SD	Min (%)	Max %	Mean (%)	SD	Min (%)	Max (%)
Intervention	97	67.18	15.21	28.46	93.85	71.07	14.50	30.77	100
Comparison	89	64.84	15.45	33.85	100	61.33	12.86	25.38	88.46
Total	186	66.06	15.33	28.46	100	66.41	14.55	25.38	100

Table 6.5 Descriptive statistics for student self-efficacy scores

Descriptive statistics showed that students had a relatively high level of self-efficacy. At pre-test the intervention group had a higher mean score than the comparison group. At the post-test, the scores of the intervention group increased while those for the comparison group decreased. When the scores of all participants were combined, a small increase of 0.35 percent was found.

To answer the second sub-question of the second main research question, and as the variables met the assumptions for the test used, a mixed ANOVA was conducted with time as the within-subjects factor, group as a between-subjects factor, and pre-test listening scores as covariate. The assumptions of including a covariate (independence from the treatment and homogeneity of regression slopes) in the study were met. *Figure 6.5* confirms the second assumption. The results revealed that there was no main effect of time, F(1,183) = .797, p = .373, $\eta^2 = .00$. However, there was a significant small main effect of group, F(1,183) = 8.065, p = .005, $\eta^2 = .034$. There was however a significant small interaction effect of time and group, F(1,183) = 18.524, p < .001, $\eta^2 = .018$. The effect size of group and its interaction with time was medium to large.



Figure 6. 5 Scatterplot of relationship between self-efficacy scores and listening scores for the intervention and comparison groups before the intervention.

This interaction was then explored through post-hoc tests with Bonferroni correction which indicated that the groups were not significantly different at pre-test (p = .50) but were significantly different at post-test (M = 8.68, 95% CI [5.11, 12.25], $p < .001, d_A = .71$) with a medium effect size. Further, the intervention group showed a significant improvement from the

pre-test to the post test (M = 3.81, 95% CI [1.50, 6.11], p < .001, $d_A = .29$) with a small effect size. On the other hand, the comparison group declined significantly from the pre-test to the post-test (M = -3.44, 95% CI [- 5.84, - 1.03], p = .005, $d_A = .26$) with a small effect size. Thus, the results of the initial mixed ANOVA were confirmed, even after controlling for initial listening comprehension scores.



Covariates appearing in the model are evaluated at the following values: Pre_Listening_Test = 41.1416

Figure 6. 6 Means of self-efficacy beliefs scores

To conclude, the findings demonstrated that the intervention had a significant positive effect on students' reported strategy use, listening performance and self-efficacy. However, their reported metacognitive knowledge slightly improved but could not reach significance. As far as the comparison group is concerned, their levels in all the previous aspects deteriorated significantly. As a result, a medium to large effect size between the groups was found. Moreover, within each group, a small effect size from Time 1 to Time 2.

6.1.5 To what extent is student listening performance predicted by their listening self-efficacy, teacher self-efficacy beliefs and other variables?

In order to understand the nature of student listening performance in relation to other variables, a five-stage sequential multiple regression was conducted with listening performance scores as the dependent variable at Time 1. This type of multiple regression requires entering the variables into the regression equation one at a time. Researchers note that there is no correct method to choose the order of variable entry, however, the order is determined by the researcher based on actual or presumed time precedence (Keith, 2019), theory or previous research, logic and perceived theoretical importance (Keith, 2019; Tabachnick & Fidell, 2014). Therefore, the variable included in the first model was vocabulary, as it was found by many researchers (e.g. Goh & Hu, 2014; Mecartty, 2000; Stæhr, 2009; Vandergrift & Baker, 2015; Wang & Treffers-Daller, 2017) to have a high correlation with or high amount of variance in explaining L2 listening. Then, metacognitive knowledge was inserted in the next model because previous research (e.g. Vandergrift et al., 2006; Goh & Hu, 2014) found that significant variance in listening performance was explained by metacognition. Next, research on listening strategies has received attention in the field and researchers argue for the predictive power of strategies in improving students' listening (e.g. Cotterall, 1999; Dimassi, 2016; Graham, 2007). However, researchers argue that metacognition plays a crucial role in monitoring the effective use of listening strategies to avoid their misuse, therefore, metacognition was considered prior to strategy use in the current model. In the fourth model, students' self-efficacy was entered. Literature in the field suggests a relationship between learners' self-efficacy and their listening performance (Graham, 2006; Simasangyaporn, 2016; Yan, 2012); however, the nature of this relationship is not clear-cut. For instance, Mills et al. (2006) found no significant contribution of learners' self-efficacy to their L2 listening performance. In the last model, teacher selfefficacy was entered. Literature in general education suggests a relationship between teachers' self-efficacy and their learners' achievement; however, in the field of L2/FL listening, this relationship has not yet been researched, thus it was inserted last to explore its contribution to listening research area.

6.1.5.1 Sequential multiple regression at Time 1

a. Intervention group

Considering the multiple regression assumptions, Table 6.6 shows the correlation matrix between the five IVs involved in the model and the DV (listening comprehension) for the intervention group at Time 1. The results demonstrated that there was no high correlation between the IVs, hence, no multicollinearity was found. Furthermore, the table also showed no significant correlation between the teacher self-efficacy variable and the outcome variable (listening comprehension), however, this does not mean that there was no relationship. Field (2018) noted that if such variables correlate with other predictors in the regression model, there is a possible predictive ability of these variables on the outcome. Hence, the teacher self-efficacy was found to correlate significantly with strategy use; thus, it was included in the regression model as shown in Table 6.7.

	Vocabulary	Metacognitive knowledge	Strategy use	Self-efficacy	Teacher self- efficacy
Listening comprehension	.57**	.37**	.42**	.35**	.14
Vocabulary	-	.35**	27**	.34**	05
Metacognitive knowledge		-	.49**	.41**	05
Strategy use			-	.48**	.26**
Self-efficacy				-	.11
Teacher self- efficacy					-

Table 6.6 Correlation matrix between the IVs and the DV (listening comprehension) for the intervention group at Time 1.

**significant at the .01 level

Table 6.7 summarises the results of the hierarchical regression analysis for the intervention group. In sequential multiple regression, the focus of analysis is towards the change in R^2 to identify whether a variable is important in the equation and its statistical significance (Keith, 2019). Vocabulary was entered at Step 1 and it contributed significantly to the model, F(1, 95) = 44.98, p < .001 and accounted for 32.1% of the variation in listening scores. Introducing metacognitive knowledge explained an additional 3.3% of variation in listening

(after controlling for vocabulary) and this change in R^2 was significant, F(2, 94) = 25.78, p < .001. The total variance explained by the third model increased by 4.8 % when strategy use was added to the model, F(3, 93) = 20.90, p < .001. However, in the fourth model, the addition of student self-efficacy did not contribute significantly to the model (p = .61). Similarly, when teacher self-efficacy was added to the model at the last step, a non-significant increase of 1% to the model was found (p = .21). In total, all the variables together explained 41.5% of the variance in student listening performance and vocabulary recorded the highest contribution.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
Model	Testamont	Λ	ΔΛ			р	-	
1	Intercept	.321	.321	20 CI (-13.23, 12.82)	6.56		03	.97
1	Vocabulary	.321	.321	.71	.10	.56	6.70	<.001
	v ocuourur y			(.50, .92)	.10	.50	0.70	<.001
	Intercept			-19.60	10.95		-1.79	.07
				(-41.34, 2.14)				
2	vocabulary	.354	.033	.63	.11	.50	5.64	< .001
				(.40, .85)				
	Metacognitive			6.31	2.88	.19	2.18	.03
	knowledge			(.58, 12.04) -39.14	10.75		2.06	002
	Intercept				12.75		-3.06	.003
3	Vocabulary			(-64.47, -13.81) .59	.11	.47	5.48	< .001
5	v ocabulai y	.403	.048	(.38, .81)	.11	.+/	5.40	< .00
	Metacognitive			2.51	3.11	.07	.80	.42
	knowledge			(-3.66, 8.70)		,		
	Ctrata and and			14.29	5.20	25	2.74	.007
	Strategy use			(3.96, 24.63)	5.20	.25	2.74	.007
	Intercept			-38.89	12.81		-3.03	.003
	intercept			(-64.35, -13.43)	12.01		5.05	.005
	Vocabulary			.58	.11	.46	5.25	< .00
	v oedoulary			(.36, .80)	.11	.10	5.25	<.00
4	Metacognitive			2.23	3.17	.06	.70	.48
	knowledge	.404	.002	(-4.08, 8.54)				
	Strategy use			13.36	5.54	.23	2.41	.01
	0.16.66			(2.35, 24.36)	11	07	50	(1
	Self-efficacy			.05	.11	.05	.50	.61
	Intercept			(17, .28) -45.54	13.81		-3.29	.001
	intercept			(-72.97, -18.10)	13.01		-3.29	.001
	Vocabulary			.59	.11	.47	5.36	< .00
5	, ocuc unu y			(.37, .82)			0.00	
	Metacognitive			2.99	3.22	.09	.92	.35
	knowledge	.415	.010	(-3.41, 9.39)				
	Strategy use			11.156	5.79	.20	1.926	.05
				(349, 22.66)				
	Self-efficacy			.051	.11	.04	.443	.65
	I 10			(18, .28)		10	1.0.5	
	Teacher self-			.140	.11	.10	1.267	.20
	efficacy			(08, .36)				

Table 6.7 Summary of hierarchical multiple regression analysis for variables predicting student listening performance in the intervention group at Time 1.

b. Comparison group

Similar procedures to the intervention group were conducted with students in the comparison group. Table 6.8 shows the correlation matrix between the five IVs involved in the model and the DV (listening comprehension) for the comparison group at Time 1. The results demonstrate a high correlation between student self-efficacy and strategy use variables. Similarly, results from the collinearity statistics demonstrated a relatively high value of Variance Inflation Factor (*VIF* > 2) for student self-efficacy, which indicates that this variable should be removed from the regression model. Then, regression was conducted with and without student self-efficacy, and the results were identical. Therefore, it was decided to keep the variable in the model.

	Vocabulary	Metacognitive knowledge	Strategy use	Self-efficacy	Teacher self efficacy
Listening comprehension	.62**	.44**	.39**	.35**	.03
Vocabulary	-	.42**	24**	.33**	28**
Metacognitive knowledge		-	.36**	.53**	05
Strategy use			-	.64**	.14
Self-efficacy				-	05
Teacher self- efficacy					-

Table 6.8 Correlation matrix between the IVs and the DV (listening comprehension) for the comparison group at Time 1.

**significant at the .01 level

Table 6.9 summarises the results of the hierarchical regression analysis for the comparison group. Findings demonstrated that vocabulary contributed significantly to the model, F(1, 87) = 53.72, p < .001 and accounted for 38.2% of the variation in listening scores which was larger than what was found in the intervention group. Introducing metacognitive knowledge explained an additional 4% of variation in listening (after controlling for vocabulary) and this change in R^2 was significant, F(2, 86) = 31.38, p < .001. This was also slightly larger than what was found in the intervention group. The total variance explained by the third model increased by 3.9% when strategy use was added to the model, F(3, 85) = 24.18, p < .001. This was slightly smaller than what was found in the intervention group. The addition

of student self-efficacy did not contribute significantly to the model (p = .60). Similarly, when teacher self-efficacy was added to the model at the last step, a non-significant increase of 2% to the model was found (p = .06). In total, all the variables together explained 48.3% of the variance in student listening performance and vocabulary recorded the highest contribution.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
	Intercept			-2.99	6.00		450	.62
1		.382	.382	CI (-14.93, 8.94)				
	Vocabulary			.71	.09	.61	7.33	< .001
				(.52, .91)				
	Intercept			-22.71	9.96		-2.28	.02
				(-42.51, -2.91)				
2	vocabulary	.422	.040	.60	.10	.52	5.83	< .001
				(.40, .81)				
	Metacognitive			6.97	2.85	.22	2.44	.01
	knowledge			(1.30, 12.64)	10.24	-	2.26	001
	Intercept			-41.58	12.34		-3.36	.001
	Veeeberlem			(-66.13, -17.04) .58	.10	50	5.71	< 001
3	Vocabulary	.460	.039		.10	.50	5.71	< .001
5	Metacognitive	.400	.039	(.38, .78) 4.84	2.90	.15	1.66	.09
	knowledge			4.84 (-9.93, 10.62)	2.90	.15	1.00	.09
	Kilowieuge			(-9.93, 10.02)				
	Strategy use			11.09	4.50	.21	2.46	.01
				(2.14, 20.06)				
	Intercept			-43.69	12.96		-3.37	.001
				(-69,47, -17.92)				
	Vocabulary			.58	.103	.51	5.72	< .001
4				(.38, .79)				
	Metacognitive			5.47	3.13	.17	1.75	.08
	knowledge	.462	.002	(75, 11.70)				
	-							
	Strategy use			12.79	5.45	.24	2.34	.02
				(1.95, 23.64)				
	Self-efficacy			07	.13	06	55	.57
				(35, .19)		_		
	Intercept			-59.37	15.36		-3.86	< .001
				(-89.93, -28.82)				
	Vocabulary			.65	.10	.56	6.08	< .001
-				(.44, .87)				
5	Metacognitive	102	021	4.56	3.12	.14	1.45	.14
	knowledge	.483	.021	(-1.66, 10.78)				
	Cture to			10.72	E 40	20	1.05	07
	Strategy use			10.73	5.49	.20	1.95	.05
	0.10.00			(19, 21.66)	10	0.4	27	71
	Self-efficacy			05	.13	04	37	.71
	Tasala a 10			(32, .22)	1.4	1.5	1.0.4	07
	Teacher self-			.26	.14	.15	1.84	.06
	efficacy			(02, .55)				

Table 6.9 Summary of hierarchical multiple regression analysis for variables predicting student listening performance in the comparison group at Time 1.

6.1.5.2 Sequential multiple regression at Time 2

Another sequential multiple regression was conducted with the participants in both groups when listening performance at Time 2 was the dependent variable. Students in the intervention group received a strategy and metacognition-based instruction in listening, and those in the comparison group received the conventional instruction. Results from Repeated measures ANOVA (Section 6.1.3) demonstrated a change in participants' listening performance from Time 1 to Time 2; while those in the intervention group improved significantly, those in the comparison group deteriorated significantly. The predictors, metacognitive knowledge, strategy-use, student self-efficacy and teacher self-efficacy were also found to change from Time 1 to Time 2, however, vocabulary was only measured once at Time 1. The following section presents findings from both groups regarding the predictive power of these variables on participants' listening performance at Time 2 separately.

a. Intervention group

The same procedures followed at Time 1 were undergone at Time 2. The correlation matrix at this time did not involve variables measured at Time 1 as they were found to correlate highly with those measured at Time 2 and showing a high value of *VIF*. Therefore, for listening performance, four variables measured at Time 2 in addition to vocabulary scores were included in the regression model as the main predictors. Table 6.10 shows the correlation between the IVs and the DV for the intervention group at Time 2. No multicollinearity was found.

	Vocabulary	Metacognitive knowledge 2	Strategy- use 2	Self- efficacy 2	Teacher self- efficacy2
Listening scores 2	.56**	.41**	.32**	.48**	.39**
Vocabulary	-	.21**	.22**	.28**	.24**
Metacognitive knowledge 2		-	.30**	.41**	.24**
Strategy-use 2			-	.38**	.18**
Self-efficacy 2				-	.21**
Teacher self- efficacy2					-

Table 6.10 *Correlation matrix between the IVs and the DV (listening comprehension) for the intervention group at Time 2.*

*significant at the .01 level

Table 6.11 summarises the results of the hierarchical regression analysis for the intervention group at Time 2. After receiving the instruction, vocabulary still contributed significantly to the model, F(1, 95) = 42.51, p < .001 and accounted for approximately 31% of the variation in listening scores which is 1% smaller than at Time 1. Introducing metacognitive knowledge explained an additional 8.7% of variation in listening (after controlling for vocabulary) and this change in R^2 was significant, F(2, 94) = 30.80, p < .001. This contribution was more than twice what was found at Time 1. The total variance explained by the third model increased by 1.7% when strategy use was added to the model, F(3, 93) = 21.80, p < .001, but this change in R^2 was not significant (p = .10). However, in the fourth model, the addition of student self-efficacy contributed significantly by an additional 4.8% to the model F(4, 92) = 19.65, p < .001. This variable did not predict listening performance at Time 1. Similarly, when teacher self-efficacy was added to the model at the last step, a significant increase of 3.4% to the model was found F(5, 91) = 17.80, p < .001. In total, all the variables together explained 49.4% of the variance in student listening performance at Time 2, almost 8% larger than at Time 1, and vocabulary still recorded the highest contribution.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
	Intercept			11.10	5.68	-	1.95	.05
1		.309	.309	CI (17, 22.39)				
	Vocabulary			.60	.09	.55	6.52	< .001
				(.42, .78)				
	Intercept			-17.32	9.40		-1.84	.06
-				(-36.00, 1.34)				
2	vocabulary	.396	.087	.53	.08	.49	5.98	< .001
				(.35, .71)		20	2.67	001
	Metacognitive			8.36	2.27	.30	3.67	< .001
	knowledge 2			(3.84, 12.88) -27.11	11.07		-2.45	01
	Intercept				11.07		-2.45	.01
	Vocabulary			(-49.09, -5.13)	.09	.46	5.67	<.001
3	v ocabulat y	.413	.017	(.33, .68)	.09	.40	5.07	< .001
5	Metacognitive	.115	.017	7.36	2.33	.26	3.14	.002
	knowledge 2			(2.71, 12.01)	2.55	.20	5.14	.002
		-						
	Strategy use 2			5.71	3.48	.14	1.64	.10
				(-1.20, 12.64)				
	Intercept			-28.56	10.67		-2.67	.009
				(-49.76, -7.35)				
4	Vocabulary	461	0.49	.46	.08	.42	5.29	<.001
4		.461	.048	(.29, .63)				
	Metacognitive			5.25	2.37	.19	2.21	.02
	knowledge 2			(.54, 9.96)				
	Strategy use 2			3.02	3.49	.07	.86	.38
	Strategy use 2			(-3.91, 9.95)	5.49	.07	.00	.50
	Self-efficacy 2	-		.27	.09	.25	2.86	.005
	Self-efficacy 2			(.08, .46)	.09	.25	2.80	.005
	Intercept			-48.20	13.10		-3.67	<.001
	intercept			(-74.14, -22.16)	15.10		5.07	<.001
	Vocabulary			.42	.08	.39	4.95	< .001
	j			(.25, .60)				
5	Metacognitive	.494	.034	4.45	2.33	.16	1.91	.05
	knowledge 2			(17, 9.09)				
	ũ							
	Strategy use 2	1		2.49	3.40	.06	.732	.46
				(-4.27, 9.25)				
	Self-efficacy 2			.25	.09	.24	2.75	.007
				(.07, .44)				
	Teacher self-			.37	.15	.19	2.46	.01
	efficacy 2			(.07, .67)				

Table 6.11 Summary of hierarchical multiple regression analysis for variables predicting student listening performance in the intervention group at Time 2.

b. Comparison group

Similar procedures undergone with the intervention group were also followed with the comparison group. Table 6.12 shows the correlation matrix for the IVs and the DV for the comparison group at Time 2. No multicollinearity was found.

	Vocabulary	Metacognitive knowledge 2	Strategy-use 2	Self-efficacy 2	Teacher self- efficacy2
Listening scores 2	.55**	.49**	.36**	.43**	19**
Vocabulary	-	.32**	.22**	.43**	25**
Metacognitive knowledge 2		-	.56**	.50**	.04
Strategy-use 2			-	.53**	.05
Self-efficacy 2				-	.04
Teacher self- efficacy2					-

Table 6.12 Correlation matrix between the IVs and the DV (listening comprehension) for the comparison group at Time 2.

**significant at the .01 level

Table 6.13 summarises the results of the hierarchical regression analysis for the comparison group at Time 2. Findings demonstrated that vocabulary still contributed significantly to the model, F(1, 87) = 37.27, p < .001 and accounted for 30% of the variation in listening scores which was 8% smaller than what was found at Time 1. Introducing metacognitive knowledge explained an additional 11.2% of variation in listening (after controlling for vocabulary) and this change in R^2 was significant, F(2, 86) = 30.10, p < .001. This contribution was almost three times larger than what was found at Time 1. The other three variables: strategy use, student self-efficacy and teacher self-efficacy did not contribute significantly to the model, p = .33, .52, .19 respectively. In total, all the variables together explained 43.3% of the variance in student listening performance which is 5% smaller than at Time 1 and 6% lower than the variance explained for the intervention group. Vocabulary recorded the highest contribution.

		-2	2	-	~			~.
Model		R^2	ΔR^2	В	SE β	β	t	Sig
	Intercept		• •	1.59	5.88		.27	.78
1		.30	.30	CI (-10.10, 13.29)				
	Vocabulary			.58	.09	.54	6.10	< .001
	Testerest			(.39, .77)	0.17		2.00	002
	Intercept	.412	.112	-28.318	9.17		-3.08	.003
2	vocabulary	.412	.112	(-46.55, -10.08) .46	.09	.43	4.95	<.001
2	vocabulary			(.27, .64)	.09	.+5	4.95	< .001
	Metacognitive			10.50	2.59	.35	4.04	<.001
	knowledge 2			(5.14, 15.67)	2.57		1.01	1.001
	Intercept			-34.84	11.31		-3.07	.003
	1			(-57.35, -12.34)				
	Vocabulary			.45	.09	.43	4.89	<.001
3		.418	.007	(.27, .64)				
	Metacognitive			8.90	3.06	.30	2.90	.005
	knowledge 2			(2.80, 15.00)				
	Strategy use 2			5.06	5.14	.09	.98	.32
	Strategy use 2			(-5.15, 15.29)	5.11	.07	.,0	
	Intercept			-34.58	11.36		-3.04	.003
	Ĩ			(-57.18, -11.99)				
	Vocabulary			.43	.09	.40	4.38	<.001
				(.23, .63)				
4	Metacognitive	.421	.003	8.44	3.15	.28	2.67	.009
	knowledge 2			(2.17, 14.72)				
	Strategy use 2			3.81	5.50	.07	.69	.49
	0.16.65 0			(-7.13, 14.76)	1.4	07	<i></i>	C 1
	Self-efficacy 2			.09	.14	.07	.65	.51
	Intercept			(19, .38) -23.71	14.01		-1.69	.09
	Intercept			(-51.59, 4.16)	14.01		-1.09	.09
	Vocabulary			.39	.10	.37	3.81	<.001
	vocubulury			(.19, .60)	.10	.57	5.01	<.001
5	Metacognitive			8.68	3.14	.29	2.76	.007
	knowledge 2	.433	.012	(2.42, 14.95)				
	C							
	Strategy use 2	1		3.80	5.48	.07	.69	.48
				(-7.09, 14.71)				
	Self-efficacy 2			.11	.14	.08	.80	.42
				(17, .40)				
	Teacher self-			15	.11	11	-1.31	.19
	efficacy 2			(37, .07)				

Table 6.13 Summary of hierarchical multiple regression analysis for variables predicting student listening performance in the comparison group at Time 2.

6.1.6 To what extent is student listening self-efficacy predicted by their listening performance, teacher self-efficacy beliefs and other variables?

In order to understand the nature of student self-efficacy level in relation to other variables, a four-stage sequential multiple regression was conducted with student self-efficacy scores as the dependent variable. The variables included in the models and their order of entry were selected based on previous literature in the field. In the first model listening performance was entered. Despite the fact that the potential contribution of learners' listening performance on their sense of efficacy has not yet been investigated in previous work, a positive correlation has been found (e.g. Simasangyaporn, 2016; Yan, 2012). Moreover, Bandura's (1986) selfefficacy theory assumes that individuals' previous mastery experience is very likely to predict their sense of efficacy. Then, metacognitive knowledge about self and task was entered. Researchers such as Graham (2007) and Vandergrift and Goh (2012) suggest that focusing on comprehension processes, i.e. how learners listen, would help them improve their motivation and sense of efficacy in listening comprehension. Moreover, based on previous listening experiences learners develop awareness of how to manage the challenges they experienced, which affects their confidence of their ability to handle listening situations (Vandergrift & Goh, 2012). As argued in the previous section 6.1.5, the researcher considered metacognition prior to strategy use, therefore, this later variable was entered to the regression equation in the third model. Additionally, these researchers (Graham, Vandergrift and Goh) argued that using listening strategies could increase learners' beliefs about their ability to comprehend spoken language. Finally, teachers' self-efficacy beliefs about listening were entered last as there has been no previous work in the field that shows a relationship between the two variables although general educational literature suggests a potential effect of teacher self-efficacy on learners' self-efficacy, which the current study aimed to investigate.

6.1.6.1 Sequential multiple regression at Time 1

a. Intervention group

Considering the multiple regression assumptions, Table 6.14 shows the correlation matrix for the four IVs involved in the model and the DV (student listening efficacy) for the intervention group. The results demonstrated that there was no high correlation between the IVs. Hence, no multicollinearity was found.

Listening scores Metacognitive Strategy use Teacher self-efficacy knowledge .35** .41** .48** .11 Self-efficacy .37** .42** .14 Listening scores Metacognitive .49** -.05 knowledge Strategy use .26** Teacher selfefficacy

Table 6.14 Correlation matrix between the IVs and the DV (student self-efficacy) for the intervention group at Time 1.

**significant at the .01 level

Table 6.15 summarises the results of the hierarchical regression analysis for the intervention group at Time 1. Listening performance was entered at Step 1 and it contributed significantly to the model, F(1, 95) = 12.97, p = .001 and accounted for 12% of the variation in student self-efficacy. Introducing metacognitive knowledge explained an additional 9.4% of variation in student self-efficacy (after controlling for listening performance) and this change in R^2 was significant, F(2, 94) = 12.82, p < .001. The total variance explained by the third model increased by 7.2 % when strategy use was added to the model, F(3, 93) = 12.41, p < .001. However, in the fourth model, the addition of teacher self-efficacy did not contribute significantly to the model (p = .82). In total, all the variables together explained 28.6% ($R^2 = .286$) of the variance in student self-efficacy in listening, however, there was not a huge difference in explaining the dependent variable between the three predictors.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
1	Intercept	.120	.120	54.80 CI (47.40, 62.22)	3.73		14.68	< .001
-	Listening performance			.29 (.13, .45)	.08	.34	3.60	.001
	Intercept			24.17 (4.72, 43.62)	9.79		2.46	.01
2	Listening performance	.214	.094	.18 (.03, .35)	.08	.22	2.29	.02
	Metacognitive knowledge			9.01 (3.68, 14.35)	2.68	.33	3.35	.001
3	Intercept			2.31 (-21.13, 25.76)	11.80		.19	.84
	Listening performance	.286	.072	.11 (05, .28)	.08	.13	1.39	.16
	Metacognitive knowledge			5.56 (03, 11.15)	2.81	.20	1.97	.05
	Strategy use			15.12 (5.28, 24.95)	4.95	.32	3.05	.003
	Intercept			1.23 (-24.21, 26.68)	12.81		.09	.92
4	Listening performance	.286	.00	.11 (05, .28)	.08	.13	1.36	.17
4	Metacognitive knowledge	.200	.00	5.70 (05, 11.45)	2.89	.21	1.96	.05
	Strategy use			14.77 (4.43, 25.12)	5.20	.31	2.83	.006
	Teacher self- efficacy			.02 (18, .22)	.10	.02	.22	.82

Table 6.15 Summary of hierarchical multiple regression analysis for variables predicting student self-efficacy for the intervention group at Time 1

b. Comparison group

Similar procedures to the intervention group were conducted with students in the comparison group. Table 6.16 shows the correlation matrix between the four IVs involved in the model and the DV (student self-efficacy) for the comparison group at Time 1. The results show no high correlation between the IVs; thus, no multicollinearity was found.

	Listening scores	Metacognitive knowledge	Strategy use	Teacher self-efficacy
Self-efficacy	.35**	.53**	.64**	01
Listening scores	-	.44**	.39**	.03
Metacognitive knowledge		-	.37**	.05
Strategy use			-	.14
Teacher self-				-
efficacy				

Table 6.16 Correlation matrix between the IVs and the DV (student self-efficacy) for the comparison group at Time 1.

**significant at the .01 level

Table 6.17 summarises the results of the hierarchical regression analysis for the comparison group at Time 1. Listening performance contributed significantly to the model, F (1, 87) = 12.24, p = .001 and accounted for 12.3% of the variation in student self-efficacy. This was almost similar to what was found in the intervention group. Introducing metacognitive knowledge explained an additional 17.4% of variation in student self-efficacy (after controlling for listening performance) and this change in R^2 was significant, F (2, 86) = 18.22, p < .001. This finding was almost twice as large as what was found in the intervention group. The total variance explained by the third model increased by 21.2% when strategy use was added to the model, F (3, 85) = 29.42, p < .001. This result was almost three times larger than what was found with the intervention group. However, in the fourth model, the addition of teacher self-efficacy did not contribute significantly to the model (p = .22). In total, all the variables together explained 51.8% (R^2 = .518%) of the variance in student self-efficacy in listening. Student reported strategy use recorded the highest contribution followed by metacognitive knowledge.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
	Intercept	.123	.123	53.19 CI (45.90, 60.49)	3.67		14.49	< .001
1	Listening performance			.29 (.12, .46)	.08	.35	3.50	.001
	Intercept			13.89 (-4.25, 32.03)	9.12		1.52	.13
2	Listening performance	.298	.174	.12 (04, .29)	.08	.14	1.46	.14
	Metacognitive knowledge			12.34 (7.03, 17.65)	2.67	.46	4.62	<.001
	Intercept			-26.92 (-47.22, -6.62)	10.21		-2.63	.01
3	Listening performance	.509	.212	.002 (14, .14)	.07	.002	.02	.98
	Metacognitive knowledge			9.10 (4.51, 13.69)	2.31	.34	3.94	< .001
	Strategy use			22.58 (15.17, 29.99)	3.72	.51	6.05	< .001
	Intercept			-19.07 (-42.95, 4.80)	12.00		-1.59	.11
4	Listening performance	.518	.009	.000 (14, 1.14)	.07	001	006	.99
4	Metacognitive knowledge	.510	.007	9.10 (4.53, 13.68)	2.30	.34	3.95	< .001
	Strategy use			23.19 (15.74, 30.65)	3.75	.52	6.18	< .001
	Teacher self- efficacy			13 (35, .08)	.11	09	-1.23	.22

Table 6.17 Summary of hierarchical multiple regression analysis for variables predicting student self-efficacy for the comparison group at Time 1.

6.1.6.2 Sequential multiple regression at Time 2

Another sequential multiple regression was conducted with the participants in both groups when student self-efficacy at Time 2 was the dependent variable. Students in the intervention group received a strategy and metacognition-based instruction in listening, and those in the comparison group received the conventional instruction. Results from Repeated measures ANOVA (Section 6.1.4) demonstrated a change in participants' self-efficacy from Time 1 to Time 2; while those in the intervention group improved significantly, those in the comparison group deteriorated significantly. The predictors, listening performance, metacognitive knowledge, strategy-use, and teacher self-efficacy were also found to change

from Time 1 to Time 2. The following section presents findings from both groups regarding the amount of variance in students' self-efficacy explained by these variables at Time 2 separately.

a. Intervention

The same procedures followed at Time 1 were undergone at Time 2. The correlation matrix at this time did not involve variables measured at Time 1 as they were found to correlate highly with those measured at Time 2 and showing a high value of *VIF*. Therefore, for student self-efficacy, four variables measured at Time 2 were included in the regression model as the main predictors. Table 6.18 shows the correlation between the IVs and the DV for the intervention group at Time 2. No multicollinearity was found.

Table 6.18 Correlation matrix between the IVs and the DV (student self-efficacy) for the intervention group at Time 2.

	Listening scores	Metacognitive knowledge	Strategy use	Teacher self-efficacy
Self-efficacy	.48**	.41**	.38**	.21**
Listening scores	-	.41**	.32**	.39**
Metacognitive knowledge		-	.30**	.24**
Strategy use			-	.18**
Teacher self- efficacy				-

**significant at the .01 level

Table 6.19 summarises the results of the hierarchical regression analysis for the intervention group at Time 2. Listening performance still contributed significantly to the model, F(1, 95) = 28.46, p < .001 and accounted for 23.1% of the variation in student self-efficacy which is twice the value at Time 1. Introducing metacognitive knowledge explained an additional 5.4% of variation in student self-efficacy (after controlling for listening performance), which is 4% smaller than what was found at Time 1, and this change in R^2 was significant, F(2, 94) = 18.69, p < .001. The total variance explained by the third model increased by 3.9% when strategy use was added to the model, F(3, 93) = 14.82, p < .001. This contribution was 3.3% smaller than what was found at Time 1. However, in the fourth model,

the addition of teacher self-efficacy did not contribute significantly to the model (p = .98) similar to what was found at Time 1. In total, all the variables together explained 32.3% ($R^2 = .323$) of the variance in student self-efficacy in listening, and listening performance had the largest contribution to the model in comparison to the other predictors.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
1	Intercept	.231	.231	49.99 CI (41.73, 58.25)	4.16		12.02	< .001
	Listening performance			.44 (.28, .61)	.08	.48	5.33	< .001
	Intercept			28.89 (11.25, 46.54)	8.88		3.25	.002
2	Listening performance	.285	.054	.35 (.17, .25)	.09	.37	3.94	< .001
	Metacognitive knowledge			6.57 (1.67, 11.47)	2.46	.25	2.66	.009
	Intercept			13.70 (-7.92, 35.33)	10.89		1.25	.21
3	Listening performance	.323	.039	.30 (.12, .48)	.09	.32	3.39	.001
	Metacognitive knowledge			5.48 (.59, 10.36)	2.46	.21	2.22	.02
	Strategy use			8.16 (1.15, 15.17)	3.53	.21	2.31	.02
	Intercept			13.95 (-15.13, 43.03)	14.64		.95	.34
4	Listening performance	.323	.000	.30 (.11, .49)	.09	.32	3.21	.002
-	Metacognitive knowledge	.525		5.48 (.55, 10.41)	2.48	.21	2.21	.03
	Strategy use			8.16 (1.11, 15.22)	3.55	.21	2.30	.02
	Teacher self- efficacy			004 (33, .32)	.16	002	02	.98

Table 6.19 Summary of hierarchical multiple regression analysis for variables predicting student self-efficacy for the intervention group at Time 2.

b. Comparison

Similar procedures undergone with the intervention group were also followed with the comparison group. Table 6.20 shows the correlation matrix for the IVs and the DV for the comparison group at Time 2. No multicollinearity was found.

Table 6.20 Correlation matrix between the IVs and the DV (student self-efficacy) for the comparison group at Time 2.

	Listening scores	Metacognitive knowledge	Strategy use	Teacher self-efficacy
Self-efficacy	.43**	.50**	.53**	.04
Listening scores	-	.49**	.36**	19**
Metacognitive knowledge		-	.56**	.04
Strategy use			-	.05
Teacher self- efficacy				-

**significant at the .01 level

Table 6.21 summarises the results of the hierarchical regression analysis for the comparison group at Time 2. Listening performance contributed significantly to the model, F (1, 87) = 19.66, p < .001 and accounted for 18.4% of the variation in student self-efficacy which is 6% larger than its contribution at Time 1. Introducing metacognitive knowledge explained an additional 11.2% of variation in student self-efficacy (after controlling for listening performance) and this change in R^2 was significant, F (2, 86) = 18.11, p < .001. This finding was also 6% smaller to what was found at Time 1. The total variance explained by the third model increased by 7.6% when strategy use was added to the model, F (3, 85) = 16.82, p < .001. This contribution dropped by almost three times to what was found at Time 1. As far as teacher self-efficacy is concerned, this variable did not contribute significantly to the model (p = .51). In total, all the variables together explained 37.6% ($R^2 = .376$) of the variance in student self-efficacy in listening; a decrease of 24.2% was marked in comparison to Time 1. While strategy use at Time 1 was the largest predictor to student self-efficacy at Time 1, their listening performance at Time 2 was the predictor with the largest contribution to their sense of efficacy at Time 2.

Model		R^2	ΔR^2	В	SE β	β	t	Sig
1	Intercept	.184	.184	49.50 CI (43.65, 55.34)	2.94		16.82	<.001
	Listening performance			.32 (.18, .47)	.07	.43	4.43	<.001
	Intercept			24.04 (9.30, 38.77)	7.41		3.24	.002
2	Listening performance	.296	.112	.18 (.03, .33)	.07	.24	2.30	.024
	Metacognitive knowledge			8.67 (4.01, 13.34)	2.34	.38	3.70	<.001
	Intercept			6.39 (-11.35, 24.14)	8.92		.71	.47
3	Listening performance	.373	.076	.15 (.01, .30)	.07	.20	2.03	.04
	Metacognitive knowledge			4.84 (18, 9.86)	2.52	.21	1.91	.05
	Strategy use			13.09 (4.99, 21.19)	4.07	.33	3.21	.002
	Intercept			2.74 (-18.10, 23.59)	10.48		.26	.79
4	Listening performance	.376	.003	.16 (.01, .32)	.07	.22	2.12	.03
4	Metacognitive knowledge	.570	.005	4.65 (42, 9.72)	2.55	.20	1.82	.07
	Strategy use		-	12.93 (4.79, 21.08)	4.09	.33	3.16	.002
	Teacher self- efficacy			.06 (11, .23)	.09	.06	.67	.50

Table 6.21 Summary of hierarchical multiple regression analysis for variables predicting student self-efficacy for the comparison group at Time 2.

To conclude, the findings above demonstrated that, first, students' listening performance was highly predicted by their level of vocabulary knowledge at two-time points. Their reported metacognitive knowledge and strategy use had almost similar level of predictive power at Time 1. However, at Time two, the predictive ability for metacognitive knowledge increased while for strategy use could not reach significance. Teachers' and students' self-efficacy were not significant predictors of students' listening performance at Time 1, however, at Time 2 they significantly predicted performance but only for the intervention group. Second, students' self-efficacy at two-time points was predicted by their listening performance, reported metacognitive knowledge and reported strategy use for both groups despite the variance found between the two groups regarding the level of predictive ability of each variable.

6.2 Qualitative data

The qualitative data were explored in order to provide better understanding of the results found from the quantitative analysis. This part of the analysis is divided into two parts, including the identification of students' strategy use in listening from a stimulated recall interview using one section from the listening test used earlier. The other part of the analysis is related to students' listening beliefs, including self-efficacy.

6.2.1 Identification of listening strategies

In order to explore deeply and directly students' use of listening strategies for comprehension, the stimulated recall interview was conducted twice – before the intervention and after the intervention-. During the recall sessions, the participants were asked to say what they were thinking about while they were trying to understand the passage and/or provide a particular response as shown in their test papers. The stimulated recall interviews provided detailed information about students' approach to comprehending an aural text in English. The free recall listening task involved participants listening to three different recordings, then identifying the place of the conversation (at pre-test) or the subject of the conversation (at posttest) and the problem occurring between the speakers in each recording.

Whether the frequency of strategy use is related to successful language learning or not is an issue of controversy in the SLA field. Researchers including Dörnyei and Ryan (2015), and Macaro (2006) have argued that successful learning is not linked to learners' frequency of using strategies, but to their ability to orchestrate the strategies that are available to them. By contrast, Griffiths (2018), for instance, claimed that the quantity of using language learner strategies is linked to successful language learning. Therefore, it was of interest to investigate this debate in relation to the results obtained from the present study.

The following Table 6.22 presents the type and frequency of the different strategies emerging from the stimulated recall interview with the participants at Time 1 for all participants including those in the intervention group and those in the comparison group as neither group had experienced strategy instruction at that point. As outlined in Section 4.6.2.2, strategies were coded using a taxonomy adapted from those of researchers in the field (Santos et al., 2008; Vandergrift & Goh, 2012) that also included new strategies that emerged from the data (Appendix O). It is important to bear in mind when comparing strategy use across high and low

proficiency learners that there were 15 in the first group and only five in the second. The groups were divided according to the total mean score in listening; those with scores above the mean score were considered high proficiency, and those with scores below the mean were considered low proficiency. Therefore, the mean of the reported strategies was calculated, otherwise it would not be possible to compare between the two groups.

Listening at Time 1

Strategy	Pre-	test
	High proficiency	Low proficiency
Between parts inferencing	0.33	00
Comprehension monitoring	0.33	00
Directed attention	0.33	00
Elaboration	0.2	0.8
Extra-linguistic deduction	1.7	01
Frequency deduction	0.1	00
General deduction	1.7	0.6
Hypothesis monitoring	1.1	0.4
Hypothesis formation	1.2	0.4
Linguistic contextualisation	0.1	00
Integration	0.8	0.4
Linguistic inference	0.1	00
Negative deduction	0.1	00
Online prediction of lexis	0.1	00
Online prediction of possible answers	0.1	0.2
Online prediction of theme	0.1	00
Prior knowledge deduction	0.5	00
Problem identification	00	0.2
Saliency deduction	1.3	0.6
Selective attention	0.3	00
Taking notes	0.8	0.8
Tone of voice deduction	1.8	1.6
Translation	0.1	00
Transfer (cognates)	0.4	0.2
Total	13.5	07.2

Table 6.22 Mean reported strategy frequency according to students' listening proficiency level

The above table demonstrates an overall 24 strategies used by the participants. The findings also show that low proficiency participants demonstrated less frequent use of strategies - almost half- in comparison to high proficiency participants. *Tone of voice deduction* strategy was reported being the most used strategy by all participants, followed by *general deduction* and *extralinguistic deduction*. However, there were 12 strategies that were reported being used by high proficiency participants and not used by the low proficiency ones (*between parts*)

inferencing, comprehension monitoring, directed attention, frequency deduction, linguistic contextualisation, linguistic inference, negative deduction, online prediction of lexis, online prediction of theme, prior knowledge deduction, selective attention and translation), but with a small frequency indicating that they were mainly used very few participants and usually used just once.

To illustrate these findings, an analysis of data from four students, two from the intervention group and two from the comparison group, and in each group, one with a high proficiency level and the other a low proficiency level was conducted at pre and post-tests. However, because of the limited word count for the thesis, it is not possible to report on these interviews.

Listening at Time 2

At post-test data were also collected from the stimulated recall about student reporting strategies they used during the post-test. As the listening tests used at Time 1 and Time 2 differed in terms of themes and purpose, it was hard to compare the frequency of the strategies reported at the two time points, therefore, only strategies where noticeable differences occurred are presented in Table 6.23. Actual frequencies rather than mean frequencies were given as the analysis was not done by proficiency level, because the focus was on identifying change across time points between the two groups, additionally, the number of participants in each group was equal (n = 10 in each group).

	Pre-test $(n = 20)$		Post-tes	t (n = 20)
Strategy	Intervention	Comparison	Intervention	Comparison
Comprehension monitoring	03	02	06	01
Directed attention	02	02	13	02
Frequency deduction	01	01	12	05
Online planning	00	00	10	00
Online selective attention	00	00	11	00
Planning	00	00	05	00
Schematic contextualisation	00	00	03	03
Saliency deduction	13	10	18	07
Selective attention	02	02	04	00
Strategy evaluation	00	00	01	00
Substitution	00	00	01	00
Word family	00	00	06	00
Total	21	17	90	18

Table 6.23 Frequency of main strategies reported at pre-test and post-test between groups

The results show that six types of strategies were identified only at post-test and mainly by participants in the intervention group: *online planning, online selective attention, planning, strategy evaluation, substitution* and *word family*. Only *schematic contextualisation strategy* emerged as a new strategy at Time 2 as identified in both groups, maybe because of the nature of the listening test at post-test. The total frequency of strategies reported by participants in the intervention group at post-test was four times more than it was at pre-test. It seems likely that this was due to the training they received regarding the employment of strategies. By contrast the total frequency of strategies reported was almost stable for students in the comparison group at post-test in comparison to pre-test, indicating students' perseverance during listening. Furthermore, *online planning* and *selective attention* respectively; this may be because participants were only able to listen once to the listening test at Time 2 after receiving the intervention.

6.2.2 Listening perceptions and beliefs

6.2.2.1 Conceptualisation of listening at Time 1

Participants were asked in the questionnaire about the Oral Expression classes and whether they found them beneficial or not to improve their listening proficiency. Their responses to this item in the questionnaire were largely similar; most of them agreed or strongly agreed that they benefited from the classes. However, during the stimulated recall the researcher asked the participants to elaborate more and give more explanation for their response. Surprisingly, none of the responses was related to listening development, rather, to other aspects including language exposure, vocabulary learning, and practising speaking. This result was in line with what was found previously in the teachers' conceptualisation of the skill. They conceptualised listening as a set of activities to provide their students with more exposure to the language where focus was on introducing different topics, developing vocabulary, developing speaking, and testing listening comprehension. Student participants' views on the purpose of undertaking listening activities in class are presented in the next section.

Language exposure

The first view regarding the purpose of undertaking listening in class was language exposure. Some participants reported that the listening class was an opportunity for them to experience authentic spoken English as they generally did not tend to listen to the language outside the classroom. Additionally, as they were first year English students, the language in previous school years was mainly reading and writing while listening was only restricted to teachers' voices. For instance, Zaky 2 said:

"I like the lab classes; I listen more to English because before I was not used to listen outside the classroom".

Leena 1 also stated:

"The teacher provides us with dialogues, so we listen and take notes, it is helping me, I listen more. For me it is interesting to listen to the language and how people speak".

Learn vocabulary

The interview data demonstrated that learning new vocabulary was the most frequent and common references among the participants regarding their benefits from the listening sessions. It was the first response given by all interviewees in relation to listening. This also confirms teachers' belief and approach to teaching the skill expressed in the teacher interview, where they claimed that listening sessions aimed to provide students with more content vocabulary. In this line, for instance, some students claimed:

"The more we listen, the more we learn new words and their pronunciation", Azzah 2

Aisha1 added:

"the teacher provides us with the vocabulary related to a particular topic. We listen to two or three different recordings but related in terms of the topic to ensure our learning of this vocabulary".
While listening input is of course an important source of vocabulary and model for pronunciation, students' responses, like those of their teachers, suggested that it was never a focus of instruction in its own right, that is, to get better at listening comprehension.

Practise speaking

Another important point that was revealed from the data is 'listen to speak'. It is likely that the most crucial matter and concern for foreign language learners is to develop their speaking ability in the target language. This result, however, is in accordance with what was found earlier with teachers' conceptualisation of listening, where any focus on listening was overshadowed by speaking. Therefore, Aisha 2, for instance, said:

"In the class, it is an opportunity for us to practise our English speaking, there is no other place to do so".

Similarly, Celia 2 reported on the opportunity of sharing ideas orally in the classroom and receiving feedback:

"After we listen to the audio several times, the teacher asks us to share personal ideas about the same topic of the audio, then she gives us feedback on our use of the language".

Additionally, some participants viewed speaking as motivating, and it was the ultimate aim of the lab session. For this, Celia 1 commented:

"What I like about the session is the speaking part, listening is boring. I want to develop my speaking, it's through speaking we can listen well, so if I know the correct pronunciation of words, I will understand what people are saying".

6.2.2.2 Listening self-efficacy at Time 1

Self- efficacy beliefs in listening were one of the fundamental areas focus of the current study. Students' beliefs about their ability to comprehend an aural text in a broad and narrow scope was highlighted during the interview in accordance with their responses in the questionnaire they completed beforehand. The last part of the interview focused on the participants' sense of efficacy in relation to listening which was presented in part four of the questionnaire. The interviewees were asked to rate their level of self-efficacy in listening to English from 0% to 100%. During the interview, they were asked to give more detail about their choice of percentage. The elements discussed in the interview included mainly: effective planning, effective use of sources of information, persistence, and effective evaluation.

Interestingly, the findings demonstrated variety in the participants' responses; some students with a similar listening performance level showed different levels of listening self-efficacy beliefs and vice versa. Therefore, it was decided to group them into categories according to their levels in listening proficiency and self-efficacy. The two categories (high / low) were divided according to the mean score of each variable; the high-level participants were those with a score above the mean, while the low-level participants were those with scores below the mean. Each group was then named to indicate the characteristics that emerged from them in the interview (Figure 6.7)

Passionate Group: high proficiency/ high self-efficacy

Ambivalent Group: high proficiency/ low self-efficacy

Aspirant Group: low proficiency/ high self-efficacy

Oblivious Group: low proficiency/ low self-efficacy

Figure 6. 7 Student groups emerged from interview data in relation to their levels in listening performance and self-efficacy.

Passionate group

As noted above, this group included participants with high level in listening performance and self-efficacy beliefs. The self-efficacy scale consisted of 13 items, and for most of them, participants reported having high efficacy. The interviewees' belief in their ability to plan their listening effectively was found to be the lowest rated in comparison to the other items. Therefore, they were asked about the reason for that and what they believed they could do for planning. All the participants reported that they lacked awareness of planning their listening approach. For instance, Azzah 1 said:

"I do not have a particular plan, and I do not know what to do, I just improvise"

Participants were also questioned about their ability to use different sources of information to understand spoken English. Almost all reported having a high level of self-efficacy regarding this item, even though they reported different approaches. Some were similar to those identified earlier in Table 6.22. For instance, Azzah 2 stated:

"I believe I can. The first thing is I concentrate and use the knowledge I already have about the topic; I try to relate words together to understand the general idea. Similar words between English French also help me understand. I also focus on the words I know, if there's any word I do not understand I can guess its meaning from the context".

This shows a clear awareness of a range of sources of information and strategies Azzah 2 believed to be important, indicating a degree of self-direction and relative confidence in her ability to control her comprehension.

Another participant, Leena 1, placed more emphasis on drawing on linguistic and cultural knowledge rather than on listening strategies to help her to understand a listening passage:

"For me, I believe that I have a good size of English vocabulary, so whenever I listen to something I can understand it, because vocabulary is very important...., and because I am exposed to English outside the class when watching movies, I kind of have an idea of the culture and what I expect the speakers to say or what will happen between them, because some scenes I already seen them".

The third item that was highlighted during the interview was students' ability to persist during listening despite some difficulties in understanding. All participants rated this item with a very high level. Some of them stated that they did not very often find difficulty comprehending; and others claimed not to focus on areas they did not understand as they could still manage to understand the intended overall message, maybe using some listening strategies. For instance, Sama 1 said:

"I can listen until the end of the passage, if I don't understand a word, I would just skip it and do not focus on it".

The last aspect that was discussed during the interview was related to the participants' evaluation of their understanding. All participants reported having a high level in their ability to evaluate their listening although there were some who believed they were unaware what form evaluation should take. For this, Celia 2 stated:

"I do not know how to evaluate, I just listen and try to understand the passage so that I can answer the question, but I would not say I cannot evaluate because it's just I do not know how".

On the other hand, other interviewees mentioned what they usually did as a form of evaluation. For instance, Zaky 1 believed that she could evaluate her listening relying on others' judgement. However, this shows that she was unable to independently evaluate:

"I always evaluate to check whether my understanding was right or wrong; I most of the time verify with my classmates' answers or I ask the teacher".

Ambivalent group

The second group of participants included those with a high level of listening performance and low level of self-efficacy beliefs. Seven participants were found to belong to this group. Notably, however, they all had a strong belief in their ability to understand spoken English overall. However, they provided low or medium ratings for most of the other items about more specific aspects of listening.

Regarding planning their approach to listening, most participants reported they had no ability to plan. When these interviewees were then asked about their choice of the percentage, all of them referred to their lack of awareness of planning. For instance, Sama 2 claimed:

"I do not know how to plan; I immediately start listening".

Moreover, Joseph 2 referred to the nature of listening in comparison to speaking:

"I do not think I can plan for listening; I think it's difficult because I do not know what I am going to hear in the audio, unlike speaking, I can plan what I am going to say, besides I might do this during the second listening not before the first listening".

In addition, Hana 1 indicated that her ability to plan depended on the presence of an instruction:

"I am sure I can do it if the teacher shows us what to do".

Regarding their sense of efficacy using different sources of information while listening to help understanding, they rated their ability differently. Some participants demonstrated their reliance on language vocabulary and concentration. Aisha 2 said:

"I believe my knowledge of the language and vocabulary are the main reasons for understanding, because if I do not hear the words, I know I cannot understand, I concentrate very hard during listening; I try to avoid every source of distraction". In addition, other participants mentioned other sources believing that they were still beginner learners of English:

"I do not think I can do more than this, I see myself as a beginner learner and I do not know everything about English".

Other participants expressed their lack of awareness of what they should use to reach a better understanding although they had reported using some strategies in the previous section of the questionnaire:

"I do not know what I should do or use, I just listen and focus on words I know"

Regarding their persistence during listening, firstly, Joseph 2, for instance, expressed her ability to carry on listening despite the difficulties she might encounter as the classroom environment is compelling students to listen:

"I believe I can especially in the classroom, I need to concentrate to what the speakers in the audio are saying, because everyone in the classroom is doing the same thing, and after listening we are expected to answer the follow-up questions. I think I have to carry on listening".

Secondly, Celia 1, referred to the content of the audio and whether it aroused her interest or not:

"I think it depends on the topic of the audio, if it is interesting to me, I would continue listening despite the difficulties, but if it is not, I am not sure I would carry on listening".

Participants with low sense of efficacy in persistence pointed out to the tasks used in the classroom as plain and easy for them, so they had not experienced very difficult passages, therefore Sama 2, for instance, claimed to be unsure about the situation:

"I am not sure about this; I have not experienced it so far, all the listening passages that we are exposed in the classroom are simple".

Last but not least, the interviewees sense of capability regarding effective evaluation of their listening, all of them viewed themselves as less able to evaluate as they believed that it is the teacher's job to do rather than theirs. To illustrate this, Sama 2 stated:

"Evaluate! I do not know what to do exactly, I just check whether I understood or not.... I do not think I am in the position to evaluate myself; it's the teacher who does this".

Aspirant group

The third group of interviewees included those with a low level in listening performance and high level in self-efficacy beliefs. Two participants were found to belong to this category, even though their level of efficacy beliefs in most items were not identical. In other words, while some items were rated as high for one interviewee, the other rated them as low and vice versa. The highest level of belief was about their ability to develop their listening comprehension.

As far as planning is concerned, one participant had a low belief to effectively plan her approach to listen, while the other had a medium level. The first interviewee (Zahra 1) expressed her lack of awareness regarding how to plan, but her view that might be able to apply it if she was shown the way:

"I cannot say I can plan because I do not know how, but if the teacher demonstrates this for us, I would say I can do it".

The other interviewee (Jacob 1) asserted that she could plan how she was going to listen, but for a general understanding focusing on words she already knew:

"I can have an overall plan for understanding the main idea, but I can't for catching the details, I mainly concentrate on the words I know, then I gather them to construct meaning"

Interestingly, both participants reported having a high level of efficacy regarding the belief about their ability to use different sources of information to assist comprehension. When they were asked about these sources, they referred to mainly to translation and identification of English' French cognates. For instance, Jacob 1 claimed:

"Yes, I can. I focus on the audio and I try to identify the words I already know or the common words between English and French....; I translate as well".

Zahra 1 added:

"I usually use background knowledge and the vocabulary I already know; I translate to French or Arabic, and if I encounter shared words with French it would facilitate comprehension for me".

Regarding persistence while listening with difficulties, both participants reported a high level of efficacy. They considered their interest and motivation to learn the language as a driver for not giving up despite their struggle reaching comprehension. For this, Zahra 1 said:

"It happened several times that I could not understand what is said in the audio, or I missed some parts because they speak very fast, but I keep listening, I like English and I want to improve my language and listening".

Finally, both participants demonstrated a medium level of efficacy regarding their ability to effectively evaluate their listening. It seems the belief in their ability was associated with their previous performance. For instance, Jacob 1 stated:

"I can evaluate. I check whether I understood or not and whether my answers were right or wrong. I also check whether I could translate or not, but not all the time I understand fully what the speakers are saying".

Oblivious group

The last category of participants included those with low level of listening performance and low level in self-efficacy beliefs; they were three in total. Their level of efficacy beliefs was almost rated in the same average. All participants' self-efficacy was highest for developing their ability to understand spoken English, whereas planning, evaluation, and listening without panicking were found to be the lowest ranked.

For planning, the three interviewees expressed their lack of awareness about how and what they should plan as a reason for their low self-efficacy. They also referred to their inability to plan especially during the first listening. For instance, Zaky 2, stated:

"I do not know what to do as a plan, I have never done this".

In addition, Jacob 2 said:

"I am not sure because I may not apply the plan, and I think it's hard especially when I listen for the first time".

Regarding their ability to use different sources of information to understand spoken English, two participants showed a high level of self-efficacy while the third one demonstrated a low level. This last participant, Jacob 2, attributed her belief to her listening proficiency; saying:

"I know that I can't, because my listening is not good"

On the other hand, the other two participants mentioned some sources, saying:

"Yes, I can. I focus on the context of the dialogue and use my background knowledge and vocabulary".

Leena 2 added:

"Yes. I translate or ask a classmate or teacher".

As far as persistence during listening, participants with high self-efficacy claimed to encounter difficulties and lose attention very often, however they tried to get back on track and carry on listening because they had to find answers for the task. For instance, Zaky 2 said:

"I have to listen, and I try to answer the questions because after that the teacher will ask us about our responses. I do not understand everything, and most of the time I miss some parts because they speak very fast and I can't catch what they are saying".

On the other hand, Jacob 2 referred back to occasions when she could not understand what the speakers in the audio were talking about, and where she had to stop listening. She also highlighted the difficulty of listening and writing simultaneously, stating:

"I think it is hard for me. I can't listen and write at the same time. It happened several times that I could not even understand what the topic was about, so I stopped, and I could not carry on".

Interestingly, all participants showed a low level of self-efficacy for their ability to effectively evaluate their listening because of their lack of awareness of how they should evaluate. As one stated:

"I can't, I do not know how".

To conclude, the findings related to participants' perceptions and beliefs about listening demonstrated that all participants in both groups showed relatively little awareness of the skill and they perceived listening classes as an environment where the aim was to gain exposure to English, learn more vocabulary and practise their speaking. Concerning their self-efficacy for listening, the participants' responses were grouped into four categories in relation to their listening performance. In this vein, in all groups most of the participants felt that planning for

listening was where they had the least confidence. Correspondingly, they showed less awareness of how to plan their approach to listening. Motivation, interest, anxiety and listening experience were also found to affect participants' self-efficacy beliefs. Results from the posttest are shown in the next section.

6.2.2.3 Conceptualisations and self-efficacy beliefs at Time 2

a. Comparison group

The findings of the post-test are presented for intervention and comparison group separately. The comparison group showed very few changes in the perceptions of listening at post-test. All participants reported having the same perceptions as they did at pre-test; i.e., listening activities were a way to gain more exposure to English, learn vocabulary and practise speaking.

As far as their efficacy beliefs of listening are concerned, some changes were found. The majority reported a low level in their ability in relation to several aspects. On one hand, low self-satisfaction, self-confidence and lack of motivation were frequently reported by the participants. On the other hand, previous experience (performance results), watching peers, and their teachers' dynamism were found to be crucial driving factors affecting their sense of efficacy.

Low self-satisfaction

The first aspect that emerged was the participants' low sense of self-satisfaction. The majority reported they were not satisfied about their level of listening. First, this was a result of previous listening experiences. For instance, Sama 2 said:

"I am not satisfied about my level of listening. When I do not understand something, it affects me negatively and I feel low and I lose attention".

Second, other participants reflected on the nature of tasks they were exposed to in the classroom. They believed that the tasks were easy, and they were not challenging for them. For this, Joseph 2 stated:

"I am not highly satisfied, because we did not experience challenging tasks. All the activities we do in the classroom were very simple and easy for me. If we want to improve our language level, English is more than what is presented in those tasks".

Third, another factor the participants emphasised, especially those with a low proficiency level, was the impact of their peers. These participants regarded their classmates as a cause of their level of self-satisfaction and self-confidence. For example, Joseph 2 said:

"When the teacher asks questions, I question why some students heard things I did not hear, or how did they get the answer?, this sometimes affects me positively, I feel more encouraged to make efforts and sometimes negatively. I just say this student is better than me".

Last but not least, an interesting result was found in one participant's response regarding her listening satisfaction. This participant had a high proficiency level. She mentioned that the questionnaire she completed earlier had raised her awareness of the listening process, but she found herself ignorant how she could apply what she grasped:

"Since we discussed my responses to the questionnaire last time, I raised my awareness about things I did not know before like planning and managing how I listen. I tried to do them, but I do not know how. That's why I think there are things that I am missing".

Lack of motivation

The other theme emerging from the data was the participants' lack of motivation and interest. The majority expressed their low motivation to listen or persist during listening while encountering difficulties. By way of illustration, Sama 1, a participant with a high listening-performance and self-efficacy level at pre-test commented:

"I lost concentration and interest..., I practise English outside the classroom, but I am just not interested in the classroom, the listening exam score was demotivating".

For this participant, his listening performance score during the exam was the notable factor affecting his motivation. On the other hand, other students considered the topics presented in tasks as the cause for their interest to listen, in other words, whether the subject of the session was of interest to them or not. For instance, Jacob 1 stated:

"I lose my attention very frequently especially if the task is not interesting to me or boring, and I find it difficult to get back on track, or even try to understand what the speakers in the audio are saying".

Another factor highlighted by the participants was the teacher's attitudes in the classroom. Several participants noticed a change in their teachers' inclination at the end of the academic year in comparison to the beginning of the year. For this, Sama 2 claimed:

"I find it difficult to maintain concentration and motivation especially at this period of time. The teacher is not like before, now she's less involved in comparison to the first semester. The listening session is also boring especially if the teacher is not dynamic and she does not show interest".

Despite the fact that the majority demonstrated negative self-beliefs and lack of motivation during listening classes, there were very few participants who believed they had improved in terms of their listening proficiency and self-efficacy beliefs. A low proficiency level student said: "I think my listening has improved in comparison to the first time, now I can get some correct answers for the activities"

Another participant with a high proficiency level referred to her experience and achievement in the exam, stating that it was her own efforts and interest to develop her language skills:

"I feel more confident and satisfied about my level, I worked as an interpreter during spring holidays for an English native, so I practised more my listening and speaking. Additionally, my exam results motivated me and boosted my self-confidence".

b. Intervention group

At post-test, the findings demonstrated some noticeable changes in the participants' perceptions of listening and their efficacy beliefs for this group. First, similar to what was found in the comparison group, participants in the intervention group held the belief that listening classes helped them improve their vocabulary repertoire regarding the different subjects they were exposed to, and they had the opportunity to practise their speaking in the classroom which they lacked beyond classes. Nevertheless, they expressed their awareness of listening to English, its importance and how they could manage their approach to reach comprehension.

Awareness of listening

All participants agreed on the fact that listening is important to learn the target language. They believed that through listening classes they explored the actual use of different language aspects which they were not aware of in other classes like grammar and phonetics. This was inferred from, for instance, Zahra 2 who stated:

"Now, I strongly agree that listening is important for learning English. For example, during some listening sessions we tackled connected speech; it was complicated during the phonetics module, but during the listening session it was very clear, and I feel that it makes sense to me or even to my peers. Now we are more aware to break down what the natives are saying into small pieces rather than looking awkward because we did not know they were some connected words". In addition, the participants demonstrated their awareness of approaching listening; in other words, they reflected on their lack of awareness previously of how they could manage their approach to comprehend an aural text when finding difficulty in understanding. Participants in this group mentioned that they had become more conscious of what they needed to do. For instance, Hana 2 said:

"Listening does not develop by itself; it requires action. Now I am more aware of what to listen to and how to listen. For example, before I used to focus on every single word in the passage, and if I heard a new word, I would find its meaning first otherwise I can't proceed with listening, but now no, I found out that this approach is not efficient I need to develop it, and I just need to skip the difficult words and try to infer their meaning from the context or the surrounding words".

Similarly, Aisha 2 reflected on her awareness of developing her approach to listening, claiming the role of teacher in raising students' awareness of reflection:

"I am more aware of what to focus on. The teacher encourages us to think and to reason instead of giving impulsive answers".

Improved motivation

Another area that emerged from the findings was the intervention participants' improved motivation. All of them expressed their motivation during listening classes and their motivation to practise listening beyond the classes. They regarded the interaction and discussion between their peers an encouragement for them to get involved. For this, Azzah 1 remarked:

"Well, I like English and I am motivated to listen, and the interaction with my classmates created a positive atmosphere because language learning is all about interaction and communication with others". Another factor found to affect participants' motivation was their belief about their listening level, and all of them claimed that their listening proficiency had improved. Hence, this belief seems to boost their motivation. For instance, Aisha 1 stated:

"I feel that my listening has developed, and I am more motivated to listen".

Moreover, being aware of how to approach listening was another factor found to affect students' motivation. For this Hana 1stated:

"I am more motivated than before because I am aware what I should focus on before starting listening".

Self-efficacy beliefs

As far as their sense of efficacy in listening was concerned, participants showed a high belief in their ability to listen effectively. All participants expressed their confidence in listening to English. Furthermore, one of the main aspects to emerge from all intervention group students was related to their persistence in listening despite difficulty understanding in some occasions. This sense of belief was found to be associated with the awareness they developed concerning listening and how they should approach it; i.e., monitoring listening using, different listening strategies to solve comprehension problems. For instance, Celia 1 said:

"I used to give up listening if I do not understand something, but now I do not. I just push myself to carry on listening and I do not have to worry if I missed something because I can try inferring it from other parts".

This belief in efficacy regarding the aspect of comprehension monitoring reflects the previous findings presented in table 6.23, which shows an increase in comprehension monitoring strategy for the intervention group.

Another factor that was found to affect the participants' listening self-efficacy beliefs was their listening proficiency level. As it was mentioned above, all participants believed that their listening had improved. Therefore, this feeling of achievement improved their self-efficacy. For instance, Zahra 1, a student with a previous low-level of listening proficiency, stated:

"I am sure I can plan and manage my listening effectively because I feel that my listening has improved. Now I understand better than before, and I started practising listening outside the classroom".

Despite the fact that the participants in the intervention group demonstrated improvement in their motivation and self-efficacy in listening, most of them expressed the view that they felt less self-satisfied about their listening proficiency level than before. This finding was surprising; however, they attributed this belief to the fact that their experience of listening was different from the previous one, i.e., the intervention had made them more aware of their short comings. For instance, Aisha 1 commented:

"At the beginning of the year I thought my level of listening was good, but with experience, this has changed. I believe I need to make more efforts to develop my listening".

Similarly, Azzah 2 referred to her experience of the strategy-instruction which raised her awareness of different aspects in listening that she needed to develop. For this, she said:

"I would not say I am very satisfied about my listening level, because I am still learning; each time we learn a new thing. This is part of the learning process, and I think there are still other things I am ignorant about".

To conclude, the findings from the post-test demonstrated a negative change in the comparison group participants, while strategy and metacognition-based instruction had a mainly positive change in the intervention group participants. The main aspects of change

included lower motivation, self-efficacy, and self-satisfaction in the comparison group while those in the intervention group demonstrated greater awareness about listening and how to monitor their comprehension. In addition, the findings from this final part of the interview demonstrated a convergence with the results from the quantitative data. This includes the level of self-efficacy beliefs and listening performance for both groups at Time 2 (increase/ decrease), and the findings from the regression analysis that listening performance level predicted selfefficacy and not the reverse, only for the comparison group. The overall factors affecting students' self-efficacy at the two times are shown in the figure below.



Figure 6. 8 Main factors affecting student self-efficacy beliefs in listening

CHAPTER SEVEN: DISCUSSION

7.1 Introduction

This chapter discusses the findings presented in the previous chapters in relation to the existing literature in the field. The main foci of the current study were related, first, to the investigation of the self-efficacy beliefs of EFL teachers in Algeria with respect to teaching listening with a focus on strategy instruction and metacognition. Second, this study also investigated students' metacognitive knowledge, use of listening strategies, their listening performance and their perceived capability to listen effectively. Third, as a language classroom is a complex environment, the interaction between teachers, learners and the instruction variables were also a point of interest. Thus, the following sections discuss the implications of the findings in relation to the five main research questions.

7.2 To what extent does a teacher development programme in listening strategy and metacognition-based instruction improve teachers' listening self-efficacy beliefs?

Self-efficacy beliefs in teaching listening among university teachers were explored prior to the teacher development programme and after its application in the classroom. The exploration took three perspectives: first, the teachers' level of self-efficacy in teaching listening; second, the relationship between teacher self-efficacy and their students' self-efficacy for listening; and third, the relationship between teacher self-efficacy and students' proficiency in listening comprehension. The participants in this study were English language teachers at two different universities with different educational backgrounds, age and gender. Their selfefficacy for teaching listening was firstly explored through a questionnaire.

7.2.1 Nature of teachers' initial self-efficacy

At pre-test, responses ranged from 40% to almost 90% confidence in being able to teach listening effectively and to develop students' listening. The median score across participants was relatively high (64.8%), but responses to this self-report instrument in no way necessarily reflected their actual classroom practice and might have elicited participants' idealised cognitions (Borg, 2015). Bandura (2012) also claimed that individuals' perceived self-efficacy

may diverge from their practice because of their "genuine faulty self-appraisal" (p. 11). Moreover, the standard deviation across the participants was found to be large which indicates that there was a high degree of variability among them, and interestingly, it was found to be larger in the intervention group (Mdn = 62.80, SD = 15.61) than in the comparison group (Mdn = 66.80, SD = 12.51).

Subsequently, teacher self-efficacy was explored more qualitatively through the semistructured interviews and using thematic analysis. The teachers' beliefs in their ability to teach listening effectively and to improve students' listening performance were found to be related to two main factors: individual and contextual. The former factor pertained, firstly, to their previous learning experience which emerged as strongly affecting their own internal pedagogical beliefs regarding listening. This suggests strongly that there is complex nexus between teachers' cognition and other different factors. In this sense, Barnard and Burns (2012) emphasised the teachers' language learning experience at school or university -whether good or bad- as the most crucial determinant of their cognition. Thus, it was reported by several participants in this study that they did not doubt their sense of efficacy regarding their teaching as they teach the way they were taught.

This finding is supported by other previous studies that also argued for the pivotal role of teachers' learning experience in shaping their cognition and instructional decisions. This was called by Lortie (1975, in Borg, 2003, p.86) as 'apprenticeship of observation' because through their experience as learners, teachers learn much about teaching. Peacock (2001) concluded from his longitudinal study with ESL teachers in Hong Kong that teachers' previous experience of being learners had a great impact on their beliefs about teaching English which were immutable after a three-year training programme.

Hence, it can be said that in the current study, what teachers themselves have experienced as language learners at university shaped their beliefs, knowledge and practice about listening pedagogy. Consequently, their perceived self-efficacy in teaching listening before the intervention was perhaps relatively high because they believed that the way they approached a listening class was the 'right' way in so far as it mirrored what their own teachers had implemented.

Despite the fact that half of the teachers reported they received training to teach listening, whether during pre-service or in-service, their beliefs, knowledge and actual practice were found to be directed towards the product of listening rather than its process which, this latter, is regarded to emphasise learners' autonomy over their listening process. Therefore, it might be possible that the content of the training they received did not bring any innovation regarding promoting teachers' awareness of listening pedagogy in relation to the latest findings in the field, or it could not create a link between theory and practice. It is also very likely that the training programmes the teachers received neglected their prior cognition regarding listening. In this realm, researchers including Burns et al. (2015) and Kubanyiova et al. (2015) stressed the importance of acknowledging teachers' previous beliefs, knowledge and practice within teacher training programmes for the sake of their success.

The above views were also reflected in their views regarding the purpose of the listening activities conducted in the classroom, as they approached listening as comprehension tasks to be completed, similar to what was reported by Goh (2008) and Graham et al. (2014). Their interview responses also suggested that they perceived such tasks as an opportunity for their students to gain more exposure to the English language and across a range of themes, as well as for students to develop their vocabulary repertoire and speaking skills similar to what was identified by Bouziri (2007). These views, however, contrast with those expressed in the questionnaire, where teachers indicated that the most important reason for conducting listening activities was 'teaching students how to listen more effectively' and the least important one 'extending students' vocabulary'. Therefore, it can be concluded that there exists a divergence between their stated beliefs and stated practice. These findings are similar to those reached by Graham et al. (2014) among their participants in England. Notably, such divergence was also evinced by the classroom observations in which the teachers focussed mainly on the assessment of the students' listening comprehension and the encouragement of speaking development, while the development of listening skills was highly neglected.

The data indicated that length of teaching experience also related to the teachers' selfefficacy levels. Before the intervention, those teachers with a greater amount of experience had higher self-efficacy scores as measured through the questionnaire, although particularly with respect to general classroom management rather than other aspects, such as providing feedback. However, it is noteworthy that teachers with a longer experience in teaching reported their perceived high efficacy, more particularly, in general classroom management procedures like students' attendance and motivation. Thus, having encountered many students over a longer teaching career seemed to have developed the teachers' confidence in dealing with matters such as class attendance but to have had less impact on their pedagogy for listening. Teacher subject knowledge also emerged from the interviews as a contributor to their sense of efficacy. This was reflected in the fact that some were teaching part-time at the university but had been teaching full-time in middle or secondary schools; others had no previous experience in teaching listening; or they lacked specialism in the area of listening, in addition to their lack of intrinsic interest to teach the skill. Arguably, the latter is a primary element in teacher motivation (Dörnyei & Ushioda, 2011). Furthermore, it became clear from the interview that there was little provision for training or professional development for listening instruction to support the teachers to learn to teach and overcome these barriers.

The interview also explored the teachers' knowledge of pedagogy in relation to listening strategies. While there is a sizeable body of research into listening strategies from the perspective of the learner, there is very little in relation to teachers. This concern has recently been raised by a group of researchers who argue that in language learning strategy instruction in general, teachers' involvement in the teaching of strategies is very limited (Goh, 2019), and that they lack knowledge of language learner strategies (Rubin & Acero Rios, 2019). In the present study, three categories of teachers emerged; those who completely lacked awareness of listening strategies, those who misconceived the strategies; and finally, those who had a limited knowledge of listening strategies. Levels of awareness were also related to the other personal factors mentioned earlier, such as lack of experience in teaching listening, specialism in the area of listening, and intrinsic interest. Moreover, these results may also be related to the lack of teacher-training in listening instruction and the divide that has been noted between the research literature and language teachers (Borg, 2010).

The other types of factors were related to contextual influences the teachers reported as affecting their sense of efficacy. Correspondingly, in organizational psychology, theories of job design postulate that the environment plays an important role in job motivation (Porter, Bigley & Steers, 2003). Accordingly, teacher motivation for some scholars like Ashton (1985) is seen to be best understood in relation to self-efficacy theory. First, being a part-time teacher with no collaboration with other teachers or no collegial relations, i.e., 'being isolated' from other teachers in the department, was a factor found in this study to have a negative effect on teachers' efficacy beliefs. This finding further supports the results found in a master's study conducted by Cooke (2013) and reported in Wyatt (2018), that teachers working in a supportive environment felt more efficacious than those who did not receive any support from their colleagues or their institutions.

Second, lack of curriculum and teaching resources was also highlighted in the teachers' interviews. According to Dörnyei and Ushioda (2011), in the case of a complex process like teaching, teachers require explicit guidelines to keep their practice on track and to be more persistent. However, in this study, teachers admitted to having to use their own teaching materials with no clear guidance from the department on a particular content or approach to teaching listening. This was also identified and confirmed during the observation conducted by the researcher, where teachers tended to use different resources and contents from each other. This fact made teachers unsure about their teaching efficacy.

Third, heterogeneity of classes in terms of language proficiency levels was also found to influence the teachers' perceived capability in teaching. These learners need a supportive environment that acknowledges their varied learning rates to reach their learning potential. Hence, this factor represented a challenge for teachers regarding their choice of teaching materials to suit all levels. This finding corroborates those of Kheladi (2017) with teachers of EFL teachers of literature in an Algerian university. He argues that teachers face difficulty dealing with mixed-ability classes in relation to addressing their different needs and keeping their interest and motivation in the classroom, and thus they are more likely to experience frustration and lack of motivation. For the current study, teachers seemed to blame the departments for the random allocation of students to different classes inducing the latter's lower efficacy.

Other contextual factors were found to be learner related. Dörnyei and Ushioda (2011), for instance, argue that general expectations on the part of teachers regarding learner potential are one of the main important factors affecting teachers' efficacy. That is, they may experience psychological shock, and that they are more likely to be vulnerable to the stressful realities of the teaching process. In this study, the learners' low level of proficiency in English, in conjunction with poor motivation and lack of autonomy, were the foremost elements mentioned by teachers as causing a negative impact on their perceived self-efficacy in teaching listening. The main and interesting complaint was the teachers' sense of impotence to improve learners' outcomes. Researchers including Macaro et al. (2016) argued that teachers' self-efficacy is very likely to be affected by their sense of helplessness regarding their doubts about their learners' ability to learn despite the teaching strategy teachers may adopt. This concept is very likely to be related to the belief or feeling that teachers are not able to control factors that influence outcomes, for instance, students' interest and motivation, which later leads them to make less efforts, and hence, this results in professional failure (Neves de Jesus & Lens, 2005). On the

227

contrary, other researchers believe that teachers' low sense of efficacy in some practices such as interaction with students in the classroom caused them negative emotions such as frustration, anxiety and helplessness (e.g., Yuan & Lee, 2015).

The study reported earlier by Kheladi (2017) also identified that teachers struggled with students' low English linguistic proficiency which, according to him, became a 'nightmare' (p.58) for teachers. In literature, although studies in different fields have suggested a relationship between teacher self-efficacy and student motivation, achievement and self-efficacy beliefs (e.g., Tschannen-Moran & Hoy, 2001), empirical research into the effect of learner-related factors on teachers' self-efficacy in SLA is scarce.

7.2.2 Teachers' experience and self-efficacy beliefs in relation to strategy and metacognition-based listening instruction

The above section has discussed teacher participants' practice and beliefs including their sense of efficacy in teaching EFL listening during the first semester of the academic year. At the end of the second semester data were also collected from all participants. However, the intervention group involving five teachers had undergone a teacher development programme on listening strategy instruction and metacognition and had applied what they learned in their classroom as observed by the researcher and reported in the teaching log provided to them. As pertains to the comparison group, the five teachers therein received no particular training programme and conducted their classes utilizing the same approach adopted during the first semester. Perhaps unsurprisingly the average level of perceived efficacy for the comparison group was found to increase by only two percent between the pre-test and the post-test. As mentioned earlier, their median self-efficacy at pre-test was 4% higher than that of the intervention group, at a fairly high level of 69.6% at the post-test. A possible explanation for this constantly high sense of self-efficacy may be related to their strong belief in their instructional practice as they regarded it the only way to approach listening. It was revealed during the observations conducted by the researcher that the listening sessions were presented following a product-based approach.

As far as the intervention group is concerned, receiving and then delivering instruction in listening strategies and metacognition seems to have had a positive impact on the teachers in different aspects. One impact of the intervention was on the teachers' stated practice as elicited in the questionnaire. There was an increase in the mean score relating to the frequency of implementing some aspects of classroom practice from 2.53 at pre-test to 3.09 at post-test on a scale from 1 to 4. Further evidence of change in classroom practice came from the observations and the classroom logs completed by the teachers themselves. Furthermore, during the interviews, the teachers made positive comments on the change induced in the focus of their teaching of listening subsequent to the training they had received. Additionally, they perceived their lack of knowledge of listening instructional pedagogy as the main reason behind their previous practice.

The understanding of teachers in the intervention regarding listening and factors influencing students' comprehension also changed as reported in the questionnaire (from 3.83 at pre-test to 4.10 at post-test on a scale from 1 to 5). That is, the teachers gained greater understanding of the nature of listening and how it should be taught to learners. Detailed findings concerning the teachers' beliefs and knowledge were identified during the interviews. The participants emphasised the crucial role of teacher training in building their knowledge and raising their awareness about the need to develop their listening pedagogy. The teachers highlighted the importance of listening as an independent skill worthy of more attention in the classroom from teachers and of helping students develop their listening proficiency for its own sake rather than regarding it as a subordinate skill serving merely to improve other skills. The teachers also pointed out an increase in their awareness of the role of listening strategies which they lacked earlier, and they believed that the intervention was as much of an opportunity for them as for students to learn about the said strategies. These findings support Bernard and Burns' (2012) claim that professional training programmes affect teachers' beliefs and knowledge as they represent one source of learning for them which thus raises their awareness of their role.

Turning now to the teachers' self-efficacy beliefs for the intervention group, first, the quantitative findings from the inventory demonstrated an increase in their perceived efficacy in teaching listening of more than eight percent. This result is in line with Pajares's (1992) claim that teacher self-efficacy beliefs are open to positive change. Additionally, the result also supports the assertion by Macaro et al. (2016) that implementing knowledge from research in teachers' continuous professional development is likely to foster teachers' sense of efficacy, as it can provide relevant materials and support from a teacher educator. Even observing peers accomplishing certain teaching tasks within such development activities can boost teacher self-efficacy through vicarious experience.

Second, the qualitative data gained from the interview provided evidence of the identified change. Although the training was found to raise teachers' awareness and increase their knowledge of listening pedagogy, it was also clear that they doubted their ability to teach listening effectively through strategy instruction because of some factors. In particular, the new knowledge they gained seemed to make them more aware of their shortcomings and lack of mastery of the strategies themselves, as well as increasing their awareness of the shortcomings of their previous approach to listening. Despite this, the training provided teachers with enough support so that they felt change is possible; this was mirrored in the efforts they made to improve students' comprehension. These results further support the claim of Wheatley (2002) who pointed out the importance of teachers' efficacy doubts in supporting their self-efficacy growth, in the sense that they are more likely to be determined to find out an alternative solution to their current teaching. Similarly, this form of doubt was highlighted in Macaro et al. (2016) as dissatisfaction about the current way of teaching. Ultimately, the findings for this research question indicate that teacher education has a significant role in developing teachers' self-efficacy, but also that it needs to be given over an extended period of time.

7.3 To what extent does receiving listening strategy and metacognition-based instruction improve learners' listening proficiency?

The students' listening proficiency was investigated using a listening comprehension test made up of five comprehension tasks. Descriptive statistics demonstrated that the mean score of participants' listening proficiency was below 50% at the beginning of the study. Mixed ANCOVA - controlling for students' initial vocabulary knowledge - with post-hoc tests were conducted to check the differences in students' listening proficiency between pre-test and post-test results and between the intervention and comparison groups. The results demonstrated that the two groups did not differ in terms of their proficiency level at pre-test, however, there was a significant difference between the groups at post-test with a medium effect size. This effect size was different from other studies (e.g. Graham & Macaro, 2008; Simasangyaporn, 2016) where it was found to be small. Indeed, in the present study, while the intervention group at post-test significantly improved, the comparison group significantly deteriorated. However, in the two studies mentioned above both the intervention and comparison groups improved with time. What is remarkable in this study is the decline in students' performance in the comparison group, which might be related to certain factors found in the qualitative results involving lack

of motivation and interest to listen when instructed under the comprehension approach presented in Section 7.4. In general, the results demonstrated that students benefited from the instruction in listening strategies and metacognition in optimising their listening comprehension.

To have a clear image of this change, students' metacognition and use of listening strategies were also investigated in the current study because they were considered to be crucial factors in the listening process. First, metacognitive knowledge was explored using a student questionnaire completed at pre-test and post-test. Results from a mixed ANOVA plus post-hoc tests conducted on students' metacognitive knowledge showed that the two groups did not differ in terms of their metacognitive knowledge at pre-test, but they were significantly different at post-test with a medium effect size. However, there was a very slight but non-significant increase in the intervention group. By contrast, the comparison group showed a significant decrease in their metacognitive knowledge for listening with a small effect size.

Vandergrift and Tafaghodtari (2010) also found that learners gained in metacognitive awareness when they received guided listening instruction with a focus on metacognitive processes in listening. The non-significant increase for the intervention group regarding their metacognitive knowledge in the current study can be ascribed to the brevity of the intervention, in the sense that students' knowledge of listening was affected by the intervention that showed their shortcomings regarding listening because they took listening for granted and perceived it as an easy task rather than a skill per se that requires development as the findings from the interviews demonstrated. Indeed, before applying the intervention students reported that listening was mostly an opportunity for them to be exposed to more spoken English which they experience less in the society. They also perceived it as a way to improve their vocabulary repertoire and listening proficiency. This finding reflects teachers' conceptualisation of listening (Section 5.8.1.1) and their classroom practice of listening had an impact on shaping students' beliefs of listening.

Furthermore, it can be said that the development of metacognitive knowledge in this study appeared to be related to improved listening performance. Indeed, results from a Pearson correlation between listening comprehension scores and metacognitive knowledge demonstrated a positive moderate correlation at Time 2 for both groups. A weak to medium correlation between listening proficiency and metacognitive awareness was also found by

Vandergrift and Baker (2015) and Goh and Hu (2014) respectively, both using the MALQ. Therefore, these results illustrate that the higher the metacognitive awareness of students is during listening, the better their understanding. The extent to which metacognition and other potential variables could predict listening performance is presented in section 7.5.

Moving to the use of listening strategies, results from a mixed ANOVA plus post-hoc tests showed that the two groups did not differ in terms of their overall reported strategy use at pre-test, but that they were significantly different at post-test with a medium effect size. This is in contrast to earlier findings from Simasangyaporn (2016), where there was no clear identification of change in the students' stated strategy use from the questionnaire data. In her study, the strategies were categorised into groups, and the *directed attention* strategy was the only one where change was observed; while the intervention group showed a non-significant increase, the comparison group decreased its use significantly. The changes in the current study, where the intervention group significantly improved and the comparison group significantly deteriorated, seem to overlap with those of the listening test results reported above, suggesting that changes in the use of strategies overall might be related to changes in listening performance. Likewise, findings from the stimulated recall interview also demonstrated an increase in students' use of a variety of listening strategies.

This suggestion is supported by results from a Pearson correlation between listening comprehension scores and strategy use which demonstrated a positive small to moderate correlation at Time 2 for the two groups. Previous studies on strategies and listening comprehension investigated the relationship between the two variables through the MALQ; for instance, the study reported above by Goh and Hu (2014) looked at the correlation between the five sub-parts of the MALQ and listening achievement. In their study, listening performance was not significantly correlated with planning and evaluation strategies, but a weak correlation was found with problem solving. The present study thus shows a stronger relationship between strategy use and listening proficiency, perhaps because the instruments used to investigate performance and strategy use were different from those used in the study mentioned above. In addition, this study looked at the total strategy use rather than at sub-categories of strategies. The correlation findings illustrate that the more students reported using the strategies, the higher they achieved in listening.

Qualitative findings from the students' interviews confirmed the above findings. After the intervention, the students reported their improvement in listening and attributed this change to being more aware of what they needed to do to overcome listening difficulties (metacognition). In addition, they reflected on how listening strategies could help them understand better; this was identified from the frequency of the strategies used and how they were used. Interviews conducted with the teachers also revealed that they noticed a change in the students' motivation and capability to arrive at an understanding of listening passages with a minimum amount of repetition in comparison to previous classes, who had needed to listen at least three times to the same audio. These findings conclude that training students on listening strategies and metacognition had a beneficial result on their achievement, while the comprehension, product-based approach to listening resulted in low performance.

7.4 To what extent does receiving listening strategy and metacognition-based instruction improve learners' listening self-efficacy beliefs?

The students' listening self-efficacy was investigated using a listening self-efficacy inventory in the questionnaire. Descriptive statistics demonstrated the mean level of the participants' listening self-efficacy was above 50% at the beginning of the study which suggests a relatively high level of confidence in being able to listen effectively. Mixed ANCOVA - controlling for the students' initial listening proficiency level - with post-hoc tests was conducted to explore changes in the students' sense of efficacy between pre-test and posttest results and differences between the intervention and comparison groups. The results demonstrated that the two groups did not differ in their self-efficacy level at pre-test, however, there was a significant difference between the groups at post-test with a medium effect size. The intervention group significantly improved, while the comparison group significantly deteriorated. The finding concerning the impact of the instruction on self-efficacy is similar to the positive impact on listening self-efficacy reported by Graham and Macaro (2008), Yan (2012) and Simasangyaporn (2016), although the latter study found that self-efficacy improved for both the intervention and comparison groups to a similar degree due to a Hawthorn effect. In general, this finding suggests that the change in the students' listening performance was very likely due to the instruction in listening strategies and metacognition received by the students.

Correspondingly, a positive moderate correlation was found with metacognitive knowledge which is in line with results from previous research in L2 learning. For instance Nosratinia, Saveiy and Zaker (2014) found a larger correlation between metacognitive awareness and general self-efficacy; however a smaller correlation was found in Rahimi and Abedi (2014) in relation to EFL listening between self-efficacy and metacognitive awareness extracted from the MALQ on Iranian high school students. The differences in results might be attributed to the different measurements used in the studies to gauge the variables. Another potential reason may be related to the participants' age, as for the present study, students' age ranged from 18 and above, while in Rahimi and Zaker (2014) the learners were younger. Indeed, a positive relationship between self-efficacy and age was found in general educational research (e.g., Zhang et al., 2015), and between age and metacognitive knowledge (e.g., Kolić-Vehovec, Bajšanski, & Rončević Zubković, 2010) in the sense that intensive developmental change in metacognitive knowledge occurs across the school years. Ultimately, this study suggests that the more metacognitively knowledgeable students are, the more they are self-efficacious in their ability to comprehend spoken language.

Additionally, a medium to large positive correlation was found with the use of listening strategies at Time 2, confirming the argument in educational research about the relationship between self-efficacy and self-regulated strategies (e.g. Pajares, 1996; Zimmerman, 1990) in general and in L2 listening in particular (Graham, 2007; Yan, 2012). Therefore, it can be said that the more strategic and metacognitively knowledgeable students are, the more confident they are in their ability to comprehend spoken language.

As before, the qualitative data supported the findings from the quantitative results. At the beginning of the study, levels of self-efficacy varied not only across different aspects of listening but also between students of different proficiency levels. First, the majority of interviewees, irrespective of their language proficiency, claimed a low sense of efficacy for planning and evaluation because of their stated lack of awareness regarding these two aspects. Second, a medium level of perceived ability to use different sources of information to comprehend spoken language was found. While some showed some knowledge and awareness of their approach to listening using some strategies, others perceived themselves as beginner learners who are new to the English listening experience, hence they believed they lacked knowledge of the kind of information needed to assist comprehension. Additionally, low listening proficiency was seen by the students as a source of a low sense of efficacy. This is in line with the social cognitive theory aspect that individuals' self-efficacy beliefs are very likely to be a result of their enactive mastery (performance outcomes) (Bandura, 1997). The nature of the relationship between self-efficacy and listening achievement is discussed in Section 7.6

The last aspect of variation among the students was related to their perceived ability to persist in listening despite any difficulties in understanding. The students' listening proficiency, whether high or low, was perceived as a determinant of their self-efficacy in this respect. Intrinsic interest and motivation in learning the English language were additional drivers for the students to persist in listening. Another source of efficacy belief was also identified in this study which is related to the students' 'imagined experience' (Maddux, 2009) in the sense that they visualised themselves behaving efficaciously or less efficaciously in certain situations depending on the nature of the listening task, i.e., whether its content was of interest to them and whether the task was challenging. Finally, being compelled to answer the listening task questions was an external factor found to affect students' belief in their ability to continue listening.

After receiving strategy instruction, the students reported an increase in their selfefficacy in the aspects outlined above. One of the main areas in which they reported improvement was their persistence in listening even in the face of difficulties. They commented that the instruction raised their awareness of the listening process and of how inferring meaning might be possible through persistence and attendance to all the listening passage. This greater sense of persistence corresponds to the increase in reported use of *directed attention* in the stimulated recall interview and in the questionnaire. Moreover, they also reported improvement in their motivation to listen and focus during listening classes because this type of instruction created interaction between them and the teacher during the reflection and feedback stages. This finding provides evidence of the significant role of this type of listening instruction on learners' cognitive and social aspect of listening. The study finding is consistent with second and foreign language comprehension research which suggests that increased metacognitive knowledge about listening and strategies for developing comprehension will result in increased motivation to listen (Vandergrift & Goh, 2012).

Despite the fact that listening strategy and metacognition-based instruction could improve students' metacognitive awareness for listening, self-efficacy beliefs and motivation, during the post-test interview the participants expressed greater dissatisfaction concerning their general proficiency level -not their perceived ability- than at pre-test; this being in the sense that they felt they needed to work more on improving their listening skills and make use of listening strategies. This is very likely a result of the intervention in which the students were trained in strategy use and a systematic metacognitive process that revealed their shortcomings and raised their attention towards some aspects of the listening process that they previously lacked or of which they were not aware. This finding indicates that the self-efficacious learners in this study had high aspirations and tended to commit a high level of effort towards meeting their commitments as suggested by Bandura (2006), which is a result of being trained through a more process-based listening instruction.

As far as the comparison group is concerned, the interviewed students reported their low level of self-satisfaction in listening and lack of motivation to listen and consequently, a low sense of efficacy to listen effectively. The majority of students referred to the impact of their unsuccessful listening performance experiences on their sense of efficacy, whether during the listening exam or during the normal listening classes. This finding strongly confirms that the individuals' negative mastery experience factor had a major influence on their efficacy beliefs according to Bandura's theory (1997). Additionally, another factor was related to the nature of the listening activities; some students referred to their disappointment regarding this as they claimed they were exposed to simple tasks presented in the same format every session (comprehension tasks). These created some boredom and did not assist them to improve their English language in general and listening in particular, in their view. Sufficiently challenging tasks or moderately difficult activities are believed to create some interest and motivation within students and hence, strengthen their sense of efficacy (Margolis & Mccabe, 2006). Borg (2006) similarly identified that language teachers tend to engage mature students in cognitively undemanding activities which may undermine their motivation. Therefore, classroom activities should be designed and tailored to provide an optimal challenge to extend students' linguistic and cognitive knowledge to a new sophisticated level (Renandya, 2014). Hence, the result from this study is an indication that the teacher's instructional approach adopted in the classroom has an important impact on students' motivation and self-efficacy.

Another interesting finding was that the comparison group students, especially those with a low listening proficiency, mentioned the impact of seeing their peers understand listening materials as a threat to their sense of self-efficacy. Judging one's ability based on observing others' behaviour in certain situations, whether positively or negatively, has been termed 'vicarious experience' by Bandura (1994), although he argues that observing 'similar others' should - in theory - boost self-efficacy, as learners see what is possible for them too. The result

from students in the comparison group could imply that the mere observation of peers with high proficiency instead undermines the low proficiency students' sense of efficacy as they did not experience interaction, reflection or direct guidance in the learning environment. The opposite might have happened in the intervention group as the students were trained in metacognitive processes and were asked to reflect on their listening and use of listening strategies and report them to their peers(modelling). This exercise possibly enabled those who had listening difficulties to develop the self-imagery they required to reach comprehension and to learn how to manage their listening better just from observing their peers.

Other students reported a low motivation and interest in concentrating and persisting during listening. This result also confirms the quantitative findings presented in section 6.2.1 regarding the frequency of *directed attention* strategy employed as the comparison group students reported less perseverance than those in the intervention group. According to theory (Bandura, 1986, 1997), less efficacious learners tend to struggle to persevere in the face of difficulties, and they are less likely to make efforts believing that they cannot be successful, while they put the blame on external factors. Indeed, the comparison group students generally referred to the classroom environment as not motivating in terms of the themes of the aural recordings and the teacher's role in the classroom. This latter was highlighted by several participants who noticed a change in the teachers' inclination in the classroom at the end of the academic year in comparison to the beginning of the year. In this line, the students disclosed that the teachers were less involved, less dynamic and they did not show interest during the session. Comparison group teachers' attitudes in the classroom at the end of the academic year is perhaps a result of the lack of curriculum that guides teachers in their classroom instructional practice, and thus, they did not feel restricted by any particular curriculum that they had to cover before the end of each year. Furthermore, this result possibly suggests that teachers' and students' motivation and attitudes in the classroom are related, and any change in one element would lead to change in the other one.

Last but not least, one unanticipated finding during the interview was that one of the students from the comparison group revealed her awareness of listening (metacognitive awareness) that she gained from the questionnaire she completed at the start of the study. However, this awareness created some kind of confusion and doubt in her ability to listen effectively using the strategies listed in the questionnaire because there was no explicit instruction for her on the part of the teacher on how, for instance, to plan, manage and evaluate listening. This result can be explained by the fact that this student could acquire an 'implicit

knowledge' (Vandergrift & Tafaghodtari, 2010) regarding listening through the metacognitive knowledge element presented in the questionnaire. However, as her doubts were not addressed in the classroom, which is regarded as the main source of learning for students, her sense of efficacy went down.

7.5 To what extent is student listening performance predicted by their listening self-efficacy, teacher self-efficacy beliefs and other variables?

The previous sections discussed the impact of strategy and metacognition-based instruction on the teachers' sense of efficacy in teaching listening, in addition to the students' sense of efficacy for listening and their listening performance. The findings revealed a positive impact of the instruction in raising the participants' self-efficacy and the students' listening performance. Subsequently, the next section discusses the nature of the relationship between the main variables involved in this study and the potential predictors of students' listening performance and their sense of efficacy beliefs in listening before the intervention and after for the two groups.

7.5.1 Factors predicting students' initial listening performance

Taking into consideration the relationships found between listening and the previous variables, the nature of correlation does not imply causation, therefore the results from the sequential multiple regression to identify the statistically significant predictors of listening performance are discussed next. Taken together, the variables were found to predict 41.5% and 48.3% of listening performance for the intervention and comparison groups respectively. This amount of explained variance is relatively high, but there was still more than 50% of unexplained variance. That might be related to other variables that were not included in the current study, such as working memory, auditory discrimination ability, and other aspects of linguistic knowledge (e.g., grammar) (Vandergrift & Baker, 2015; Zoghlami, 2015).

First, vocabulary received the strongest weight in the models explaining 32% and 38% of the variance for the experimental and comparison groups, respectively, which is higher than the 20% found in Goh and Hu (2014), 19% in Wang and Treffers-Daller (2017), and 14% found in Mecartty (2000). It is also noteworthy that the finding from the current study might be attributed to the fact that it used an aural vocabulary knowledge test that is different from the

tests used in the previous studies which used written tests instead. These results lend credence to the crucial role of vocabulary knowledge in understanding aural texts. The findings for the metacognitive knowledge measure demonstrated a significant small effect on listening performance contributing on average 3.5% of explained variance, which is close to the 4% reported in Wang and Treffers-Daller (2017) but for the person knowledge section of the MALQ only. The value is much smaller than the 13% in Vandergrift et al. (2006) and the 20% in Goh and Hu (2014) who investigated only the influence of the variable of metacognition without controlling for any other variables using bivariate regression, thus interaction with other variables was not considered. Yet the complex nature of listening involves more than metacognitive knowledge. Similarly, it was also smaller than the 15% reported by Vafaee and Suzuki (2020) using the MALQ, however involving only three of its components: directed attention, planning and evaluation and person knowledge. Mental translation and problemsolving items in the MALQ were not found to fit the model when using structural equation modelling. However, in their model using path analysis, Vandergrift and Baker (2015) found that metacognition positively influences listening comprehension through vocabulary (i.e., an indirect effect of metacognition on listening), but only person knowledge was found as a significant predictor of variance. In the current study, a different instrument from the MALQ which was mainly used in the previous studies- was used to investigate the learners' metacognitive awareness, therefore different results were identified although they support the fact that metacognition contributes to listening performance.

Similarly, overall strategy use showed a significant small influence on the students' listening performance, explaining on average 4% of the variance. At pre-test, metacognitive knowledge and strategy use seem to have equal importance in predicting the students' listening comprehension. Although previous studies (e.g., Graham & Macaro, 2008; Simasangyaporn, 2016; Yan, 2012) were interested in investigating listening comprehension in relation to listening strategies, they did not explore the ability of these strategies to predict listening outcomes. Hence the current study provides much more robust evidence of the importance of strategies for listening comprehension.

Surprisingly, although students' self-efficacy was positively correlated with listening proficiency, its unique contribution did not reach significance. These results are in line with Nicole Mills et al. (2006) finding that self-efficacy did not significantly predict listening proficiency in French. However, this contradicts the conclusion of a review of 32 published articles in L2 research (Raoofi et al., 2012) which found that self-efficacy beliefs are a strong

predictor of performance in various L2 skills. There may, however, have been an indirect effect of self-efficacy on performance; Bandura (2006) argues that efficacy beliefs do not only affect ones' behaviour directly, but they also affect other determinants of behaviour such as aspirations, perceptions, efforts, perseverance and erratic/ strategic thinking. Similarly, Linnenbrink and Pintrich (2003) provided a general framework for self-efficacy, engagement and learning, demonstrating the influence of self-efficacy on engagement (behavioural, cognitive and motivational), and which in turn, affects academic performance. In fact, in this study a medium to large correlation between self-efficacy and strategy use was found, potentially because increased self-efficacy promoted higher strategy use, and strategy use had a significant impact on listening outcomes. Another explanation of the weak predictive ability of listening performance by efficacy beliefs result is probably related to the fact that, according to literature, self-efficacy beliefs are supposed to be linked to subjective convictions in one's ability to perform a particular task, rather than actual practice or performance.

Likewise, the unique contribution of teacher self-efficacy to students' listening performance did not reach significance. The relationship between teacher self-efficacy and student performance has not previously been investigated in relation to L2 listening. However, this finding contradicts what research suggests regarding the potential effect of teacher self-efficacy on learners' performance in other education areas (e.g., Tschannen-Moran & Hoy, 2001). This finding from the study might be ascribed to the small sample size for the teachers. An additional explanation might be related to the fact that data were collected at the beginning of the academic year where the potential impact of teachers' self-efficacy was not yet evident on their students' achievement.

7.5.2 Factors predicting students' listening performance after the treatment

At post-test, taken together, the variables were found to predict 43.3% of the students' listening performance in the comparison group. However, only two variables were found to be significant predictors: their vocabulary level and their metacognitive knowledge. These findings provide credibility to the significant role of the two variables in listening achievement as discussed above. There was a noteworthy threefold increase in the amount of variance in listening comprehension scores explained by metacognitive knowledge. For the comparison group, a significant decrease in the students' metacognitive knowledge resulted in a significant decrease in their listening performance, reflecting the findings of the Repeated Measures
ANOVA. The qualitative data gained from the interview provided evidence of the identified change, in the sense that students reported a low level of motivation and interest in listening, in addition to the difficulties they encountered, especially in maintaining concentration during listening.

After intervention group students received the strategy and metacognition-based instruction, all the variables together explained 49.4% of the variance in those students' listening performance, demonstrating an increase of 8% in comparison to Time 1 and 6% higher than the comparison group at Time 2. This increase reflects the positive impact of the intervention on the students' listening performance. An increase in the variance explained by metacognitive knowledge was found, confirming the important role of the students' metacognitive knowledge in listening. However, reported strategy use was not found to predict significantly listening performance at post-test. Studying learners of English in the UAE, Dimassi (2016) investigated the potential benefit for comprehension of strategy use, as measured by the MALQ, alongside other variables (aural word recognition, oral word recognition, working memory). The results showed a large effect of planning/evaluation factors $(\beta = .37)$, problem solving factor $(\beta = .28)$, and finally a moderate effect of directed attention $(\beta = .24)$ on learners' listening performance, underlining that the successful use of language learner strategies makes an important contribution to successful language learning. However, these strategies are metacognitive in nature. In the current study, the increase in metacognitive knowledge for both the intervention and comparison groups in predicting listening may explain why strategy use more generally was not a significant predictor of listening comprehension. In other words, the findings suggest that there might be an interaction between the effect of metacognition and strategy use on listening performance, i.e., it is possible that using more strategies made students more metacognitively aware, so it is an indirect effect, and that these variables together are needed for improved listening. To confirm this assumption another analysis such structural equation modelling (SEM) to test the exact nature of this relationship would be useful and could be an area for future research.

Surprisingly, student and teacher self-efficacy was found to predict significantly the students' listening performance, explaining 4.8% and 3.4% of the variance respectively for the intervention group but not for the comparison group. Again, this might be due to the effect of the intervention. First, the metacognitive approach to listening trained the students through a cycle of planning, monitoring and evaluation in the listening tasks, which might have strengthened their perceived ability to listen better, and hence make efforts to achieve the task

goals. This finding corroborates Bandura's argument that self-efficacy influences academic achievement. Actually, in this study, this impact was evident only after the intervention that improved their sense of efficacy and made them aware of how to manage their comprehension. Regarding the comparison group, it is very likely that the type of the instruction in the comparison group i.e. using the comprehension approach, could not create a connection between the learners' self-confidence and their actual ability as it lacks the element of reflection about the listening process.

Second, the contribution of teacher self-efficacy to student listening performance confirms what research suggests (e.g., Tschannen-Moran & Hoy, 2001): self-efficacious teachers are more likely to use novel teaching methods and support their students' learning (Tschannen-Moran & Johnson, 2011). At Time 2, both teachers' self-efficacy and students' listening performance improved due to the training they received. This finding suggests that this type of instruction supports teacher confidence; they gain experience in guiding students through a collaborative and interactive learning process, which leads to students' growth and success. However, the small magnitude of the effect of teachers' self-efficacy and students' self-efficacy on students' listening performance might be related to the short nature of the intervention which might have limited the interaction between the variables.

7.6 To what extent are student listening self-efficacy beliefs predicted by their listening performance, teacher self-efficacy beliefs and other variables?

This section discusses the findings regarding the nature of the relationship between students' self-efficacy in relation to listening and other variables: their listening performance, metacognitive knowledge, strategy use and teacher self-efficacy for the intervention and comparison groups. First, the findings from data collected before the intervention are discussed, then they are followed by findings from data collected through the post-intervention tests.

7.6.1 Factors predicting students' initial self-efficacy

Taken together, the variables were found to predict 28.6% of the students' self-efficacy for the intervention group and almost twice as much (51.8%) for the comparison group. This finding might be attributed, first, to the design of the study where participants were not

randomly chosen, thus, the researcher did not have control over the variables affecting the outcome variable. Therefore, results should be interpreted with caution (Bordens & Abbot, 2014). Secondly, it might be the complex (Bandura, 1989) and malleable nature of self-efficacy (Gist & Mitchell, 1992) as a psychological construct that makes the accuracy of its multidimensionality measurement difficult, and hence variability in the findings might occur.

Despite the differences in the amount of variance predicting self-efficacy in both groups, the same variables were found to contribute in explaining the variance: listening performance, metacognitive knowledge and strategy use. These variables made a significant and direct contribution to student self-efficacy. Interestingly, although the students' self-efficacy could not predict their listening performance at Time 1, the reverse was found, i.e. listening achievement was a significant predictor of student efficacy beliefs explaining 12% of the variance. This result corroborates Bandura's arguments regarding the significant impact of mastery experiences on one's sense of efficacy. That is, the students in this study were very likely to have been influenced by their own achievement, i.e., the better scores they achieved, the more efficacious they felt and vice versa. Again, the potential contribution of the learners' listening performance and their self-efficacy beliefs was not investigated in previous work, thus, this study provides important and novel empirical evidence of previous listening experience having a direct effect on learners' sense of efficacy as discussed earlier in Section 7.4.

Additionally, reported use of listening strategies was found to be the strongest predictor of the students' self-efficacy among the variables considered, explaining on average 14% of the variance. This result indicates the important and direct role of employing strategies while listening in affecting one's beliefs in one's capability to comprehend spoken language effectively. In other words, the more students employ listening strategies the more they feel confident that they will understand an aural passage. Once more, it was suggested by Graham (2007) that students should be aware of strategies that can facilitate their listening process, and hence, strengthen their sense of control. Furthermore, from correlational findings, researchers in language learner strategies (e.g., Wang & Li, 2010; Yilmaz, 2010). Thus, results from the current study provide empirical evidence of the role of employing listening strategies in improving learners' belief in their ability to listen effectively, but of a more robust kind using regression rather than just correlational analysis.

Additionally, metacognitive knowledge also predicted the students' perceived selfefficacy contributing on average 13% to the variance. This result also illustrates that students' knowledge of themselves as listeners, and knowledge of the listening task requirement had a unique effect on their belief in their ability to comprehend spoken language effectively. In other words, the more knowledgeable they were about the factors influencing listening, the more confident they felt that they could undertake listening. The potential impact of metacognition on learners' listening self-efficacy, again, has not yet been investigated previously, hence, this study has gone some way towards enhancing our understanding of the nature of the relationship between learners' self-efficacy and their metacognition in relation to listening.

Only the teachers' self-efficacy was not a significant predictor of students' self-efficacy at pre-test. This result may suggest that the student's sense of efficacy in the current study was affected more by personal or individual determinants (knowledge and achievement) rather than by external factors such as their teacher's level of confidence in teaching listening. Indeed, when interviewed at T1 students reported solely individual-related reasons for their sense of ability to listen effectively. These included their intrinsic motivation, interest, mastery experience and others. Researchers (e.g., Dörnyei & Kubanyiova, 2014) suggest that teachers' and learners' psychologies are linked and may be best considered as two sides of the same coin. However, the findings from this study might be related to the small sample size of teacher participants which could not vindicate building this kind of relationship. Furthermore, it maybe also possible that the comprehension approach to teaching listening adopted by teachers lacks the interaction, collaboration and evaluation aspects of teaching and learning which prevented any contribution to students' sense of efficacy. Again, the relationship and potential impact of teachers' self-efficacy on their students' self-efficacy has not yet been investigated previously in relation to foreign language listening and is another area where the current study makes an important contribution.

7.5.2 Factors predicting students' self-efficacy after the treatment

At post-test, taken together, the variables were found to predict 37.6% of students' selfefficacy in the comparison group, which is far less than what was found at Time 1. However, the same variables were found to be significant predictors: students' listening performance, metacognitive knowledge and their reported use of listening strategies, which provide credibility to the significant role of these variables in self-efficacy as discussed above. At this time, the students' self-efficacy was influenced by their listening performance more than by the other two variables; as listening performance decreased, their sense of efficacy decreased (reflecting the Repeated Measures ANOVA results). The decrease in the magnitude of the effect of metacognitive knowledge and strategy use on self-efficacy from Time 1 to Time 2 might be a result of their interaction with listening performance as both variables were found to affect listening proficiency. Ultimately, this finding supports Bandura's (1997) claim that one's mastery experience is the most robust and influential source of one's sense of efficacy. Qualitative data also confirms this result; the majority of students when interviewed associated their perceived ability to comprehend spoken English with their previous listening experiences whether positively or negatively. Again, the extent to which of teacher self-efficacy predicted student self-efficacy did not reach significance.

After students received the strategy and metacognition-based instruction, all the variables together in the intervention group explained 32.3% of the variance in the students' self-efficacy, demonstrating an increase of 3.7% in comparison to Time 1. This increase reflects the positive impact of the intervention on the students' listening self-efficacy. Similar predictors to those found in the comparison group and to those found at Time 1 were also noticed at Time 2. An increase of nearly twofold in the extent to which listening performance predicted self-efficacy was found; for this group, as the listening performance increased, self-efficacy increased (reflecting the Repeated Measures ANOVA results). Again, the results for the intervention group also implied interaction between the three predictors in the model which demonstrates the multivariate nature of second language learning in general (Plonsky & Oswald, 2017) and listening in particular, and the relationship between the different predictors.

Surprisingly, although there was a significant positive correlation between teacher selfefficacy and student self-efficacy, the former was not a significant predictor of student selfefficacy. This finding might be attributed to the multifaceted nature of individuals' self-efficacy (Zimmerman, 1999) that takes time to develop. Furthermore, it is also likely that the short period of the intervention had an influence on this result because the teachers focused more on teaching the strategies and raising students' metacognitive awareness of listening rather than boosting their confidence. Interestingly, the correlation findings suggest that this type of listening instruction could build a positive relationship between teachers' and their students' self-efficacy, in the sense that an increase in teachers' efficacy beliefs would lead to an increase in students' self-efficacy and vice versa.

CHAPTER EIGHT: CONCLUSION

8.1 Introduction

This final chapter summarises the findings of the study and provides answers to the research questions. The contribution of the study to knowledge is outlined and the limitations are also acknowledged. Furthermore, the implications for practitioners and policymakers are provided, and finally, suggestions for future research are presented.

8.2 Substantive findings

The broad aim of the study has been to investigate listening pedagogy in EFL classrooms in Algerian universities, focusing on the main elements of the language classroom: teachers, learners and the teaching/ learning process. Research in the area of L2 listening has highlighted the complex nature of this skill (Goh & Wallace, 2018; Graham, Santos, & Francis-Brophy, 2014), and hence, its pedagogy. For long, listening was perceived as a type of classroom activity to be addressed rather than a skill that needs its own pedagogy to be developed. Recent research (Graham & Santos, 2015) has suggested that listening in a language classroom needs to stand out as a fundamental skill and its pedagogy needs to be emphasized in order to maximise learners' listening ability in parallel with other language skills. One of the main types of instructions supported by research findings and shown to generate improved learners' listening proficiency and confidence to listen effectively is strategy training and metacognition (e.g. Graham & Macaro, 2008; Vandergrift & Tafaghodtari, 2010).

There is nonetheless a paucity of research regarding teachers of listening in respect of their cognition and practice. By way of consequence, this study set out to investigate teachers' general understanding and knowledge concerning the teaching of listening, in addition to their perceived capability to teach listening effectively using strategy instruction and metacognition. The findings revealed little awareness of the importance of listening on the part of teachers as they tended to conduct their classes in a traditional method of testing students' ability to answer comprehension questions rather than focusing on the listening process itself. This practice reflected their belief that the purpose of the language laboratory classes is to provide students with real life models of spoken language situations to help them improve their vocabulary

repertoire and speaking ability. To this end, teachers perceived their schooling experience as a main source of their current practice.

A supplementary finding of this study was the highlighting of the teachers' limited knowledge of listening strategies, essentially due to the non-provision by their institutions of continuous professional development programmes. Furthermore, the teachers' perceptions of their ability to, first, teach listening effectively in relation to listening strategies and metacognition and, second, to improve the students' listening proficiency, was relatively high although some variance was found among the teachers. Generally, teaching experience had an important role in the teachers' self-efficacy, insofar as the teachers perceived themselves as capable of directing the listening session and students' behaviour. Notwithstanding the relative high level of their self-efficacy, the teachers did reflect on some barriers that they sensed had a negative impact on their sense of efficacy.

Despite the different factors found to influence teachers' sense of efficacy in the teaching of listening and improving students' listening proficiency, the Algerian university, particularly the foreign language department, does not provide professional development programmes for its teachers to help them improve the quality of teaching and learning. Therefore, research findings related to listening strategies and metacognition were utilized in the current study to train Oral Expression teachers to apply them in the classroom. This endeavor then took the form of an initiation into research-informed pedagogy.

The findings of the study concluded that listening instruction based on training learners in metacognition and the use of strategies benefited both teachers and students. The teachers witnessed a growth in their perceived sense of efficacy in the teaching of listening. These beliefs were shaped by their developed awareness and knowledge regarding the nature of the listening process and its requirements. Despite the fact that the teacher training programme and the practice of applying the instruction with learners revealed some of the teachers' practical shortcomings, they displayed their willingness to adopt the instructional method for future practice.

With regard to the students, this study investigated their metacognitive knowledge of listening, their use of listening strategies, their perceived capability to listen to spoken English effectively, and their listening proficiency level. The findings revealed a low level of listening proficiency with a large variance among the students demonstrating the heterogeneity of classes in relation to their language proficiency. This observation hence puts into question the adequacy

of the training dispensed to students in the previous seven years of teaching/ learning English, and which resulted in generally low levels of language proficiency. This result further underscores the difficulties teachers experience in managing the classroom with no support from the departments, a situation that requires a reconsideration of the language entry requirements to the course in the future.)

A medium level of listening metacognitive awareness was also found, and listening classes were perceived by learners as more of an opportunity for language exposure to maximize the vocabulary repertoire and practise speaking rather than as a chance to improve listening as such. This result clearly reflects their teachers' understanding and practice in the classroom. Furthermore, a moderate level of strategy use was also found, with high proficiency level students reporting more frequent use of strategies than their low proficiency counterparts.

Regarding their perceived self-efficacy in listening, the findings demonstrated a relatively high level with a large variance among students. Additionally, students with similar proficiency levels reported different self-efficacy levels, more particularly for the aspects of planning, evaluation, use of sources of information, and persistence during listening.

Most of the factors presented above are personal determinants whether positive or negative. This reflects students' belief that their ability is more dependent on their current performance, knowledge, beliefs and motivation, and it is less related to other factors, such as teacher instruction or feedback, possibly because they generally do not receive any feedback on listening from their teachers. In addition, listening in the context of the study is treated as an individual task, students listen and complete comprehension questions without any interaction. Consequently, this practice shaped their self-efficacy beliefs.

The findings demonstrated that the implementation of strategy and metacognition training induced an improvement in the students' listening proficiency, metacognitive knowledge, employment of listening strategies and their perceived capability to listen effectively. The students highlighted the crucial role of the training in raising their awareness of listening and how it can be approached to reach comprehension, a competence which they did not possess previously. The findings in the current study support previous research on the positive impact of this type of instruction on learners' proficiency and confidence. However, students who did not undergo the training experienced no improvement in their performance, self-efficacy beliefs or motivation to learn, and indeed witnessed a significant decline in those areas. Consequently, it can be argued that the traditional method of approaching listening could

248

not achieve the desired results regarding students' performance and motivation, thus, there is ground for recommending the adoption of listening instruction based on the use of strategies and metacognition.

Viewing the main variables involved in the study, a relationship between them was established. Furthermore, a causal relationship was also established for students' listening proficiency and self-efficacy beliefs. The figure below (*Figure 8.1*) shows the nature of the relationship between the variables. The findings for this part of the study demonstrated a positive relationship between these variables and listening performance, however, the students' reported strategy use was correlated with their achievement but could not predict directly their performance after the training. Nevertheless, it might be possible that the use of strategies affected proficiency in an indirect way by interacting with metacognition knowledge after receiving the instruction.



Figure 8. 1 Relationship between listening strategy training and metacognition, students listening proficiency, student self-efficacy, vocabulary, strategy use, metacognitive knowledge, and teacher self-efficacy.

As far as student self-efficacy beliefs is concerned, a relationship between other factors was uncovered and a causal relationship was also established between listening proficiency, use of listening strategies and metacognitive knowledge. The nature of the relationship is shown in the figure above. The findings for this part demonstrated a positive relationship between all the variables: listening performance, teacher self-efficacy, metacognitive knowledge, strategy use and perceived efficacy beliefs in listening. Despite the fact that the teachers' and students' efficacy beliefs were correlated, there was no direct causal relationship between the two variables. Moreover, student listening performance exerted a significant impact on their efficacy beliefs. This suggests that students are more likely to judge their ability according to their personal-related factors rather than external factors (e.g. the teacher). While research suggests a relationship between teacher and student self-efficacy, the causal relationship between the two variables has not received sufficient investigation.

8.3 Contribution of the study

First and foremost, this study brought together research and pedagogy in relation to foreign language listening. It has made a number of important contributions to the field of foreign language learning and teaching of listening in the following aspects. Firstly, it investigated the teaching and learning of listening to English as a foreign language, which in the context of Algeria is considered as an L4 or L5, while most studies have investigated listening in an L2 context. Secondly, this study empirically investigated foreign language teachers' and learners' cognition and practice in relation to listening, while most previous studies have focused largely on learners and very few on teachers. Thirdly, the study is one of few to explore teachers' knowledge of listening and to then train them in the application of research findings in their own classrooms. It is also the first study investigating teachers' selfefficacy beliefs in relation to the teaching of listening in a foreign language context, in addition to a deep exploration of the different factors affecting their cognition and practice. It is also the first study that investigated the impact of research-based training on raising teachers' knowledge of listening strategies and cognition in general. This study can, thus, serve as a basis for future studies in the area of listening instruction. It further enhances our understanding of language teacher self-efficacy using a mixed method design in an area which has been criticised for its reliance on quantitative methods (Hoang, 2018; Wyatt, 2018).

Concerning the design of the study, the intervention in this work was delivered by five teachers, while in the majority of the studies the intervention was delivered by the researchers. Although studies (e.g. Plonsky, 2011) suggest that interventions imparted by teachers are less effective than those delivered by researchers, the findings from the current study shows that the instruction can be used in real classrooms. Furthermore, in contrast to a majority of previous listening research in particular where most studies rely heavily on analysis of variance (Plonsky & Oswald, 2017), the use of a more sophisticated analysis through multiple regression is considered a key strength of this study.

The findings from this study provide additional empirical evidence with regard to the benefit of strategy instruction and metacognition for improving, first, listening proficiency and second, self-efficacy beliefs. This type of listening instruction has been criticised for lacking sufficient evidence to support the claim that it ameliorates listening comprehension (Renandya & Farrell, 2011). It also confirms the existence of a relationship between, first, listening comprehension and self-efficacy beliefs, second, strategy use and self-efficacy, third, strategy use and listening comprehension, fourth, metacognition and listening comprehension, fifth, metacognition and self-efficacy, and lastly teacher self-efficacy and students' performance and self-efficacy. More importantly, it extends knowledge concerning the nature of the relationship between listening performance and self-efficacy beliefs whilst most studies relied solely on investigating the relationship through correlation analysis. In the current study, although both variables were correlated, there was no bi-directional causal relationship at the beginning of the study. That is, while listening performance predicted self-efficacy, self-efficacy did not predict listening performance. However, this causal relationship was established after receiving the strategy and metacognition training.

Last but not least, the current findings add to a growing body of literature on the impact of teacher development programme on teachers' cognition and practice in general and on language teachers in particular. Subsequently, the results empirically support the claim regarding the relationship between teacher self-efficacy and learners' self-efficacy and their performance, and provides empirical evidence on the impact of EFL teachers' self-efficacy on learners' outcomes when Hoang (2018) claims lack of evidence between to the two constructs in the field. Although the quantitative findings did not show a direct impact of teacher selfefficacy on student self-efficacy, a significant positive relationship was found. Similarly, qualitative findings also demonstrated the existence of a relationship between the three constructs.

8.4 Limitations of the study and future research

Before summarising the findings of the current study, a number of limitations are considered. First, this study adopted a quasi-experimental design where the participants were not allocated randomly, rather a convenience sampling approach was chosen and intact classes were used. Moreover, the sample of teacher-participants in this study was small which might have limited the possibility of significant variations among teachers in the context in terms of their understanding, knowledge and practice of listening. Therefore, a larger sample size would be considered representative. Second, the duration of the teacher training was relatively short because of the teachers' other work commitments. A longer and more detailed training programme might have generated better results.

Furthermore, the data were collected only twice, before and after the intervention. A delayed post-test would have been useful to check whether the impact of the intervention on the participants persisted in the longer term. Another limitation is related to the scope of the study. It did not investigate other variables that are regarded as crucial in affecting first, learners' listening proficiency, such as working memory and auditory discrimination ability, and second, in relation to self-efficacy beliefs, factors such as gender and age which might have a potential predictability for learners, in addition to teaching experience and educational level for teachers. Furthermore, measuring learners' motivation before and after the intervention would be beneficial since motivation emerged as a key construct in this study. The qualitative findings in relation to learners' self-efficacy revealed that eliciting the same information in the questionnaire twice, before and after the intervention, had an impact on their reported ability to listen effectively. Therefore, this procedure might pose a potential limitation to the study.

8.5 Pedagogical implications of the study

This study draws the following implications for the teaching and learning of listening in the context of the study in particular. Firstly, given the positive impact on learners' listening performance and self-efficacy beliefs of instruction in strategies and metacognition compared with the more traditional approach to listening, it is highly recommended that the former type of instruction is implemented in classrooms. However, the greatest benefits might come from introducing it at an earlier stage of language learning, for example in secondary schools. Similarly, the results in relation to student listening performance demonstrated a large

contribution of vocabulary knowledge to comprehension, therefore this study suggests developing learners' vocabulary through teaching vocabulary strategies to learners at an earlier stage of English learning. It was also identified that learners' motivation was highly affected by the type and content of the activities used in the classroom, therefore, it is highly recommended that teachers should use tasks that suit their level and interest and with an optimal challenge to increase motivation and linguistics and cognitive knowledge to a new sophisticated level of learning (Renandya, 2014). Indeed, the evidence from this study regarding the mutual impact of teachers' and learners' motivation and interest in the classroom suggests encouraging more teacher-learner collaboration and interaction in the classroom for successful teaching and learning processes.

Secondly, the findings revealed the difficulties teachers encountered while teaching listening regarding students' language proficiency level. Therefore, on the one hand, this study proposes some refinement in the language requirements for the enrolment into English courses at universities. On the other one, the results also revealed the absence of a curriculum for listening -a sub-part of the Oral Expression module- although it is a fundamental unit in the English language programme. The pressing recommendation issued here is for the provision of a constructive curriculum for the listening subject and the creation of a collaborative environment for teachers to assist the latter's pedagogical practice and raise their self-efficacy throughout the academic year. Additionally, teachers are made to teach listening without an achievable aims, and their lack of specialism and lack of interest in the module they teach - because of the language department system- were found to affect their cognition, teaching practice and willingness to make efforts in order to improve their pedagogy, therefore, it is highly recommended that heads of departments to prioritise teachers' expertise in the field they teach.

Thirdly, as it was found that research-based teacher training benefited the teachers' knowledge and self-efficacy beliefs about listening, the provision of teacher continuous development programmes is recommended to develop and maximise the quality of language teaching and learning. Lastly, this study also suggests and encourages language teachers to engage with research to develop their subject knowledge and pedagogical practice, and to keep updated with the latest research findings. Policy makers should ensure the availability of resources to support teacher growth.

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APPENDICES

Appendix A: Pre-test Listening Comprehension

SECTION 1

Questions 1-7

There are seven questions in this part. For each question there are three pictures and a short recording. Choose the correct picture and put a tick (\checkmark) in the box below it.

Example: Which sport did the girl watch on TV last night?



1. What time did the taxi arrive?







4. How will the boy contact his mother?



5. What should Jessy bring to the picnic?



6. What did the man buy?



7. Which bus will the girl catch?



SECTION 2

Questions 8-17

Complete the notes below. Write 1 WORD for each answer.

	SELF-DRIVE TOURS IN THE USA		
Example			
Name:	AndreaBrown		
Address:	24 Road (8)		
Postcode:	BH5 2OP		
Phone:	(mobile) 077 8664 3091		
Heard about com	Heard about company from:		
Possible self-driv	tours		
Trip One:			
. Los Angeles: cus	tomer wants to visit some parks with her children (10)		
. Yosemite Park: c	ustomer wants to stay in a lodge, not a		
Trip Two:			
. Customer wants	o see the on the way to Cambria (12)		
. At Santa Monica	not interested in shopping		
. At San Diego, wa	nts to spend time on the		

Complete the table below.

Write 1 WORD AND/OR A NUMBER for each answer.

	Number of days	Total distance	Price (per person)	Includes
				. accommodation
Trip One	12 days	km (14)	£ 525	. car
				. one (15)
Trip Two	9 days	980 km	£ (16)	. accommodation
				. car
				(17)

SECTION 3 Questions 18-23

Look at the six sentences for this part. You will hear a conversation between a boy, Oliver, and a girl, Hannah, about a party. Decide if each sentence is correct or incorrect, or if the information is not mentioned. Put a tick (\checkmark) in the appropriate box.

	Yes	No	Not mentioned
18. Hannah shared a birthday party with her sister last year			
19. They agree that the barbecue was a good idea			
20. Hannah's grandmother will let her use her house for her party			
21. Oliver would like to have a party in his grandmother's flat			
22. Hannah thinks the Chinese restaurant would be the best choice.			
23. Hannah will ask her parents before booking the school canteen			

SECTION 4

Questions 24-19

a. Look at the university library map. You are going to hear two people, a librarian and a student showing him the different library areas.



b. Complete the notes below. Write no more than three words

Group Study Booking system

To be used for group projects

Advance notice required: 48 hours

- 27. Must reserve using
- 28. Website booking for group study room- need student name and
- **29**. Booking confirmation received via

SECTION 5 Questions 30- 35

Listen to threes short conversations. There is an unexpected problem in each. Complete the following table.

Conversation	Where does it take place	The problem
1	(30)	(31)
1	(30)	(51)
2	(32)	(33)
3	(34)	(35)

Appendix B: Post-test Listening Comprehension

SECTION 1 Questions 1-7

There are seven questions in this part. For each question there are three pictures and a short recording. Choose the correct picture and put a tick (\checkmark) in the box below it.

Example: Where did the girl and her family go on holiday?



1. Which cyclist won the race?



2. Why couldn't the girl go to photography club yesterday?



A





С

3. Where will the boy and his friend practise basketball?







в





4. how did the girl get to school?



5. Which music poster does the boy prefer?



6. Where will they go after the cinema?





в



С

A B7. What will Sam take on the school museum trip tomorrow?











С

SECTION2

Questions 8-17

Complete the notes below. Write **1 WORD/ OR A NUMBER** for each answer.

HIRING A PUBLIC ROOM
Example
me: The main Hall – seats200
Room and cost
• The Room – seats 100 (8)
. Cost of Main Hall for Saturday evening: £ (9)
+ $\pounds 250$ deposit (
. Cost includes use of tables and chairs and also
. Additional charge for use of the kitchen: £25
Before the event
. Will need a licence (12)
. Need to contact caretaker (Mr Evan) in advance to arrange (13)
During the event:
. The building is no smoking
. The band should use the door at the back (14)
. Don't touch the system that controls the volume
. For microphones, contact the caretaker
After the event:
. Need to know the For the cleaning cupboard (15)
. The must be washed and rubbish placed in black bags (16)
• All must be taken down (17)

SECTION 3

Questions 18-23

Look at the six sentences for this part. You will hear a boy, Mark, and a girl, Anna, talking about winter sports. Decide if each sentence is correct or incorrect, or if the information is not mentioned. Put a tick (\checkmark) in the appropriate box

	Yes	No	Not mentioned
18. Mark was disappointed at the amount of snow at his holiday centre			
19. Anna is surprised at how quickly Mark learnt to snowboard.			
20. Mark thinks it's important to be fit in order to snowboard well			
21. Anna is shocked that some people don't protect themselves better when snowboarding			
22. Mark is keen to learn more advanced snowboarding in future			
23. Anna and mark both prefer doing snowboarding to other winter sports			

SECTION 4

Questions 24-29

c. Look at the diagram below. Write NO MORE THAN TWO WORDS AND/ OR A NUMBER for each answer.

Swimming Pool			(26)
	Gym	Skate Arena	
(24)		(25)	
		Reception	

d. Complete the flow chart below.

Write no more than two words and/ or a number for each answer

Complete an enrolment form

Parents need to (27) an authorization form.

Give forms to reception with a fee of $\pounds 20$ (for an annual subscription) or pay per visit.

You will receive your (28) in the post.

Your (29) is required for booking classes.

Part 5 Questions 30- 35

Listen to threes short conversations. There is an unexpected problem in each. Complete the following table.

Conversation	The subject of the	The problem
1	conversation (30)	(31)
1	(30)	
2	(32)	(33)
3	(34)	(35)

Appendix C: Aural Vocabulary Test

Instructions: Listen to the sentences and fill in the blanks according to what you hear. Each sentence will be heard only once. Each sentence has only one word missing. Look at the example in the box below:

If you hear: "He lives in **Europe**" - You write "Europe" in the space provided. Example: He lives in.....

1. Her two favourite subjects at university were and computer studies.
2. The worker had a lot of in the field.
3. She has worked as a for most of her life.
4. I called his this morning, but he wasn't there.
5. The police officer made sure the was secure.
6. The teacher for the children every day.
7. This has very good food.
8. Two things which I love the most are and painting.
9. The poor made it difficult to enjoy travelling.
10. A major of the machine is its cost.
11. The between the two groups went for over an hour.
12. The woman wanted to a few issues to the student.
13. I will try to the office tomorrow morning.
14. The man found it difficult to in the hot weather.
15. The student was she would be able to complete the work on time.
16. The young man was more than the older man.
17. The government tried to increase within the country.
18. The student had seen a similar in his book last year.
19. He explained the to his friend.
20. The student couldn't decide which would be best for him.
21. The best was near the post office.
22. Living in a small town can sometimes be a for students.
23. Which of the play did you like the most?
24. The door to the was very difficult to open.
25. He had disliked his entire life.
26. Some children will choose to eat a rather than a piece of fruit.
27. The woman wanted to the book as soon as possible.
28. The man wanted to so

29. It was important to the in
30. They wanted to the work
31. The team was the best in
32. The boy surprised the man by speaking in a
33. She planned to contact the
34. The children rode their bikes along the
35. The cleaner needed to buy a new
36. It was necessary for the to
37. The woman wasn't sure what the
38. He was surprised to see a large
39. The child's was very impo
40. The police found the in the
41. The boy's was to assist his
42. The family was hoping to reach the
43. The man wanted to the ap
44. The politician wanted to get a
45. It is often important to y
46. The man was hoping to
47. The dancing went on for
48. The children had a exp
49. She didn't have any information about the _
50. She had been a teach
51. The had involved many
52. The politician's was popu
53. The woman bought a
54. The of the project would
55. The man had lived in
56. The team's was totally un
57. His was unhappy wi
58. She could the colo
59. The student wasn't able to
60. Some things are very difficult to
61. The boy found it hard to
62. The number of problems
63. The man was quite toward

Appendix D : Pre- and Post-test Student Questionnaire

Dear students;

Thank you for accepting to take part in this study. The goal of this questionnaire is to help us understand your experience in listening to English. Your answers will contribute to the improvement of the teaching of listening in this context. There is no right or wrong answer. Please give your honest answers.

Part 1: Demographic information

Name:		
University:		
Gender: Age: Class:	Male	Female

Part 2

How far do you agree with the following statements? Please circle one number below to show your level of agreement.

1. Strongly Disagree	2. Disagree	3. Partly Disagree	4. Partly Agree	5. Agree	6. Strongly Agree

		8	0		0,00	
1. I find listening more difficult than reading, speaking, or writing in English	1	2	3	4	5	6
2. Listening is important for learning the English language	1	2	3	4	5	6
3. Before I listen to English, I feel nervous	1	2	3	4	5	6
4. I feel confident while I am listening to English	1	2	3	4	5	6
5. I am satisfied with my current level of listening comprehension	1	2	3	4	5	6
6. I am not motivated to listen to English	1	2	3	4	5	6
7. I want to develop my listening skills	1	2	3	4	5	6
8. Understanding spoken English requires the understanding of every word in the passage	1	2	3	4	5	6
9. Understanding spoken English requires knowledge of Anglophone cultures	1	2	3	4	5	6
10. I find it difficult to maintain my concentration while listening	1	2	3	4	5	6
11. I find it difficult to remember the words I hear	1	2	3	4	5	6
12. I find it difficult to recognise words while listening to English	1	2	3	4	5	6
13. I find it difficult to understand spoken English when I am not familiar with the topic	1	2	3	4	5	6
14. I find it difficult to understand spoken English when there is unfamiliar vocabulary	1	2	3	4	5	6
15. I find it difficult to understand speech because I lack knowledge of English grammar	1	2	3	4	5	6

Part 3

How often you do the following? Please, tick the corresponding answer.

Never	Sometimes	Frequently	Always
	Never	NeverSometimesImage: Constraint of the second seco	Never Sometimes Frequently Image: Sometimes Frequently Image: Sometimes Image: Sometimes Image: Sometimes

Part 4

How confident do you feel about listening in English?

How confident are you that, **in your current level of listening proficiency**, you can do the following? Circle a percentage to show your level of confidence.

0 % = I absolutely **can't** do this

100% = I absolutely **can** do this

IN MY PRESENT TEACHING SITUATION, I CAN:

1. Dev	elop my a	ability to	understa	and spok	en Englis	h				
0	10	20	30	40	50	60	70	80	90	100
2. Und	erstand th	ne details	s of what	I hear						
0	10	20	30	40	50	60	70	80	90	100
3. Und	erstand th	ne gist (r	nain idea) of wha	ıt I hear					
0	10	20	30	40	50	60	70	80	90	100
4. Iden	tify word	s in con	nected (f	ast) spee	ch					
0	10	20	30	40	50	60	70	80	90	100
5. Rec	ognise op	pinions e	expressed	l by spea	kers whil	e listening	5			
0	10	20	30	40	50	60	70	80	90	100
6. Con	tinue liste	ening eve	en if I fin	d difficu	ulties und	erstanding	5			
0	10	20	30	40	50	60	70	80	90	100
7. Plan	effective	ly how]	l am goir	ng to list	en					
0	10	20	30	40	50	60	70	80	90	100
8. Und	erstand a	passage	without	transcrip	ots					
0	10	20	30	40	50	60	70	80	90	100
9. Use	different	sources	of inforn	nation to	understa	nd what I	am listenir	ng to		
0	10	20	30	40	50	60	70	80	90	100
10. Ge	t the mea	ning of ı	ınknown	or incom	nprehens	ible words	5			
0	10	20	30	40	50	60	70	80	90	100
11. Lis	sten to En	glish wi	thout pan	icking						
0	10	20	30	40	50	60	70	80	90	100
12. Co	ntrol how	' I am lis	stening							
0	10	20	30	40	50	60	70	80	90	100

281

13. Evaluate how effectively I am listening

0	10	20	30	40	50	60	70	80	90	100

Please make sure that you answered all questions.

Thank you for your time.

Appendix E: Pre- and Post-test Teacher Questionnaire

Dear teachers,

Thank you for agreeing to complete this questionnaire. We are interested in your personal views about the teaching of English listening to undergraduate students in the English language department. When completing the questionnaire, please think particularly and precisely about what happens in the classroom or language laboratory context. Your answers should not be perfect just frank.

The information gathered will be used for research purposes only, your responses will remain strictly anonymous and confidential.

Part one: demographic information

Please tick the appropriate response:

Gender:	A. Male	В	8. Female		
Educational level:	A. Bachelor o	legree			
	B. Mast	ter degree			
		orate degree			
	D. Othe	U			
English language tea	ching experien	ce: A. Less th	nan five years		
		B. 5 - 15 ye	ears		
		C. Over 15	years		
Training to teach En	glish:	A. Yes	B. No		
If Yes, please say:					
a. where did the trainin	g take place?				
b. how long did the trac. what was the level of				chool	
				 second university 	lary school sity
Educational experient	nce abroad (stu	dying, teaching	g, or being trained):	A. Yes	B. No
Pre-service training	in teaching list	ening:		A. Yes	B. No
In-service training in	n teaching lister	ning:		A. Yes	B. No

Part 2: teachers' understanding of listening

How far do you agree with the following statements? Please circle one number below to show your level of agreement.

1. Strongly Disagree 2. Di	sagree 3. Undecided	4. Agree	5. Strongly Agree
----------------------------	---------------------	----------	-------------------

i. I like teaching listening	1	2	3	4	5	
ii. I find teaching listening challenging	1	2	3	4	5	
iii. Listening is a skill that develops by itself through exposure to spoken English	1	2	3	4	5	
iv. When students don't understand a word, they should work out its meaning from the context	1	2	3	4	5	
v. When students don't understand a word, they should work out its meaning from the words/phrases that precede or follow the unknown word	1	2	3	4	5	
vi. When students don't understand a word, they should work out its meaning from their linguistic knowledge (e.g. knowledge of L2/L1 vocab, grammar)	Stron Stron Disa Agree	gly gree	agree	Undecide	ed A	gree
	1	2	3	4	5	
vii. It's more important for students to use the context of the passage to understand than to listen carefully to what is actually said.	1	2	3	4	5	
viii. The main difficulties for students in listening arise from lack of grammatical knowledge.	1	2	3	4	5	
ix. The main difficulties for students in listening arise from lack of vocabulary.	1	2	3	4	5	
x. Students' main problems lie in the difficulty they have in identifying where word/phrase/sentence boundaries are.	1	2	3	4	5	
xi. The main difficulties for learners in listening arise from lack of background knowledge about the topic of the passage.	1	2	3	4	5	
xii. It is possible to teach students how to listen more effectively.	1	2	3	4	5	
xiii. After listening, students should discuss how they complete the listening activity.	1	2	3	4	5	
xiv. After listening, students should discuss how they felt about the listening activity.	1	2	3	4	5	

Part 3: teachers' instructional practice

a. When you ask learners to listen, how often you do the following?

Please, tick the corresponding answer.

	Never	Sometimes	Frequently	Always
1. I remind students of vocabulary linked to the topic				
2. I ask students to predict aspects of the text to concentrate on (e.g. verbs, nouns, numbers)				
3. I ask students to think of ideas/facts etc. that might be discussed in the passage				
4. I ask students to pay attention to stress, intonation, tone etc.				
5. I ask students to focus on key words				
6. I remind students about different tasks characteristics (e.g. interview, academic lecture, radio broadcast etc.)				
7. I ask students to discuss possible answers to the questions				
8. I tell students what the answers are (e.g. picture A, picture B, etc.)				
9. I ask students what answers they put (e.g. picture A, picture B, etc.)				
10. I ask learners to answer using English words/phrases				
11. I ask students how they felt about the task				
12. I ask students what they did to complete the task (how they get a particular answer whether correct or incorrect)				
13. I ask students to reflect on the difficulties they encountered during listening				
14. I advise students how to deal with difficulties next time				
15. I ask learners to use language/structures used in the passage in a productive follow-up task				

b. Select from the following list the type of activities you use with your students in the usual listening classes. Tick as many as you want.

- 1. Listen out for words they predict they may hear
- 2. True false statements
- 3. Listen out for how individual words change in connected speech
- 4. Identify tone of voice/emotion
- 5. Identify word boundaries
- 6. Think about how to work out/deal with unknown words

Other: _

c. What, in your view, is the main purpose of carrying out listening tasks? Please rank the following in order of importance, with 1 for the most important reason, 6 the least important.

- To extend students' vocabulary	
- To increase students' opportunities to practise listening	
- To teach students how to listen more effectively	
- To assess how well students can listen	
- To provide students with a model of pronunciation	
- To improve their speaking skill	
If you have another reason, please write it here	

Part 4: How confident do you feel about teaching listening? Self-efficacy beliefs for teaching listening inventory (SEBTLI)

This questionnaire is designed to help the researcher and yourself as a teacher to gain better understanding of the kinds of things that influence how confident you feel about teaching English listening.

The questionnaire is not a test, there is no correct or incorrect answers. We are just interested in your frank answers. Your responses will be kept strictly confidential and will not be identified by name.

How confident are you that, **in your present teaching situation**, you can do the following things? Circle a percentage to show your level of confidence.

0 % = I absolutely **can't** do this

100% = I absolutely **can** do this

IN MY PRESENT TEACHING SITUATION, I CAN:

1. Sele	ct releva	int listeni	ng materi	iais appro	opriate to a	all student	s' languag	ge level		
0	10	20	30	40	50	60	70	80	90	100
2. Use	the alloc	cated time	e for liste	ning activ	vities appr	opriately				
0	10	20	30	40	50	60	70	80	90	100
3. Plan	the liste	ening cou	rse effect	ively						
0	10	20	30	40	50	60	70	80	90	100
4. Prov	ride stud	ents with	ı feedback	c on their	listening	performan	ice			
0	10	20	30	40	50	60	70	80	90	100
5. Prov	ride stud	ents with	opportur	nities to p	oractise lis	tening out	side class	room		
0	10	20	30	40	50	60	70	80	90	100
6. Maiı	ntain hig	h levels	of student	ts' motiv	ation and	engageme	nt in liste	ning task	S	
0	10	20	30	40	50	60	70	80	90	100
7. Fost	er intera	ction am	ong stude	ents						
0	10	20	30	40	50	60	70	80	90	100
8. Impi	rove stud	dents' list	tening pro	oficiency						
0	10	20	30	40	50	60	70	80	90	100
9. Man	age the	listening	session if	unexpec	cted studer	nt behavio	ur occurs			
0	10	20	30	40	50	60	70	80	90	100
10. Co	operate	with othe	r teachers	s to devel	lop my ow	n listening	g teaching	5		
0	10	20	30	40	50	60	70	80	90	100
11. Imj	plement	new teac	hing liste	ning met	hods					
0	10	20	30	40	50	60	70	80	90	100
12. Per	sist with	students	s who are	unmotiv	ated when	listening				
0	10	20	30	40	50	60	70	80	90	100
13. Per	sist with	students	s whose li	stening i	s not impr	oving				
0	10	20	30	40	50	60	70	80	90	100
14. Cla	rify the	goal of e	ach listen	ing task						
0	10	20	30	40	50	60	70	80	90	100
15. Acl	hieve the	e objectiv	ve I have	set for lis	stening					
0	10	20	30	40	50	60	70	80	90	100
16. Tea	ach lister	ning strat	egies effe	ectively						
0	10	20	30	40	50	60	70	80	90	100
			~ .							

1. Select relevant listening materials appropriate to all students' language level

17. Develop students' effective use of listening strategies

0	10	20	30	40	50	60	70	80	90	100
18. Eva	luate stu	udents' u	se of liste	ning stra	tegies					
0	10	20	30	40	50	60	70	80	90	100
19. Improve students' sense of efficacy for listening										
0	10	20	30	40	50	60	70	80	90	100
20. Provide students with opportunities to reflect on their way of processing listening input										
0	10	20	30	40	50	60	70	80	90	100
21. Rai	se stude	nts' awai	reness of	the differ	ent types	of listenin	g task der	nands		
0	10	20	30	40	50	60	70	80	90	100
22. Ma	intain st	udents' h	igh attend	lance in	the listening	ng class				
0	10	20	30	40	50	60	70	80	90	100
23. Mal	ke my li	stening in	nstruction	understa	andable					
0	10	20	30	40	50	60	70	80	90	100
24. Raise students' awareness of the nature of the listening process										
0	10	20	30	40	50	60	70	80	90	100
25. Use	e a varie	ty of liste	ening activ	vities to a	assess stud	lents' liste	ning prof	iciency.		
0	10	20	30	40	50	60	70	80	90	100

Thank you for your thought and the time you have put into completing this questionnaire.

Appendix F: Classroom Observation Checklist

Teacher:

Date:

	Yes or No	What has been done	Type of listening activities	Teaching strategies (if any, what are they?)	Students' motivation/ engagement
Pre-listening Planning (contextualisation) - introducing the topic - discussing text genre - discussing cultural information - information/words prediction - possible answers discussion - introducing strategies (modelling)					
During listening 1 st listening (verification) - peer-discussion - planning 2 nd listening (verification) - class discussion (about pertinent details or answers)					

- students' reflection on they arrived at the meaning of some words, or part of the text			
 3rd listening (final verification) using transcripts (e.g. demonstrate sound-symbol differences) model listening strategies to be used in future activities to solve comprehension 			
problems			
Post-listening			
Evaluation (reflection) - students reflect on the difficulties encountered in the previous activity			
- students set goals on how to listen for the next activity using listening strategies			

Appendix G: Teachers' Instructional Log

Teacher: Date: Session n°:

Lesson objective:

Phase	Activities used	Learners' response	How did you feel it went? Why?	Any changes for next time?
Pre-				
listening				
_				
While				
listening				
_				
Post-				
listening				

Appendix H: Information sheet and Consent Form (Head of the Departments)



Researcher: Keltoum Mansouri

E-mail: K.Mansouri@pgr.reading.ac.uk

Supervisors: Prof. Suzanne Graham; Dr. Naomi Flynn

E-mail: s.j.graham@reading.ac.uk; n.flynn@reading.ac.uk

Heads of Departments' Information Sheet

Research Project: Research into practice: implementing strategy and metacognition-based instruction in the teaching of EFL listening. The case of Algerian University teachers and students.

The Study

This research forms the basis of the PhD I am completing at the Institute of Education, University of Reading in the UK. It aims to investigate teachers' and students' beliefs about listening in English as a foreign language as well as ways to improve the development of listening. It hopes to make recommendations regarding how we can best help teachers and students in these areas.

Does the department have to take part?

It is entirely up to you whether you give permission for the department to participate. It is totally voluntary and the participants have the right to withdraw at any time during the study without any repercussions to them by contacting the researcher. If they change their minds after data collection has ended, the researcher will discard their data.

What will happen if my department take part in this study?

If you permit your department to take part in the study, 1st year Oral Expression teachers and their students will be involved. The participants will receive questionnaires to complete, be observed during listening classes, then, will be interviewed individually and audio-recorded. In addition, the students will have a listening test administered in class, taking approximately 45 minutes. The results to be gained from the test will not be part of their grades. The interviews recordings, of all participants, will be transcribed and anonymised before being analysed. Teachers will receive training in how to teach listening and they will be asked to keep teaching logs to report on what they include in their sessions. After some time (approximately 12 weeks), the research instruments used at the beginning of the study will be re-administered with all participants (teachers and students).

What are the risks and benefits of taking part?

I do not foresee any risks in participating in the study. The information the participants will give in the study will be kept strictly confidential and will only be seen by the researcher. Neither you, the teachers, the students or the department will be identifiable in any published report resulting from this research including the thesis. Information about individuals will not be shared with the department.

I anticipate that the findings of the study will be useful for you, teachers, and students in improving how listening is taught/learnt in Algeria.

What will happen to the data?

Participants will be assigned a pseudonym and will be referred to by that pseudonym in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to the records. All interview recordings will be destroyed after the end of the research. My academic supervisors will have access to the transcripts and test results, but I will be the only person to have access to the original recordings. In line with the University's policy on the management of research data, anonymised data gathered in this research may be preserved and made publicly available for others to consult and re-use. The results of the study will be presented at national and international conferences, and in written reports and articles. We can send you electronic copies of these publications if you wish.

What happens if something goes wrong?

In the unlikely case of concern or complaint, you can contact my supervisor, **Prof. Suzanne Graham**, Tel: +44 (0) 118 378 2684 or E-mail: s.j.graham@reading.ac.uk

Where can I get more information?

If you would like more information, please contact me, Keltoum Mansouri.

E-mail: k.mansouri@pgr.reading.ac.uk

What happens if I change my mind?

You can change your mind at any time without any repercussions. During the research, you can stop your participation at any time. If you change your mind after data collection has ended, I will discard the participants' data.

Who has reviewed the study?

This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

I highly value your cooperation and I hope that you are willing to contribute to this research project by giving your permission. If you do so, please complete the attached consent form and return it via email to the address mentioned above. A summary of the results can be sent upon your request by sending an email to the address above.

Thank you for your time.

Yours sincerely



Keltoum Mansouri

Head of Departments' Consent Form

I have read the Information Sheet about the project and received a copy of it.

I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Name of Head of Department: _____

Name of the University: _____

Please tick as appropriate:

I consent to the involvement of my department in the project as outlined in the Information Sheet

Signed: _____

Date:	

Appendix I: Information sheet and Consent Form (Teachers)



Researcher: Keltoum Mansouri E-mail: <u>K.Mansouri@pgr.reading.ac.uk</u> Supervisors: Prof. Suzanne Graham; Dr. Naomi Flynn

E-mail: s.j.graham@reading.ac.uk; n.flynn@reading.ac.uk

Teachers' Information Sheet

Research Project:

Research into practice: implementing strategy and metacognition-based instruction in the teaching of EFL listening. The case of Algerian University teachers and students.

The Study

This research forms the basis of the PhD I am completing at the Institute of Education, University of Reading in the UK. It aims to investigate teachers' and students' beliefs about listening in English as a foreign language as well as ways to improve the development of listening. It hopes to make recommendations regarding how we can best help teachers and students in these areas.

Why have I been chosen to take part?

All 1st year teachers of Oral Expression at the department of English Language and Literature in an Algerian University have been invited to take part.

Do I have to take part?

It is entirely up to you whether you participate or not. It is totally voluntary, and you have the right to withdraw at any time during the study without any repercussions by contacting the researcher. If you change your mind after data collection has ended, the researcher will discard your data.

What will happen if I take part in this study?

If you agree to take part in the study, you will be asked to complete a questionnaire about teaching listening. It will take approximately 20 minutes to complete. You will be observed teaching a listening class. After that, you will be interviewed individually to explore your questionnaire response in greater depth and to discuss what was observed in your teaching. The interview will take approximately 30 minutes, at a time and place convenient to you. Your students will be asked to complete a listening test followed by a questionnaire, both administered by the researcher in class (total completion time approximately an hour). Subsequently, some students will be asked to participate in an individual interview outside of class time. All interview recordings will be recorded, transcribed and anonymised before being analysed, with the consent of the participants.

You will receive training on how to teach listening and will then be asked to implement an intervention lasting approximately 12 weeks. During those 12 weeks, you will be asked to keep teaching logs recording how listening was taught in your class. At the end of the 12-week period, the research instruments used at the beginning of the study will be re-administered with all participants (teachers and students).

What are the risks and benefits of taking part?

I do not foresee any risks in participating in the study. The information you will give in the study will be kept strictly confidential and will only be seen by the researcher. Neither you, the students or the department will be identifiable in

any published report resulting from this research including the thesis. Information about individuals will not be shared with the department.

I anticipate that the findings of the study will be useful for you, teacher, and students in improving how listening is taught/learnt in Algeria.

What will happen to the data?

Participants will be assigned a pseudonym and will be referred to by that pseudonym in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to the records. All interview recordings will be destroyed after the end of the research. My academic supervisors will have access to the transcripts and test results, but I will be the only person to have access to the original recordings. In line with the University's policy on the management of research data, anonymised data gathered in this research may be preserved and made publicly available for others to consult and re-use. The results of the study will be presented at national and international conferences, and in written reports and articles. We can send you electronic copies of these publications if you wish.

What happens if something goes wrong?

In the unlikely case of concern or complaint, you can contact my supervisor, **Prof. Suzanne Graham**, Tel: +44 (0) 118 378 2684 or E-mail: s.j.graham@reading.ac.uk

Where can I get more information?

If you would like more information, please contact me, Keltoum Mansouri.

E-mail: k.mansouri@pgr.reading.ac.uk

What happens if I change my mind?

You can change your mind at any time without any repercussions. During the research, you can stop your participation in the activities at any time. If you change your mind after data collection has ended, I will discard your data.

Who has reviewed the study?

This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request.

I highly value the information that you can provide and I hope that you are willing to contribute to this research project by giving your permission. If you do so, please complete the attached consent form and return it via email to the address mentioned above. A summary of the results can be sent upon your request by sending an email to the address above.

Thank you for your time.

Yours sincerely



Keltoum Mansouri

Teacher Consent Form

I have read the Information Sheet about the project and received a copy of it.

I understand what the purpose of the project is and what is required of me. All my questions have been answered.

Name of teacher:

E-mail: _____

Name of the university: _____

Please tick as appropriate:

I consent to complete a questionnaire

I consent to be interviewed

I consent to the audio-recording of the interview

I consent to be observed teaching

I consent to participate in teacher training sessions

I consent to deliver the intervention

I consent to use the teacher \log

Signed: _____

Date: _____

Appendix J: Information sheet and Consent Form (Students)



Researcher: Keltoum Mansouri

E-mail: K.Mansouri@pgr.reading.ac.uk

Supervisors: Prof. Suzanne Graham; Dr. Naomi Flynn

E-mail: s.j.graham@reading.ac.uk; n.flynn@reading.ac.uk; <a href="mailto:n.flynn@reading.ac.uk"; <a href=

Students' Information Sheet

Research Project: Research into practice: implementing strategy-instruction and metacognition in the teaching of EFL listening. The case of Algerian University teachers and students.

The Study

This research forms the basis of the PhD I am completing at the Institute of Education, University of Reading in the UK. It aims to investigate teachers' and students' beliefs about listening in English as a foreign language as well as ways to improve the development of listening. It hopes to make recommendations regarding how we can best help teachers and students in these areas.

Why have I been chosen to take part?

All 1st year students at the department of English Language and Literature in an Algerian University have been invited to take part.

Do I have to take part?

It is entirely up to you whether you participate or not. It is totally voluntary, and you have the right to withdraw at any time during the study without any repercussions by contacting the researcher. If you change your mind after data collection has ended, the researcher will discard your data.

What will happen if I take part in this study?

If you agree to take part in the study, at the start of the study you will be asked to complete a listening test in class time (approximately 45 minutes). The scores you will get will not be part of your term grades. You will then be asked to complete a questionnaire, also in class time. I will observe some of your classes. Later, some of you will be invited to have an individual interview. With your consent, the interview will be recorded and then transcribed and anonymised before being analysed. At the end of the study, you will be asked to complete a second listening test and questionnaire as before.

What are the risks and benefits of taking part?

I do not foresee any risks in participating in the study. The information you will give in the study and your listening test scores will be kept strictly confidential and will only be seen by the researcher. Neither you, your teacher or the department will be identifiable in any published report resulting from this research including the thesis. Information about individuals will not be shared with the department.

I anticipate that the findings of the study will be useful for you as a student in improving how listening is taught/learnt in Algeria.

What will happen to the data?

Participants will be assigned a pseudonym and will be referred to by that pseudonym in all records. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the researcher will have access to the records. All interview recordings will be destroyed after the end of the research. My academic supervisors will have access to the transcripts and test results, but I will be the only person to have access to the original recordings. In line with the University's policy on the management of research data, anonymised data gathered in this research may be preserved and made publicly available for others to consult and re-use. The results of the study will be presented at national and international conferences, and in written reports and articles. We can send you electronic copies of these publications if you wish.

What happens if something goes wrong?

In the unlikely case of concern or complaint, you can contact my supervisor, **Prof. Suzanne Graham**, Tel: +44 (0) 118 378 2684 or E-mail: s.j.graham@reading.ac.uk

Where can I get more information?

If you would like more information, please contact me, Keltoum Mansouri.

E-mail: k.mansouri@pgr.reading.ac.uk

What happens if I change my mind?

You can change your mind at any time without any repercussions. During the research, you can stop your participation in the activities at any time. If you change your mind after data collection has ended, I will discard your data.

Who has reviewed the study?

This project has been reviewed following the procedures of the University Research Ethics Committee and has been given a favourable ethical opinion for conduct. The University has the appropriate insurances in place. Full details are available on request

I highly value the information that you can provide, and I hope that you are willing to contribute to this research project by giving your permission. If you do so, please complete the attached consent form and return it via email to the address mentioned above. A summary of the results can be sent upon your request by sending an email to the address above.

Thank you for your time.

Yours sincerely



Keltoum Mansouri

Student Consent Form

I have read the Information Sheet about the project and received a copy of it.

I understand what the purpose of the project is and what is required of me. All my questions have been answered.

 \square

Name of student:

Name	of the	university	
Name	or the	university	•

Please tick as appropriate:

I consent to take the vocabulary test

I consent to take the listening test

I consent to complete the questionnaire

I consent to be interviewed

I consent to the audio-recording of the interview

I consent to be observed in listening lessons

Signed: _____

Date: _____

Appendix K: Ethical Approval (IoE University of Reading)



University of Reading Institute of Education Ethical Approval Form A (version May 2015)

Tick one:

Staff project: ____ PhD _ EdD ____

Name of applicant (s): Keltoum Mansouri

Title of project: Research into practice: implementing strategy-instruction and metacognition in the teaching of EFL listening. The case of Algerian University teachers and students.

Name of supervisor (for student projects): Prof. Suzanne Graham; Dr. Naomi Flynn

Please complete the form below including relevant sections overleaf.

	YES	NO
Have you prepared an Information Sheet for participants and/or their		
parents/carers that:		
a) explains the purpose(s) of the project		
b) explains how they have been selected as potential participants		
b) explains now they have been selected as potential participants		
c) gives a full, fair and clear account of what will be asked of them and how the		
information that they provide will be used		
d) makes clear that participation in the project is voluntary		
e) explains the arrangements to allow participants to withdraw at any stage if they		
wish		
f) explains the arrangements to ensure the confidentiality of any material collected		
during the project, including secure arrangements for its storage, retention and		
disposal		
g) explains the arrangements for publishing the research results and, if		
confidentiality might be affected, for obtaining written consent for this		
h) explains the arrangements for providing participants with the research results if		
they wish to have them		
i) gives the name and designation of the member of staff with responsibility for the		
project together with contact details, including email. If any of the project		
investigators are students at the IoE, then this information must be included and		
their name provided		
k) explains, where applicable, the arrangements for expenses and other payments		
to be made to the participants		
j) includes a standard statement indicating the process of ethical review at the		
University undergone by the project, as follows:		
'This project has been reviewed following the procedures of the University		
Research Ethics Committee and has been given a favourable ethical opinion for		
conduct'.		

k) includes a standard statement regarding insurance:			
"The University has the appropriate insurances in place. Full details are available			
on request".			-
Please answer the following questions			
1) Will you provide participants involved in your research with all the information			
necessary to ensure that they are fully informed and not in any way deceived or			
misled as to the purpose(s) and nature of the research? (Please use the subheadings			
used in the example information sheets on blackboard to ensure this).			
2) Will you seek written or other formal consent from all participants, if they are			
able to provide it, in addition to (1)?			
3) Is there any risk that participants may experience physical or psychological			-
distress in taking part in your research?			
4) Have you taken the online training modules in data protection and information			
security (which can be found here:			
5) Have you read the Health and Safety booklet (available on Blackboard) and			1
completed a Risk Assessment Form to be included with this ethics application?			
6) Does your research comply with the University's Code of Good Practice in			
Research?			
	YES	NO	N.A.
7) If your research is taking place in a school, have you prepared an information			
sheet and consent form to gain the permission in writing of the head teacher or			
other relevant supervisory professional?			
8) Has the data collector obtained satisfactory DBS clearance?			
9) If your research involves working with children under the age of 16 (or those			
whose special educational needs mean they are unable to give informed			
consent), have you prepared an information sheet and consent form for			
parents/carers to seek permission in writing, or to give parents/carers the			
opportunity to decline consent?			
10) If your research involves processing sensitive personal data ¹ , or if it involves			
audio/video recordings, have you obtained the explicit consent of			
participants/parents?			
11) If you are using a data processor to subcontract any part of your research, have			
you got a written contract with that contractor which (a) specifies that the			
contractor is required to act only on your instructions, and (b) provides for			
			1
contractor is required to act only on your instructions, and (b) provides for			
contractor is required to act only on your instructions, and (b) provides for appropriate technical and organisational security measures to protect the data?			
contractor is required to act only on your instructions, and (b) provides for appropriate technical and organisational security measures to protect the data? 12a) Does your research involve data collection outside the UK?			

¹ Sensitive personal data consists of information relating to the racial or ethnic origin of a data subject, their political opinions, religious beliefs, trade union membership, sexual life, physical or mental health or condition, or criminal offences or record.

3b) If the answer to question 13a is "yes", please confirm that information sheets,		
onsent forms, and research instruments, where appropriate, have been directly		
anslated from the English versions submitted with this application.		
14a. Does the proposed research involve children under the age of 5?		
14b. If the answer to question 14a is "yes":		
My Head of School (or authorised Head of Department) has given details of the		
My Head of School (or authorised Head of Department) has given details of the proposed research to the University's insurance officer, and the research will not		

Please complete **either** Section A **or** Section B and provide the details required in support of your application. Sign the form (Section C) then submit it with all relevant attachments (e.g. information sheets, consent forms, tests, questionnaires, interview schedules) to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.

A: My research goes beyond the 'accepted custom and practice of teaching' but I consider that this project has no significant ethical implications. (Please tick the	
box.)	
Please state the total number of participants that will be involved in the project and give a breakdow how many there are in each category e.g. teachers, parents, pupils etc.	vn of
The participants of this study will be 1 st year English language teachers of Oral Expression and their students at a university level.	
 For the pilot study: 10 teachers and 60 students For the main study: 16 teachers and 500 students 	
Give a brief description of the aims and the methods (participants, instruments and procedures) of t in up to 200 words noting:	he project
1. title of project	
2. purpose of project and its academic rationale	
3. brief description of methods and measurements	
4. participants: recruitment methods, number, age, gender, exclusion/inclusion criteria	
5. consent and participant information arrangements, debriefing (attach forms where necessa	
6. a clear and concise statement of the ethical considerations raised by the project and how ye to deal with then.	ou intend
7. estimated start date and duration of project	
The study aims to investigate the impact of strategy-instruction and metacognition on teachers students' EFL listening self-efficacy beliefs and students' listening proficiency. It seeks also to	

identify the relationship between teachers' and students' listening self-efficacy beliefs.

The main study will be quasi-experimental mixed methods in nature. The participants involved will be 1st year English language teachers teaching Oral Expression at two Algerian universities and their students. At Time 1, classroom observation, questionnaires (teachers and students), interviews (teachers and students) and an English listening test (from IELTS) for students will be implemented.

Teachers will be asked to complete a listening self-efficacy beliefs questionnaire and to take part in the study as a whole. Teachers' responses to the self-efficacy beliefs questionnaire will be used to allocate them to the intervention or comparison group so that groups are matched as far as possible on that variable and include teachers with a range of levels of self-efficacy for teaching listening.

Subsequently, the experimental group of teachers will receive training in how to deliver the intervention (teaching of clusters of listening strategies through a metacognitive approach) to the experimental group of students. The intervention will be implemented by teachers over a period of approximately 12 weeks. The comparison group of teachers will provide no strategy-instruction. Teachers in both groups will keep teaching logs to report on what they include in their sessions. At Time2, post-intervention, the research instruments used at Time 1 will be re-administered with the teachers and students (comparison and experimental).

For the main study, it is intended that eight teachers in each group will be included, plus their students (approx. 500 in total). Questionnaires (teachers and students) and listening tests (students) will be completed by all participants. Interviews will be conducted with all teachers and all will be observed before and during the intervention. A sub-sample of students (approximately 6 from each condition) will complete stimulated recall interviews before and after the intervention.

For the pilot study (to be conducted in a different university), questionnaires will be completed by 10 teachers and approximately 60 students, who will also complete the listening test(s). Interviews will be piloted with two teachers and two students.

For both the pilot and main studies, a classroom observation scheme will be used and the researcher will be non-participant. The interviews will be audio recorded.

I anticipate the pilot study to take up to 21 days, starting from the end of September 2017. For the main study, I anticipate it to be up to six months, starting from January 2018.

To deal with ethical concerns and considerations, participant will be provided with information and consent forms that explain the aims of the work and to be ensured of their anonymity. The participants will be explained the rationale of using the research instruments and what will be reported will be totally confidential and no third party will intervene.

B: I consider that this project **may** have ethical implications that should be brought before the Institute's Ethics Committee.

Please state the total number of participants that will be involved in the project and give a breakdown of how many there are in each category e.g. teachers, parents, pupils etc.

Give a brief description of the aims and the methods (participants, instruments and procedures) of the project in up to 200 words.

- 1. title of project
- 2. purpose of project and its academic rationale
- 3. brief description of methods and measurements
- 4. participants: recruitment methods, number, age, gender, exclusion/inclusion criteria
- 5. consent and participant information arrangements, debriefing (attach forms where necessary)
- 6. a clear and concise statement of the ethical considerations raised by the project and how you intend to deal with then.
- 7. estimated start date and duration of project

C: SIGNATURE OF APPLICANT:

Note: a signature is required. Typed names are not acceptable.

I have declared all relevant information regarding my proposed project and confirm that ethical good practice will be followed within the project.

Signed:

Print Name:

: Keltoum Mansouri

Date: 05/06/2017

STATEMENT OF ETHICAL APPROVAL FOR PROPOSALS SUBMITTED TO THE INSTITUTE ETHICS COMMITTEE

This project has been considered using agreed Institute procedures and is now approved.

Signed:

Print Name: Xiao Lan Curdt-Christiansen

Date: 14-07-17...

(IoE Research Ethics Committee representative) *

* A decision to allow a project to proceed is not an expert assessment of its content or of the possible risks involved in the investigation, nor does it detract in any way from the ultimate responsibility which students/investigators must themselves have for these matters. Approval is granted on the basis of the information declared by the applicant.

Appendix L: List of Strategies Taught During the Intervention (for students)



- 1. Inferencing: Use information within the text or conversational context to guess the meanings of unfamiliar language items associated with a listening task, to predict content and outcomes, or to fill in missing information.
- a. Linguistic inferencing: Use known words in an utterance to guess the meaning of an unknown word
- **b.** Voice and paralinguistic inferencing: Use tone of voice to guess the meaning of unknown words in an utterance
- **c. Extra-linguistic inferencing:** Use background sounds and relationships between speakers in an oral text to guess the meaning of unknown words
- 2. Elaboration: Use prior knowledge from outside the text or conversational context and relating it to knowledge gained from the text or conversation in order to embellish your interpretation of the text
- 3. Prediction: Anticipate the contents and the message of what you are going to hear
- **4.** Note-taking: Write down key words and concepts in abbreviated verbal, graphics, or numerical form to assist performance of a listening task
- 5. Cognates: make use of shared words between English and French that you know
- 6. Directed attention: Attend in general to the listening task and ignore distraction; maintain attention while listening
- **7. Selective attention:** Attend to specific aspects of language input or situational details that assist in understanding and/or task completion
- 8. Monitoring: Check, verify, or correct your comprehension or performance in the course of a task
- **a. Double-check monitoring:** Check, verify, or correct your understanding across the task during the second time through the oral text
- **b.** Checking transition in speech: focus on transition words that change previous information, opinion and decision. For instance, however, but, in other words.....
- **9. Problem-solving (substitution):** Select alternative approaches, revised plans, or different words or phrases to accomplish a listening task
- **10. Evaluation:** check the efficacy of your listening and determine whether you have met some or all of the goals set before.
- 11. Listen to main idea: focus in advance to repeated words or expressions

12. Listen to details: decide in advance on what you need to listen to. Then, pay attention to intonation, stressed words, transition words (however, but.... Because the speakers change their opinions, so don't stop listening when you hear the first suggestion.

Appendix M: A Sample of a Lesson Plan

Lesson 2: The Secret of Success

Objectives: By the end of the lesson, students will have been

- 1. introduced to and practised the strategy of planning
- 2. introduced to and practised the strategy of prediction
- 3. introduced to and practised the strategy of prediction verification
- 4. introduced to some characteristics of connected speech

Materials: computers with headphones, audio recordings, prediction sheet

Activities

T. elicits types of listening strategies dealt in the previous session

- S. brainstorm as many strategies as possible
- T. focuses on planning strategy and show students how to apply it

What is the secret of success?

BBC Focus Magazine investigates

BBC Focus Magazine investigates

T. tells the students to guess the topic of the audio they are going to listen to from the picture on their computer screens.

S. predict the topic from the picture

T. tells the students the topic of what they are going to listen to (e.g. a BBC podcast about successful people)

T. elicits ideas, words, phrases from students related to the topic

- **S.** brainstorm as many ideas as possible
- T. asks students to read part from the podcast and guess what the speakers will carry on talking about

- T. asks students to focus on key words to get the main idea of the recording
- T. plays the recording (Speak Out 7.1)
- **S**. listen and take notes in the 2^{nd} column
- **T**. stops the recording
- S. discuss their answers in pairs and talk about the differences and fill in the 3rd column

T. plays the recording a 2nd time and ask students to pay attention to the things that created confusion or disagreement (verification & problem solving)

S. listen carefully and check their predictions, make corrections then complete the 4th column

T. starts a classroom discussion about their answers and corrections, then gives feedback

S. talk about the differences (if any) and share what and how they also understood, discussing the strategies they used.

T. distributes the audio scripts (or read from the screen) while listening for the 3rd time and highlight words in connected speech (week and strong forms and contractions).

Practice 1

Look at the following pictures and predict what the other speaker is saying in each situation according to the question or answer provided. Use background knowledge, the speaker, the context... **S.** plan, 1^{st} listening, verify, 2nd listening, evaluate.



Practice 2 (DICTATION)

In small groups of 3, \mathbf{T} provides students with another audio and ask them to listen (connected speech) and count the number of words they hear and write them down. (*Speak Out* 7.2).

S. listen and count number of words, then compare together. Then, listen a second time to verify their answers. Finally, they discuss their answers in whole class.

Prediction Sheet

	My predictions	1 st listening	Our predictions	2 nd listening	Correct sequence (verification)
1					
2					
3					
4					
5					

Appendix N: A Sample Guide for a Lesson Procedure for the Intervention & Notes

Strategy		When to teach it	How to teach it	Examples
Planning	Directed attention		Encourage students to a. concentrate and avoid distractions b. carry on listening when having difficulty understanding	
Prepare to listen (general or specific details)	Prediction Selective attention	Before listening	Ask students to a. Guess what the speakers are going to talk about (background knowledge) b. Guess particular words/ phrases associated with the topic c. Guess possible answers (from world knowledge/ previous and coming words) Ask students to a. Decide in advance to listen to particular parts in the audio (e.g. names,	 a. Show a picture, graph, table b. Show title of a song, a story c. Gap filling (noun, verb, adjective, adverb, number) a. listen for details (who, what, when, how?)
Verification	Self-questioning		numbers, dates) b. listen for key words (stressed, repeated, synonyms) c. listen to transition words (but, however, for example) Ask students to a. ask themselves whether what they have understood makes sense (is it	a. fister for details (who, what, when, how?)
	Inferencing	While listening	meaningful?) Ask students to use a. surrounding known words to help understanding b. tone of the voice to help understanding c. background sounds to help understanding	 a. meaning of new/ unknown vocabulary, idioms, phrases in an audio b. Speakers' attitudes (angry, excited, confident) c. places where a conversation is taking place
	Speech- segmentation		Ask students to a. mark change in pronunciation of words in connected speech (week and strong forms, contraction).	a. listen and read the audio-scriptsb. dictation (short statements)c. listen and count words in a short statement
Evaluation	n After listening		 Ask students a. how was the task b. what difficulties they found c. to plan for what they need to focus on next time 	

NOTES

1. decide on the purpose of each task first. What strategy you want to teach your students

2. you can create your own activities for each recording, i.e. from one recording you can design different activities according to your purpose (listen for key words, details, gist, prediction, understanding unknown words, inferencing, sound-word correspondence)

3. before listening, tell students what strategy they need to use

4. before giving a task make sure to show students how to do it. Model the strategy, e.g. listen to stressed words, listen to synonyms, focus on the speakers' tone of voice....

5. Don't teach individual strategies. Try to include different strategies in 1 task. For example, selective attention + directive attention+ inference....

 Allow students to listen up to 3 times for a single recording. Predict -1st listen – initial understandingcheck in pairs- 2nd listen to verify- whole class discussion- 3rd listen with scripts

7. if possible, at the end of listening task, try to demonstrate the audio-scripts to raise students' awareness of how words are pronounced in connected speech (elision, weak and strong forms, contraction, assimilation...).
For example, how the final sound of a word "merges" with the first sound of the next word

8. Encourage pair work and group work, for instance, for "prediction" in pairs and check their initial answers in pairs. For "listen and count words" in small groups then check which group got the right answers (create kind of competition)

9. Encourage students to speak and justify their answers (why and how did they choose a particular answer?)

10. Use different types of input: songs, interviews, stories, news

11. At the end of each task, ask students to evaluate their listening and strategy use (as in the evaluation section)

312

Appendix O: Taxonomy of Listening Strategies Adapted from Santos et al. (2008) and Vandergrift and Goh (2012).

Strategy name	Definition
Hypothesis formation	Suggests a possible answer/interpretation
Santos et al.	
Hypothesis monitoring	Checks whether hypothesis is verified or contradicted by text or
Santos et al	subsequent information
Integration	Draws together more two or more pieces of information to reach a
Santos et al.	conclusion
Strategy evaluation	Judges how appropriate a chosen strategy is, whether it needs changing
Santos et al.	or adapting
General deduction	Deduction based on general information
Santos et al.	
Frequency deduction	Deduction based on frequency of item heard
Santos et al.	
Negative deduction	Deduction based on what is not heard
Santos et al.	
Saliency deduction	Deduction based on what is the most perceptually salient item
Santos et al.	
Prior knowledge deduction	Deduction based on prior knowledge
Santos et al.	
Extralinguistic deduction	Deduction based on background sounds and relationships between
New Tone of voice deduction	speakers in an oral text
New	Deduction based on the speakers' tone of voice
Word family	Using words related to the same family
New	Using words related to the same raining
Planning	Developing awareness of what needs to be done to accomplish a
Vandergrift & Goh	listening task, developing an appropriate action plan and/or appropriate
	contingency plans to overcome difficulties that may interfere with
	successful completion of a task.
Online planning	Developing awareness of what needs to be done and appropriate action
New	plans while listening to overcome difficulties that may interfere with
	successful completion of a task.
Online selective attention	Deciding to attend to specific aspects of language input or situational
New	details that assist in understanding and/or task completion while
	listening
Online prediction of pessible oneman	Deadicts what might he possible answers while listening
Online prediction of possible answer New	Predicts what might be possible answers while listening
Online prediction of theme	Activates general knowledge of topic while listening
New	The traces general knowledge of topic while insteaming
Online prediction of lexis	Activates L2 lexical knowledge while listening
New	
Directed attention	Attending in general to the listening task and ignoring distraction;
Vandergrift & Goh	maintaining attention while listening.
Selective attention	Attending to specific aspects of language input or situational details
Vandergrift & Goh	that assist in understanding and/or task completion
Comprehension monitoring	Checking, verifying, or correcting understanding at the local level.
Vandergrift & Goh	
Problem identification	Identifying what needs resolution or what part of the task still needs to
Vandergrift & Goh	be completed
Substitution	Salacting alternative approaches revised plans, or different words or
Vandergrift & Goh	Selecting alternative approaches, revised plans, or different words or phrases to accomplish a listening task

Linguistic inferencing Vandergrift & Goh	Using known words in an utterance to guess the meaning of unknown words		
Between parts inferencing Vandergrift & Goh	Using information from different parts of the text to guess at meaning.		
Elaboration Vandergrift & Goh	Using prior knowledge from outside the text or conversational context and relating it to knowledge gained from the text or conversation in order to embellish one's interpretation of the text.		
Linguistic contextualization Vandergrift & Goh	Relating a word or a phrase heard to an environment where the word has appeared before.		
Schematic contextualization Vandergrift & Goh	Relating a clue to some factual information in long-term memory		
Taking notes Vandergrift & Goh	Writing down key words and concepts in abbreviated verbal, graphic, or verbal, graphic, or numerical form to assist performance of a listening task.		
Translation Vandergrift & Goh	Rendering ideas from one language to L1 in a relatively verbatim manner.		
Transfer Vandergrift & Goh	Using knowledge of one language (e.g., cognates) to facilitate listening in another		