

UNIVERSITY OF READING

**The effect of listening strategy instruction on Thai learners' self-efficacy,
English listening comprehension and reported use of listening strategies**

Thesis submitted for the degree of

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Declaration

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

This study aimed to explore the nature of self-efficacy among 161 Thai undergraduate EFL students through the investigation of the level of their self-efficacy and the relationship between their self-efficacy and their proficiency in listening comprehension. Learners' attributions for success and failure, which might also influence their self-efficacy beliefs, were also explored. The second aim of the study was to examine whether a programme of listening strategy instruction could improve their level of self-efficacy, the level of their listening comprehension, and their reported use of listening strategies. Finally, the study examined whether learners from different levels of proficiency benefit from the strategy instruction in a similar manner.

This research study is of a quasi-experimental, mixed method design, with one intervention group and one comparison group. Listening proficiency was measured by a free-recall listening task and a listening comprehension question task. The levels of self-efficacy and strategy use were elicited by a set of questionnaires. The manner of strategy use was also further investigated by using a stimulated-recall interview which required 14 participants to give a verbal account of how they had performed the previous listening tasks. These instruments were implemented at pre- and post-test data collection points before and after the intervention which lasted 12 weeks.

The findings of the study indicate that, at pre-test, the level of self-efficacy among the participants was rather low but correlation analyses suggest a moderate relationship between self-efficacy and listening comprehension levels. Statistical analysis revealed that there was no statistically significant difference in how much the intervention and comparison groups improved their self-efficacy levels from pre-test to post-test. However, the intervention group participants improved their levels of listening comprehension significantly more than the

comparison group participants on both the free-recall and the listening comprehension question task. This was true for both high and low proficiency learners. While a 2×2 ANOVA on the strategy questionnaire items did not indicate statistically significant changes in strategy use as a result of the intervention, a Hierarchical Cluster Analysis suggested that a greater number of the intervention group participants had positive behaviours at post-test than was the case at pre-test.

The manner of the participants' listening strategy use was further explored by looking at the frequency of strategies reported in the stimulated recall interview as well as the way in which strategy combinations were employed. At post-test, the intervention group reported a much higher level of hypothesis formation, hypothesis monitoring and hypothesis formation than at pre-test, which was not the case for the comparison group. Likewise, the intervention participants also reported greater use of word or chunk identification as well as being able to combine other strategies to compensate for gaps in their bottom-upskills. Thus, there was evidence that the intervention group had changed the way in which they employed listening strategies as a result of the intervention, while the comparison group showed much fewer changes.

The study not only provides evidence of the potential benefits of strategy instruction for improving L2 listening comprehension, regardless of learners' proficiency levels, but also has methodological implications, as the strategy analyses demonstrated the value of exploring strategy use through a qualitative approach.

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Table of Contents

Chapter 1 Introduction.....	1
1.1 Introduction.....	1
1.1.1 English language teaching in basic education level in Thailand.....	1
1.1.2 English language teaching in a public university context in Thailand.....	9
1.2 Statement of the problem.....	10
1.3 Objective of the study.....	11
1.4 Structure of the thesis.....	12
Chapter 2 Literature review.....	13
2.1 Introduction.....	13
2.2 Listening comprehension.....	13
2.2.1 Theoretical perspectives on listening comprehension.....	13
2.2.1.1 Listening comprehension models.....	13
2.2.1.2 Studies on bottom-up and top-down processes, processing and strategies.....	21
2.2.2 Theoretical perspective on differences in first and second/foreign language listening.....	24
2.3 Self-efficacy, attribution theory and self-regulation.....	29
2.3.1 Theoretical perspectives on self-efficacy, attribution theory and self-regulation.....	29
2.3.1.1 Definition of self-efficacy.....	29
2.3.1.2 Source of self-efficacy.....	31

2.3.1.3	Self-efficacy and attribution of success and failure	34
2.3.1.4	Influence of culture type on self-efficacy and attribution	35
2.3.1.5	Self-efficacy and self-regulation	38
2.3.2	Empirical studies on self-efficacy, attribution theory and self-regulation	39
2.4	Language learner strategies	45
2.4.1	Definition of language learner strategies	46
2.4.2	Listening strategies	51
2.4.3	Listening strategy instruction	59
2.5	Research questions	71
2.6	Summary	71
Chapter 3	Methodology	72
3.1	Introduction	72
3.2	Design of the study	72
3.3	Context of the study	74
3.4	Participants and sampling	74
3.5	Materials and procedures for pre- and post-test data collection	75
3.5.1	Listening comprehension tasks	76
3.5.1.1	Development of listening task	79
3.5.1.2	Listening task characteristics	80
3.5.2	Questionnaire	82
3.5.2.1	Development of the questionnaire	85

3.5.2.2	Summary of questionnaire characteristics	88
3.5.3	Stimulated recall protocols (Interview)	89
3.6	Intervention	92
3.6.1	Strategies included in the intervention	95
3.6.2	Strategies sequence	102
3.6.3	How the intervention was implemented	103
3.6.4	Classroom context	104
3.7	Pilot study	105
3.7.1	Changes in the main study due to the result of pilot study	106
3.7.1.1	Changes in listening task	106
3.7.1.2	Changes in questionnaire	106
3.7.1.3	Changes in stimulated recall protocol	107
3.7.1.4	Changes in intervention	107
3.8	Data collection procedures in main study	109
3.8.1	Quantitative data collection procedures	110
3.8.1.1	Listening task data collection	110
3.8.1.2	Questionnaire data collection	111
3.8.2	Qualitative data collection procedures - Stimulated recall protocols	111
3.8.3	Intervention procedures	113
3.9	Data analysis procedures	113
3.9.1	Quantitative data analysis	113

3.9.1.1	Data preparation and marking	114
3.9.1.2	Quantitative analyses according to research questions	118
3.9.2	Qualitative data analysis	126
3.9.2.1	Interview transcription	126
3.9.2.2	Strategy coding and taxonomy	127
3.9.2.3	Qualitative data analyses	128
3.10	Ethical issues	129
3.11	Summary	130
Chapter 4	Quantitative data analysis and results	132
4.1	Introduction.....	132
4.2	Descriptive statistics	132
4.3	Analyses and results relating to research questions.....	134
4.3.1	What is the nature of self-efficacy in listening comprehension among Thai EFL learners?.....	134
4.3.1.1	What is the relationship between self-efficacy and EFL listening performance?.....	135
4.3.1.2	What is the learners' level of adaptive attribution to EFL listening performance?.....	136
4.3.2	What is the effect of strategy instruction on self-efficacy, English listening comprehension and the reported use of English language listening strategies?	137
4.3.2.1	What is the effect of strategy instruction on self-efficacy?.....	138

4.3.2.2	What is the effect of strategy instruction on English listening comprehension?.....	141
4.3.2.3	What is the effect of strategy instruction on the reported use of English listening strategies?	144
4.3.3	Does the strategy instruction benefit learners with different levels of proficiency in a similar manner?	159
4.3.3.1	Descriptive statistics.....	159
4.3.3.2	Difference in levels of self-efficacy	160
4.3.3.3	Difference in levels of free-recall listening task	161
4.3.3.4	Difference in levels of listening comprehension question task.....	162
4.4	Summary.....	163
Chapter 5 Qualitative Results.....		164
5.1	Introduction.....	164
5.2	Analyses based on strategies emerging from the data	164
5.2.1	Overall reported strategies at pre-test and post-test	165
5.2.2	A qualitative analysis of strategies taught in the intervention across the task at pre-test and post-test.....	170
5.2.2.1	Identification of words or chunks	170
5.2.2.2	Lexical segmentation strategies	175
5.2.2.3	Planning, monitoring and evaluation	180
5.2.2.4	Prediction and verification	199
5.2.2.5	Listening for gist	211

5.2.2.6	Listening for detailed information	216
5.2.2.7	Inferencing	219
5.3	Summary	222
Chapter 6	Discussion	223
6.1	Introduction	223
6.2	The nature of self-efficacy in listening comprehension among Thai EFL learners	223
6.3	The effect of strategy instruction on self-efficacy, English listening comprehension and reported use of English language listening strategies	226
6.3.1	Effect of strategy instruction on self-efficacy	227
6.3.2	Effect of strategy instruction on English listening comprehension	230
6.3.3	Effect of strategy instruction on reported use of listening strategies	231
6.4	Does the strategy instruction benefit learners of in different levels of proficiency in a similar manner?	238
6.5	Summary	239
Chapter 7	Conclusion	241
7.1	Introduction	241
7.2	Summary of the study	241
7.3	Limitations	245
7.4	Contribution	246
7.5	Suggestions for future research	248
7.6	Summary	249
References	250

Appendices	259
Appendix A: Listening tasks	260
Appendix B : Listening Comprehension Questionnaire.....	265
Appendix C: Listening strategy checklist.....	268
Appendix D: Main points of the listening text	269
Appendix E: Codes to categorise factors reported to contribute to success or failure in listening comprehension.....	273
Appendix F: Attributional factors	274
Appendix G: Transcription example	275
Appendix H: Taxonomy for coding stimulated-recall interviews.....	279
Appendix I: Example of individual strategy profile sheet.....	287
Appendix J: Example of strategy grid sheet.....	304
Appendix K: Ethical approval, information sheets and consent forms	326

List of Tables

Table 1 Desired competences achieve at the end of each academic level.....	4
Table 2 Number of participants	75
Table 3 Passage arrangement and details of listening comprehension task	81
Table 4 Strategies sequence.....	103
Table 5 Number of participants in pilot study	105
Table 6 Mean performance of intervention and comparison groups at pre- and post-tests of the pilot study	108
Table 7 Differences in strategy arrangement in pilot and main studies	109
Table 8 Free-recall task band description for scoring	115
Table 9 Cronbach's alphas of the adapted MALQ strategy groups	117
Table 10 Self-efficacy score descriptive statistics.....	132
Table 11 Free-recall task score descriptive statistics	133
Table 12 Comprehension question task score descriptive statistics.....	134
Table 13 Spearman's correlation coefficients between scores on self-efficacy and the two listening tasks	135
Table 14 Descriptive statistics of adaptive attribution of success	136
Table 15 Descriptive statistics of adaptive attribution of failure	137
Table 16 Strategy groups.....	145
Table 17 Number of participants from intervention and comparison groups in each cluster	154
Table 18 Means of level of self-efficacy of participants from lower and higher levels of proficiency.....	159
Table 19 Means of free-recall task scores of participants from lower and higher levels of proficiency.....	160

Table 20 Means of listening comprehension question task scores of participants from lower and	160
Table 21 Overall reported strategies at pre-test and post-test (instances of unsuccessful use shown in brackets)	165
Table 22 Summary of qualitative analysis of identification of words or chunks strategies..	174
Table 23 Summary of qualitative analysis of lexical segmentation strategies	180
Table 24 Summary of qualitative analysis of planning strategy	184
Table 25 Summary of qualitative analysis of monitoring strategies	194
Table 26 Summary of the qualitative analysis of evaluation strategies	199
Table 27 Summary of qualitative analysis of prediction strategies.....	202
Table 28 Summary of qualitative analysis of verification strategies	211
Table 29 Summary of the qualitative analysis of listening for gist strategies.....	215
Table 30 Summary of the qualitative analysis of listening for detailed information strategies	219
Table 31 Summary of qualitative analysis of inferencing strategies.....	222

List of Figures

Figure 1 Model of Triadic reciprocity	32
Figure 2 Means of intervention and comparison groups' self-efficacy score	139
Figure 3 Means of intervention and comparison groups' free-recall score.....	142
Figure 4 Means of intervention and comparison groups' comprehension question score	143
Figure 5 Means of intervention and comparison groups' reported use of direct attention strategies	147
Figure 6 Means of intervention and comparison groups' reported use of direct attention strategies	148
Figure 7 Means of intervention and comparison groups' reported use of planning and evaluation strategies	149
Figure 8 Means of intervention and comparison groups' reported use of planning and evaluation strategies	150
Figure 9 Means of intervention and comparison groups' reported personal knowledge	151
Figure 10 Means of intervention and comparison groups' beliefs and attitudes.....	152
Figure 11 Means of intervention and comparison groups' positive attributions to success and failure.....	153
Figure 12 Pre-test adapted MALQ items hierarchical clustering dendogram result	156
Figure 13 Post-test adapted MALQ items hierarchical clustering dendogram result	157

Chapter 1 Introduction

1.1 Introduction

This chapter discusses the background of the study concerning English language teaching in Thailand, highlighting the factors which contribute to the learners' level of listening proficiency when they enter the university. The statement of the problem, the objectives of the study and the structure of the thesis are also presented.

1.1.1 English language teaching in basic education level in Thailand

Thailand is a country in Southeast Asia. The official language which all Thai people speak and use in their education is Thai. Though different dialects could be found in each region, they do not have formal written forms and are not used in schools. Unlike some countries in Southeast Asia, such as Malaysia, Singapore, Brunei and Philippines (Association of Southeast Asian Nations), in which English is one of the official languages, English is a foreign language in Thailand. Therefore, English does not feature in the general public media. There are limited radio stations which broadcast in English and those that do are restricted to Bangkok and metropolitan areas. There are also hardly any programmes shown on free television channels in English. Only families with higher financial status have access to cable television with English programmes. English language films are subtitled and dubbed with Thai. There is a growing development in terms of internet access but, at the moment, it is available for those who can afford a computer or mobile devices. Schools are equipped with computers with internet access but the number of students to computers per student may be high.

Basic education in Thailand consists of twelve years of schooling (Office of the Basic Education Commission of Thailand, 2009). Primary school comprises six years. Both

secondary school and high school consist of three years. In all levels of education, there are eight learning areas:

- Thai language, mathematics
- Science
- Social studies, religion and cultures
- Health and physical education
- Arts
- Occupations and technology
- Foreign languages

The compulsory foreign language is English, but students in high school may be able to choose to learn additional languages, such as French, German, Chinese and Japanese, depending on their study programme. The basic education is generally free but the quality of teaching varies in different schools.

Thailand co-founded the Association of Southeast Asian Nations (ASEAN), along with Indonesia, Malaysia, the Philippines and Singapore, and has been a member since 1967. Later, Brunei, Cambodia, Lao, Myanmar and Vietnam joined the association and ASEAN currently has ten member states. Recent developments within ASEAN include the ASEAN Economic Community (AEC), which aims to integrate the economies of countries in the region. In 2015, the AEC was formally established. The official language within the ACE is English and, according to the 2025 Blueprint (The ASEAN Secretariat, n.d.), the community is aiming to enable trade and workforce from the member countries to flow within the region. Concerns over the Thai graduates' lack of ability to communicate in English compared to those from other AEC member countries started to arise in 2007 when this blueprint was adopted. It was also an underlying cause of the shift in the English curriculum in Thailand in 2008 from one focusing on grammar and vocabulary to one oriented more towards communicative language teaching (Mackenzie, 2011).

According to the basic core curriculum documents, the 2008 curriculum aims at ...

...enabling learners to acquire a favourable attitude towards foreign languages, the ability to use foreign languages for communicating in various situations, seeking knowledge, engaging in a livelihood and pursuing further education at higher levels. Learners will thus have knowledge and understanding of stories and cultural diversity of the world community, and will be able to creatively convey Thai concepts and culture to the global society.” (Office of the Basic Education Commission of Thailand, 2009, p. 252)

The curriculum consists of four strands: language for communication, language and cultures, language and the relationship with other learning areas, and language and the relationship with community and the world. There are also seven sub-areas. Out of the seven sub-areas, only three of them concern listening as seen in the excerpt from the guidelines presented in Table 1 (which presents the researcher’s translation of the Thai original wording). The guidelines explain the competences which the students should have acquired at the end of each academic level. This chapter discusses only the points which concern listening.

In summary, at the end of twelve years of basic education, students should be able to follow instructions in various forms, to make a connection between texts and non-text information, to identify main ideas and perform language tasks and to identify similarities and differences between the pronunciation of various types of texts in Thai and English. Additionally, there has been a growing trend to introduce English native speakers for English communication practice and, in 2012, the Ministry of Education planned for all schools in Thailand to have native speaker English teachers. Thai students currently studying at tertiary level will have experienced English lessons based on curriculum reforms in 2001 and 2008 during their primary through high school years.

Table 1 Desired competences achieve at the end of each academic level

Point	End of Primary school	End of Secondary school	End of High school
Sub-area 1.1 Understand and be able to interpret what has been heard or read from various types of media as well as the ability to express rational opinions			
1.	Follow orders, requests and instructions from what has been heard and read	Follow requests and instructions and show understanding of explanations of what has been heard and read	Follow instructions from manuals and show understanding of explanations and descriptions from what has been heard and read
3.	Choose or identify the sentence or short texts which matches the meaning of symbols or sign read (or language heard in lower years)	Choose or identify non-text information which matches the sentence or text heard or read	Explain and write sentences and texts to correspond with non-text information as well as identify and produce non-text information to correspond with sentences or texts heard or read
4.	Identify the main ideas and answer questions from listening texts and written dialogues, simple tales and stories	Identify the topic, main idea, and supporting details and express opinions on the texts heard or read from various types of media, as well as providing reasons and examples	Identify the main idea, analyse the message, interpret the message and express opinions from listening to and reading academic and entertainment texts, as well as providing reasons and examples
Sub-area 1.3 Ability to present data, information, concepts and views about various matters through speaking and writing			
2.	Draw a picture, a map or a layout, a chart or a table to show data heard and read	Not related to listening	Not related to listening
Sub-area 2.2 Understanding the similarity and differences between the language and cultures of the target language and Thai as well as applying them appropriately			
1.	Identify similarities and differences between pronunciation of various kinds of sentences, the use of punctuation marks, word order according to sentence structure in Thai and English	Compare and explain similarities and differences between pronunciation of various kinds of sentences and word order according to sentence structure in Thai and English	Compare and explain differences between word order in sentences, texts, idioms, and poems in Thai and English

Academic evidence (Mackenzie, 2011) and the researcher's experience in teaching students who have received English education after the implementation of these reforms indicate,

however, that the curriculum is still not effective, especially in the areas of listening and speaking. This lack of effectiveness may arise not only from the nature of the curriculum and guidelines but also from the teachers' resistance to it and unpreparedness to teach it, as well as the inconsistency between the curriculum and the national tests set for students.

First, the curriculum and the guidelines cannot be applied efficiently. Difficulties arose in implementing the curriculum and guidelines, which lack clarity (Mackenzie, 2011). Any positive impact the curriculum might have had did not spread much beyond the few pilot schools, mostly in Bangkok and major cities, where they were implemented more effectively, but did not have a widespread impact due to the obscurity of the guidelines provided by the Ministry of Education (Mackenzie, 2011). As seen in Table 1, the guidelines indicate the learners' desired competences at the end of each educational level, but do not specify how those competences are to be developed. For teachers who have neither full understanding of the concept of communicative language teaching nor have had training in such a method, the guidelines are not sufficient for them to create communicative lessons, especially when they have limited access to resources and lack of support from school administrations (Mackenzie, 2011).

Looking particularly at listening, while the image of listening as a passive skill which does not require much teaching has changed over the past few decades (Vandergrift, 2007), the curriculum does not seem to reflect that trend. For other skills, though the curriculum did not specify how to teach, details on what the students should be able to do are provided. For listening, the competences are described in terms of the types of listening task the students should be able to complete. This might also be the result of considering listening to be a passive process which is difficult to describe. The fact that listening tasks, rather than listening competences, are seen as aims in themselves, might have an impact on how students perceive

the goal of listening, i.e. they too might see it as task completion only. In addition, further evidence that listening is considered as a less important skill is its omission from national tests, will be discussed later.

The curriculum addresses differences between listening in Thai and English but suggests that the students should learn to compare and contrast the linguistic features of the two languages, but does not mention the need for students to try to overcome the influence of Thai while listening to English. Thai and English differ vastly in terms of pronunciation and prosodic features. Trying to identify similarities in pronunciation, as seen in Sub-area 2.2, might persuade students to try to apply Thai prosodic and phonetic knowledge to English spoken-word recognition. This might be aggravated through activities based on the use of a written script as Thai has a shallow orthography, with direct grapheme-phoneme correspondence. On the other hand, English has a deep orthography and the pronunciation of the same grapheme may differ from word to word. If Thai grapheme-phoneme association strategies are used with the English language, the result is expected to be negative.

The next issue in implementing the curriculum is the students' background knowledge and previous educational experiences. At the time of curriculum change in 2008 when communicative language teaching became officially the main teaching approach to be used in the curriculum, the students who participated in the present study and were currently in tertiary level, were already in secondary school and had experienced English teaching with a heavy grammar and vocabulary orientation. They did not have the opportunity to gradually build up their communicative skills. Instead, they entered 'communicative' classrooms in which they had to compress six to nine years of English 'communicative' learning into one or two years so that they could meet the national standard in time, namely at the end of high school. This is a very difficult feat to achieve and it is likely that students would experience repeated failure

in listening and speaking activities, in turn developing negative attitudes and beliefs about their ability in those skills. These negative attitudes might be intensified through awareness of the AEC and the importance of good English communication skills for future job opportunities. Many companies now request job applicants to submit a standardised English test score, such as the TOEIC, which mainly assesses listening and reading skills. The gulf between the communicative ability required and students' lack of experience in English listening and speaking might further worsen their attitudes about their language learning ability and in turn impact negatively on their capacity to improve.

The third issue concerns teachers, among whom there is a reported resistance to the reformed English curriculum (Mackenzie, 2011). Many teachers have followed a grammar and vocabulary orientation throughout their career and are likely to have felt resistance towards a teaching methodology which was introduced without additional training. High school teachers may also focus less on listening as the national tests taken by high school students to gain entry to university do not include a listening section. Therefore, it is likely that high school teachers would focus more on the skills and knowledge required by the test.

It is also possible that English teachers are not confident about their own English listening proficiency or their ability to teach listening. A report to the Ministry of Education in 2005 suggested that, of the English teachers completing a survey, less than eight percent reported having an advanced level of English. Fifty percent reported having intermediate to advanced level and 42 percent reported themselves as beginners (Mackenzie, 2011). In a recent study, they similarly reported themselves to be lacking exposure to the English language and requiring more training on teaching listening, speaking, conversations and writing (Noom-Ura, 2013).

The Ministry of Education responded to the teachers' lack of confidence in teaching listening and speaking by recruiting English native speakers to teach or become teaching assistants in

schools. Anecdotal evidence suggests that teachers' lack of confidence in using and teaching listening and speaking and the presence of native English speaker teachers has led some Thai English teachers to abandon the teaching of listening and speaking and to retreat to teaching mostly grammar and vocabulary oriented lessons. This poses issues for teaching quality, especially as there is variability in the quality of native English speaking teachers employed in Thai schools, not all of whom have full teaching qualifications.

As mentioned, the washback of national examinations and university admission examinations may also influence what is taught and how. According to the National Institute of Educational Testing Service (NIETS), the students are required to take the Ordinary National Educational Test (ONET) and General Aptitude Test (GAT). ONET is a pencil and paper based test in which English skills (speaking, writing and reading) are assessed through multiple-choice questions only (NIETS, 2015). In the high school level ONET, for the speaking section, test takers are required to choose appropriate statements to make sensible conversations in a paper based test. The writing section consists of grammar-oriented gap filling items and error recognition-correction items. Listening, though officially included within the curriculum, does not appear in the test.

For the university admission examinations, students are also required to take a General Aptitude Test (GAT) as a fundamental test within the university entrance examination. The GAT consists of two parts. The first part is in Thai and it intends to measure ability in reading, writing, critical thinking and problem-solving. The second part is intended to measure English communication ability. There are four sections in this part; speaking and conversation, vocabulary, structure and writing, and reading comprehension (NIETS, 2013). Listening does not appear in this test either.

ONET and GAT are very important tests as their results determine students' academic path and the school Key Performance Index (KPI) is partly assessed by students' achievement in these tests. Therefore, it is likely that listening proficiency, which is not present in either of the tests, would not be a main concern in the planning of English lessons in school.

1.1.2 English language teaching in a public university context in Thailand

There are 156 universities in Thailand. These universities are under different administration systems: public universities under the control of the Office of the Higher Education Commission (23), universities own by the Office of Higher Education Commission (12), Rachbhat universities, which are teacher colleges promoted into universities (38), Rachamongkol universities, which are vocational colleges promoted into universities (9) and private universities (74) (Office of the Higher Education Commission). Public universities are the oldest and hold higher positions in the university rankings. All top five Thai universities on the QS World Rankings (QS, 2016b) and top ten Thai universities on QS University Rankings in Asia (QS, 2016a) are public universities. The university in which this study was conducted is one of the oldest public universities in Thailand and is in the 601-650 rank in the QS World University Rankings and in the top-ten university ranking in Thailand.

Like most universities in Thailand, this university requires all students to take fundamental English courses. Each university has created its own fundamental English curriculum under the framework provided by the National Education Act of B.E. 2542 (1999) (Cheewakaroon, 2011). The institute in which the study took place provides fundamental English courses to all faculties in the university, both at undergraduate and postgraduate levels. The fundamental English courses are compulsory and all the students have to pass them in order to graduate

from the university. The students usually take them from the first semester of their first university year onwards, with only high-school level of English as background knowledge.

Expectations in English lessons at university are higher than at high school level. All four skills are given equal weight in lessons, including listening, which features both in instruction and in examinations. A smaller proportion of examination marks are awarded for listening, however, in light of students' limited previous experience in listening to English, but with more difficult content than is taught at high school. In-house textbook activities determine the teaching methods used for listening lessons but lessons follow the common pattern of pre-listening activities, the listening activity itself (usually comprehension questions) and checking of the answers, resembling the teaching method which J. Field (2008) referred to as the three-step listening lesson which does not include the actual teaching of listening as a skill.

1.2 Statement of the problem

From the foregoing discussion, it is apparent that in spite of a reformed curriculum that places value on communicative competence, students enter university with underdeveloped English listening skills as a result of the instruction they have received in school and the examination system they have followed. This leaves them ill-equipped to meet the higher, more communicative expectations for listening set by the university.

At the same time, listening instruction at university tends to focus on the completion of listening tasks rather than listening development. This has implications for learners' listening self-efficacy and the extent to which they are able to find ways to improve their listening proficiency. Across different contexts it has been found that learners tend to find listening more difficult than other second or foreign language skills and think that it is the most difficult area to improve (Goh, 2000; Graham, 2006a). This negative belief might arise from the view that

listening is a passive skill over which learners have no control, possibly reinforced by the type of listening instruction the students have been exposed to both prior to and at university. Few studies have investigated second language listening and its relationship with self-efficacy but there is evidence that such a relationship is an important one (Graham & Macaro, 2008; Mills, Pajares & Herron, 2006). In addition, there have been calls for further examination of the possibility of improving both learners' self-efficacy for, and proficiency in, listening, through interventions that focus on learners' strategy development (Vandergrift & Cross, 2015). According to a definition by Macaro (2006), language learner strategies represent conscious cognitive activity employed by learners to achieve a learning goal. There is some evidence that strategy instruction can improve language learners' listening comprehension (e.g. Graham & Macaro, 2008; O'Malley, Chamot, Stewner-Manzanares, Küpper, & Russo, 1985b; Thompson & Rubin, 1996) as well as their levels of self-efficacy (Graham, 2007), but there is a need for further research addressing both listening and self-efficacy (Vandergrift & Cross, 2016). Furthermore, it is not clear from previous studies whether strategy interventions can benefit learners of high and low proficiency, with some suggestions in the literature that the impact of such interventions is more limited for higher proficiency learners (Vandergrift & Tafaghodtari, 2010).

1.3 Objective of the study

Drawing on the issues discussed in the previous section, the main objectives of the study were identified as follows:

1. To explore the nature of Thai language learners' self-efficacy for English listening at the time when they entered university and its relationship with their level of listening proficiency

2. To investigate the effect that strategy instruction may have on learners' levels of listening proficiency and levels of self-efficacy as well as whether the instruction would change the manner of their strategy use
3. To investigate whether higher proficiency learners and lower proficiency learners would benefit from the strategy instruction in a similar manner

1.4 Structure of the thesis

In this chapter, the background to the study concerning English language teaching in Thailand, the statement of the problem and the objectives of the study are presented. In Chapter 2, the literature relating to listening comprehension, self-efficacy and language learner strategies is discussed. Chapter 3 presents the design of the study, the development of instruments for data collection, the intervention, the pilot study, the data collection and the data analyses. In Chapter 4, the results of the quantitative analyses are presented according to the study's research questions. Likewise, Chapter 5 addresses each research question and presents the findings from the qualitative analyses.

Chapter 2 Literature review

2.1 Introduction

In this chapter, the theoretical perspectives of listening comprehension, self-efficacy, attribution theory and self-regulation, and language learner strategies are discussed. Studies investigating the nature and relationship between those variables, as well as controversial issues concerning the variables, are also reviewed.

2.2 Listening comprehension

2.2.1 Theoretical perspectives on listening comprehension

Listening comprehension is a complex processes of transforming perceived wave signals into understanding of the conveyed messages, which occurs in working memory (Rost, 2011). Among all four skills, listening is the most under-researched (J. Field, 2014; Lynch, 2011). Various models have been constructed, however, in an attempt to explain how listening comprehension works.

2.2.1.1 Listening comprehension models

One of the most widely cited models of listening comprehension is proposed by John Anderson (1990). According to Anderson, the process of language comprehension consists of three phases: perception, parsing and utilization. Perception involves receiving and encoding the incoming message. Parsing is the process of breaking a sentence into phrasal units and using syntactic information of the sentence to understand the overall message of the sentence. Utilization concerns further use of the comprehended message, such as storing in memory,

answering the question asked, or making inferences and relating what has been heard to information stored in long-term memory (Anderson, 2015).

Anderson's cognitive model of comprehension is widely accepted and some studies into language learning strategies adopted this model in the examination of listening strategies (e.g. Goh, 2000; O'Malley, Chamot, & Küpper, 1989; Yang, 1999). Studies which have adopted Anderson's model have tended to focus on the top-down aspects of the model, i.e. those relating to utilization, whereas in reality the model emphasises the interaction between both top-down (utilization) and bottom-up processes (perception and parsing). Others highlight the importance of the interaction between top-down and bottom-up processing (J. Field, 2002; Imhof, 2001). Some have argued that the model implies that listening is a linear process rather than one in which many pieces of information needed to be processed simultaneously and there are overlapping of processes (Graham & Macaro, 2008)

Rost (2011) highlights four types of processing in relation to listening: neurological processing, linguistic processing, semantic processing and pragmatic processing. He suggested that these types of processing are overlapping and that development of listening acquisition in both L1 and L2 align with these categories. Neurological processing starts when the auditory system transforms sound waves into nerve activities which then stimulate the auditory cortex in the brain. Many areas inside the brain are involved in language comprehension, processing language features such as phonemes of sound and prosody, syntactic information, lexical information and discourse information. The connection between world knowledge and the brain activity is through consciousness, which denotes "the root concept for describing the process that initiate attention, meaning construction, memory and learning"(Rost, 2011, p. 17). Consciousness allows an individual to be goal directed and responsive to the internal and external environment. Neurological processing also explains the brain activities during

Anderson's perception phase, namely how the brain responds to the incoming sounds and how it encodes the message from those sounds.

Linguistic processing concerns decoding processes of the incoming signal into linguistic features of L2. It involves speech perception or identifying the features of incoming sounds, identifying units of spoken language to facilitate processing for working memory by observing the speakers' manner of speaking, using prosodic features such as pause units and tonic prominence in segmenting stream of speech into shorter units for processing, and recognising words or phrases and activating knowledge relating to them. It also involves using the phonotactic system of the language and a degree of sensitivity to the allophonic variations of the prototype in the system, parsing the incoming speech onto a grammatical model or syntactic processing, and integrating non-verbal cues into linguistic processing (Rost, 2011). Rost's linguistic processing corresponds to the parsing phase in Anderson's model when the incoming message is divided into smaller units called the constituents, or the subpatterns of the sentence, and the meaning of those constituents in the sentence are mapped out, by using syntactic and semantic information (Anderson, 2015).

Semantic processing is directly related to comprehension. Sanders and Gernsbacher (2004) explain that the processes of comprehension occur through "structure building" (as cited in Rost, 2011, p. 53) which involves association of the language with the concept representing the world knowledge in the person's mind. Semantic processing corresponds to Anderson's (2015) utilization phase of the listening model when a person make inferences and connections between each parts of the text. Language processing, hence, involves relating heard language to the listener's experience or world knowledge and recognising the relevance of that information to the listener's current understanding of the topic (Rost, 2011). Listeners are also required to integrate information from the incoming text with their existing knowledge about

the topic. Moreover, these processes are effective only when appropriate schemata, or cognitive structures representing categorical world knowledge (Anderson, 2015; Schunk, Meece, & Pintrich, 2014), that will assist comprehension are activated. Comprehension also occurs based on the speaker's and listener's common ground in social understanding. In addition, listeners are also required to extend their understanding by making inferences, reasoning by using induction or deduction and using compensating strategies when there is a gap in comprehension. All of these things are especially important in L2 listening, where vocabulary knowledge is of necessity imperfect.

The last type of processing according to Rost (2011) is pragmatic processing. Although this mainly relates to reciprocal or interactive listening (i.e. during a conversation), some characteristics relate to non-reciprocal or unidirectional listening as in the present study. Speech does not contain only a literal meaning but also a contextual meaning. In order to fully understand spoken text, listeners also need to be able to interpret the speaker's intention, to interpret the reason for the speaker's manipulation, use of language and to apply knowledge of the cultural context relating to the setting of the conversation.

Anderson explained the process of listening comprehension through cognitive processes while Rost viewed listening through types of processing. Furthermore, listening could also be viewed from the source of information listeners draw on for processing as to be discussed. Some language knowledge is interdependent and transferrable from L1 to L2 (Cummins, 1979). Nonetheless, the specific challenges of second or foreign language learning should also be acknowledged. L1 learners have a wide range of linguistic and non-linguistic knowledge and skills at their disposal whereas second or foreign language learners do not necessarily have such a range (Vanderplank, 2014). Vanderplank (2014) argues that as models of L2 listening comprehension are based on those from first language acquisition, they downplay the

importance of listeners' existing knowledge and its relation to comprehension of the incoming text, because first language acquisition usually occurs in children at the age of 1-2 years old, who have limited world knowledge.

In a more recent attempt to outline the processes involved in L2 listening in particular, Field (2014) distinguishes between bottom-up and top-down processing, which focuses more on the direction of information processing or processing of information from different sources (J. Field, 2004). Bottom-up processing denotes the decoding of linguistic input, from the acoustic signal heard, and mapping what has been decoded, according to learners' segmental and suprasegmental knowledge, onto the syntactic features of the language. Top-down processing refers to the learners' use of pre-existing knowledge, world knowledge, or the context to make sense of the spoken text. The knowledge may also include the schemas which have been activated earlier in the listening passage. (Buck, 2001; J. Field, 2004; Tsui & Fullilove, 1998; Vandergrift & Goh, 2012; Vanderplank, 2014).

Field (2014) proposed that listening involves five processes, within two stages of listening. The first stage, the perceptual stage, which involves bottom-up processes, consists of decoding, lexical search and parsing processes which include activities ranging from identifying language units from the incoming sound signals to assigning grammatical function to a piece of language. Decoding involves matching the incoming sounds to the phonemes available in the system of the target language (J. Field, 2014). This may sound simple but learners face many challenges to succeed in this process. First, there are difficulties in identifying phonemes as the sound changes according to surrounding phonemes and acoustic features which help distinguish each phoneme are not easy to locate. Besides, unfamiliarity with speakers' voices, tones or local accents also contribute to the learners' challenges (J. Field, 2014).

Lexical search denotes “the process of dividing connected speech into words and matching them to the words in the learners’ lexicon” (J. Field, 2014, p. 30). Listeners use many clues such as phoneme, syllable, word and adjacent words to determine the closest match of a word in their lexicon and the incoming input. The learners tend to make decisions relying on the resemblance of the input to the word already existing in their lexicon rather than the phoneme information. Variation in speakers’ articulation also intensifies the level of difficulty of identifying words in a stream of speech. Field (2014) argues that learners consequently resort to identifying a few words or clusters in which they have confidence. Finally, according to Field (2014) identifying word boundaries in a stream of speech requires the assistance of rhythmic characteristics, which vary in each language. Native speakers of each language employ different lexical segmentation strategies to identify word boundaries in the language. Listeners, especially early learners, tend to apply the strategy of their native language to the target language since they were not able to identify the difference between strategies of the two languages yet (J. Field, 2014).

Parsing, the final process in the perceptual stage according to Field (2014), involves assigning grammatical patterns onto groups of words. He argues that the challenge of this process is caused by the transitory nature of spoken texts. Listeners have to hold information in their mind long enough for the grammatical pattern to be detected while operating other processes at the same time.

Listening also involves top-down processes during the comprehension stage (Field, 2014), which includes meaning construction (from words and sentences) and discourse construction. In both, the listener uses the information they already possess to assist comprehension. Meaning construction occurs when identified pieces of language are associated with relevant world knowledge, knowledge about the speaker, knowledge of the current situation and recall

of what has been mentioned so far. In order to extend their understanding, learners may be required to make inferences or use pragmatic understanding to recognise the intended meaning of the identified piece of language, which could be restricted due to their cultural assumption, limited familiarity with the target language pragmatics and markers of politeness (J. Field, 2014).

Finally, discourse construction involves relating new information to previous information (J. Field, 2014). According to Field, the listener has to choose or give priorities to the pieces of information, combine the information with the previous points identified, compare the consistency of the information and, finally, construct the overall argument. However, this high degree of information monitoring may not be achieved if learners spend most attention resources on low-level operations such as word recognition. Because all processes mentioned so far operate simultaneously, the cognitive load may be very heavy for listeners who may be unable to allocate enough attentional resources to a higher level of comprehension, hindering a full comprehension of the entire text. Also, learners may not monitor their information processing if they have made an incorrect assumption early in the text, and, if left uncorrected, that misconception will continue throughout the text.

Different emphasis has been placed on bottom-up or top-down processing over the years. While early listening research studies drew attention to the importance of bottom-up processes, the attention was shifted towards the use of top-down processes, with the arrival of communicative language teaching (Graham & Santos, 2015). Some propose that the purpose of listening determines whether bottom-up or top-down processes will be called upon the most (Vandergrift & Goh, 2012). For example, if the listening goal is to understand the gist of a conversation, then top-down processing may be more important; if detailed information has to be retrieved from spoken language, then bottom-up processes may be more important.

Studies of native speakers revealed that they draw on both bottom-up and top-down processes while listening and the ability to orchestrate these two processes is a central aspect of successful listening comprehension (Graham & Santos, 2015; Vanderplank, 2014). In order to succeed in second/foreign language listening, learners need to develop more native-like ability to apply bottom-up and top-down processes appropriately. Field expressed concerns over the recent trend in the listening field which focuses more on the benefit of top-down processes (J. Field, 2008).

Drawing on Stanovich's (1980 as cited in Field, 2008) Interactive Compensatory Hypothesis, Field explained that native listeners rely mainly on the bottom-up information from decoding and resort to top-down information when they encounter difficulty in decoding. This is also true for second or foreign language learners. Field related this hypothesis to the findings of Tsui and Fullilove's (1998) study, which found that more skilled listeners incorporate both bottom-up and top-down information when listening. On the other hand, less skilled listeners had to depend more on top-down information, contextual and co-textual evidence, to compensate for their lack of competence in decoding. The problem with relying on top-down information occurred when the learners were required to use co-textual information to compensate for breakdown in decoding because the co-textual information also needed to be obtained by decoding. In addition, if the learners use top-down information to build on comprehension based on inaccurate decoded bottom-up information, the interpretation of the message will be inaccurate. Therefore, instead of focusing on processes based on one particular type of information, language learners should be taught to master decoding in order to get bottom-up information and to use top-down information as compensatory information when decoding does not provide the complete message.

It is also important to differentiate processes and strategies. Process refers to the mechanism used to transform a set of information, which language learners have already acquired and use when language performance is required (J. Field, 2008; McDonough, 1995 as cited in Macaro, 2006). On the other hand, language learner strategies are the ways language learners acquire the process. Language learner strategies are characterised as conscious mental activities which are used in pursuit of a learning goal (Macaro, 2006). While listening, language learners may use strategies to compensate for the gaps in comprehension and to deal with difficulty while learning to master the process of listening (J. Field, 2008). Both process and strategy are employed by language learners while listening since a listening text usually requires both processes which the language learners have already mastered and ones which they have not (J. Field, 2008). More discussion on the definition of language learner strategies is in 2.4.1.

2.2.1.2 Studies on bottom-up and top-down processes, processing and strategies

Recent studies looking at second or foreign language listeners' bottom-up and top-down processes and strategies seem to highlight the importance of interactions between the two. O'Malley and his colleagues investigated the use of listening comprehension strategies during each phase of listening among native speaker of Spanish learning English in the US (O'Malley et al., 1989). The result of a think-aloud protocol session suggested that more skilled learners were able to incorporate top-down strategies, such as elaboration and inferencing, to assist the processing of bottom-up information during the perceptual phase and parsing phase. On the contrary, less skilled learners were not able to do so or did so ineffectively.

The differences between skilled and non-skilled listeners in incorporating bottom-up and top-down processing was later examined by Tsui and Fullilove (1998). The participants in their study were approximately one thousand students taking the English language test as a part of the Hong Kong Certificate of Education Examination. During the examination, the participants

listened to short texts which were simulation of radio texts such as news items, advertisement or interviews, and answered listening multiple-choice questions. For some questions, the information required was consistent with the schema activated at the start of the passage ('matching' items). In others, the information was inconsistent (or 'non-matching') – for example, in a passage about a fire to which the fire brigade was summoned, the correct answer regarding who or what put the fire out was 'the wind', which was likely to be inconsistent with the schema established in learners' minds at the start of the passage. If the learner only used top-down strategies and recalled the schemata from the beginning of the passage, they would get incorrect answers. The authors examined the responses to 'matching' and 'non-matching' items given by learners with overall low and high scores in the examination. The result suggested that only more skilled listeners (those with high scores overall) were able to answer the question even when the bottom-up information did not match with previously activated schema, indicating that they attended to both bottom-up and top-down information and verified their interpretation with linguistic input. The less-skilled listeners (those with lower scores overall), due to their incompetence in bottom-up processing, resorted to top-down processing, which led them to incorrect answers. This result occurred particularly in the type of questions which asked for specific information and where the participants could not use top-down information to compensate for the lack of comprehension of linguistic input. The lower scoring listeners tended to rely on top-down information. This indicated not only that the learners have to use both processes, with bottom-up processing discriminating more clearly between low and high level listeners, but they also have to monitor their comprehension according to task requirements.

The results of the two studies above seem to point to the benefit of combining top-down processes and information with bottom-up processes and information. However, as the result of Tsui and Fullilove (1998) suggested, the issue does not lie only in which processes are used,

but also in how they are used. A series of experiments to examine whether top-down information can overrule bottom-up information was conducted by Field (2004). Three experiments were conducted with 48 lower intermediate to high elementary English learners in the United Kingdom. In the first experiment, the participants were asked to write down the last word of the groups of words they heard. In some groups, all the items in the groups belonged to the same lexical field while, in some groups, only the last two words were related. In target items, the onset of the last word was changed into a similar word that does not belong to the set. The second experiment aimed to examine whether the participants were able to accurately identify the unusual words at the end of the sentence which replaced the word that corresponded to the context. In the last experiment, low frequency words replaced higher frequency words which sounded similar to the high frequency words but did not correspond to the context. The results of the experiment suggested that when language learners encounter unfamiliar words, instead of attending to bottom-up information, they attempted to match the heard words with words in their lexicon regardless of appropriateness, or to match them with a word that matched their top-down expectations.

Success in listening comprehension seems to stem from the incorporation of both bottom-up and top-down information as well as the manner of using those information. It can also be seen from these example studies that most of them were of an exploratory nature, studying the pattern of usage between skilled and less skilled second language learners. However, teaching the non-skilled learners to appropriately use strategies to manage that information was not addressed. Empirical studies which attempt to examine the effect of teaching learners how to incorporate bottom-up and top-down information are still scarce (Vanderplank, 2014).

2.2.2 Theoretical perspective on differences in first and second/foreign language listening

Some models of listening comprehension processes and processing such as Anderson's (Anderson, 2015) and Rost's (Rost, 2011) were based on the underlying concepts that the characteristics of listening processes and processing were shared between the first and second language. The Developmental Interdependence Hypothesis (Cummins, 1979) suggested that there was a common underlying L1 and L2 proficiency and the developmental threshold of second language depends on L1 competence. The Linguistic Coding Deficit Hypothesis (Sparks & Ganschow, 1991) proposed that language deficiency arose from learners' lack of control when coding the phonological, syntactic and semantic component, the processes which learners have acquired learning their L1. In addition, the authors stated that affective factors, such as motivation, attitude or anxiety, were merely the effect of level of success in second language performance which was caused by L1 (Sparks, 2012; Sparks & Ganschow, 1991).

These hypotheses are based on the assumption that language processing in each language are similar and language processing which learners have acquired in the first language could be transferred into the second language. However, as mentioned earlier, L1 learners have more resources and time at their disposal and they do not have pre-existing language knowledge which might interfere with language acquisition (Vanderplank, 2014). Particularly in listening, children have opportunities to learn isolated words before progressing to segmenting words from a stream of speech while adult learners may not have that opportunity (J. Field, 2003). When the two languages share many common linguistic features, the transfer may be efficient but, in many occasions, language-specificity features, such as its prosody (Cutler, 2012) prevent the transfer from being efficient and perhaps even cause language learning difficulty. When learners need to listen to a stream of speech, they need to use a system to segment the

speech stream, using prosody information. Each language has developed its own language-specific system or strategies for processing this bottom-up information, i.e. lexical segmentation strategies, which may not be transferable to other languages (Cutler, 2000; J. Field, 2003). Studies have shown that second/foreign language learners rely on first language strategies or resort to them when learning new things or facing difficulties (Altenberg, 2005; Clarke, 1980; Graham & Macaro, 2007; Zatorre & Gandour, 2008).

All participants in the present study are native speakers of Thai. Thai is a language in the Tai-Kadai language family, among Lao, Burmese and Vietnamese, and it is an analytic, monosyllabic, tonal language (Benedict, 1942). Being an analytic language means that Thai syntactic features cannot be detected by the change of language form but need to be analysed. Thai words mostly consist of one syllable and compound nouns originate from the combination of two words into an integrity unit (Aronmanakun, 2007). The minimal integrity unit is the smallest meaningful unit of language and may contain more than one syllable. Words are segmented semantically using these units (Aronmanakun, 2007). Native speakers of Thai, consequently, do not use phonological features to find word boundaries. In addition, there are five tones in Thai language and they are lexical in nature, which means each syllable in Thai has a tone fixed to the word (Cutler, 2012). Changing of the tone or the pitch of each syllable indicates changing of the word. For example, if *ma* is pronounced with five different tones, it will refer to five different things.

The tone has some effects on how the brain process audio language input. The results from a number of empirical studies in neural specialization of speech and pitch facilitated by neuro-imaging indicated that there are were differences in pitch processing among speakers of tonal language compared to speakers of non-tonal languages such as English (Zatorre & Gandour, 2008). The studies suggested that when native speakers of Mandarin Chinese were asked to

discriminate speech (Mandarin) and non-speech stimuli with pitch pattern, not only were they more sensitive to pitch movement than native speakers of English, they also extracted tonal information from both speech and non-speech stimuli that contained similar pitch to Mandarin tones with the left inferior frontal region of the brain, which is the part that processes language. On the contrary, they extracted other tonal information with the right inferior frontal region, which normally processes pitch information in stimuli such as music. The native speakers of English, on the other hand, used only the right frontal region of the brain to extract all tonal information.

Moreover, when Chinese and Thai speakers were asked to discriminate speech and non-speech with tonal patterns as well as various vowel duration, Thai listeners were the only group to use the left inferior frontal region of the brain to extract information (Zatorre & Gandour, 2008). This is because duration of vowel articulation in Thai is a discriminator of vowels which are pronounced similarly but with different length. Therefore, changing of vowel length could mean changing the word. Without training, the vowel lengths in English can confuse the Thai learners of English when they learn to segment English words using lexical stress as a guide, as the vowel length is associated with just linguistic features rather than with both semantic and linguistic features as is the case in Thai.

As changing of the tone means changing of the word, in order to recognise words in tonal languages, listeners do not only attend to bottom-up lexical tone but also need to access their top-down semantic processing to recall associated meaning for lexical decisions, using attention and memory (Zatorre & Gandour, 2008). A research study using MRI scans shows that native speakers of a tonal language, when listening to their own language, activated both linguistic and semantic parts of the brain while segmenting a word, whereas native speakers of a non-tonal language only activated the linguistic part (Ge et al., 2015). Moreover, native

speakers of tonal language developed a parsimonious usage of attention and memory to access semantic information (Zatorre & Gandour, 2008). These differences in how the brain processes prosodic information in a first and second language may require more working memory load as the brain is required to not only process the bottom-up information but also suppress the retrieval of semantic information linking to the prosodic features similar to when they listen to their first language.

English is a polysyllabic language with free lexical stress, which means that each word has a different position of lexical stress (Cutler, 2012). A word in English may consist of more than one syllable and some syllables are stronger than the others. English words contain lexical stress which is the syllable with more prominent volume, length of vowel articulation and occasionally higher pitch (Cutler, 2012; Rost, 2011). In each word, there is only one primary lexical stress, possibly secondary stress and normal syllables. To native speakers of English, information required for identifying a word is not only phonemic information, but also information about this lexical stress as it determines vowel quality or whether the vowel sound is articulated in full or reduced form (Cutler, 2012; Cutler & Butterfield, 1992).

Speech segmentation is triggered by strong syllables, which are the lexical stress (Cutler & Norris, 1988). Therefore, identifying the lexical stress can assist word recognition. Though phonological and contextual information is more influential when listeners identify words, knowledge of the lexical stress pattern in each word facilitates word recognition by providing more clues to distinguish between words with rather similar rhythm of pronunciation (Cutler, 2012; J. Field, 2003). Not only can lexical stress give clues to word identification, lexical stress can also indicate the beginning of a polysyllabic word. A corpus study of English pronunciation in natural speech revealed an estimation of 85% of polysyllabic words in English beginning with a strong syllable, either the primary or secondary lexical stresses (Cutler & Carter, 1987).

The lexical stress, hence, can give listeners a starting point to identify a word from a stream of speech (J. Field, 2003).

Identifying lexical stress may provide assistance to word recognition when listening to a stream of speech in English, but learners of English still cannot immediately make use of this strategy. Since this strategy is English language specific, learners whose native language is very different cannot directly transfer and use this strategy. As previously mentioned, processing of prosodic information in Thai and English is vastly different. English speakers use phonemic and lexical stress information to linguistically activate words while Thai speakers do so using phonemic information, vowel articulation length, as well as tonal information to linguistically and semantically identify words. Learners, instead of learning the entirely new type of processing, usually attempt to build on the existing type of processing (Rost, 2011), which in this case may become a hindrance rather than an accelerator. Moreover, native speakers of a tonal language are more sensitive to pitch movement and give semantic prominence to the length of vowel articulation. This processing is deeply rooted in their neuro-processing. Since they need to suppress their sensitivity in recognising pitch and focus their attention more on other features, there is evidence that native speakers of tonal language process sound input in English more slowly than native speakers of a non-tonal language (Zatorre & Gandour, 2008).

It is true that human language processing has a certain level of plasticity which allows us to learn new ways of processing (Rost, 2011). Nevertheless, language learners may view listening as the most difficult language skill to develop (Graham, 2006b; Hasan, 2000) because of the complexity of the processes that need to be acquired, the temporal nature of spoken language, anxiety arising from uncertainty about what is heard and an apparent inability to control one's comprehension. Such views may lead to high levels of anxiety and a low sense of self-efficacy.

2.3 Self-efficacy, attribution theory and self-regulation

2.3.1 Theoretical perspectives on self-efficacy, attribution theory and self-regulation

2.3.1.1 Definition of self-efficacy

The aspiration to have control over life's circumstances is part of human nature as predictability enables human to prepare themselves for what they might encounter while uncertainty undermines it (Bandura, 1997). People desire to develop a sense of agency, or the belief that they have the power to exert control over situations in their lives (Schunk et al., 2014). The belief that they possess the required skill or knowledge to perform a task to a certain level of achievement allows them to exert that control (Bandura, 1997).

Self-efficacy is a key variable of human agency in social cognitive theory which influences people's choice of activity and persistence in task performance (Bandura, 1997, 1999; Schunk et al., 2014). Self-efficacy as a construct was developed by Albert Bandura and it denotes "...beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments." (Bandura, 1997, p. 3). In an academic context, it is the learner's judgement whether they have the required skills or knowledge to perform a task to a certain level of achievement which they have previously set. Self-efficacy beliefs are an important determinant of their choice of activities as people would naturally not attempt to accomplish a task in which they believed they will not succeed (Schunk et al., 2014). Self-efficacy also determines the level of persistence when facing difficulties as, without believing that they can produce the desired result, people have no incentive to carry out an activity (Bandura, 2001). Self-efficacy encourages self-motivational processes through goal setting and evaluation of one's own performance (Bandura, 1999). Before performing any task, individuals form forethoughts of future events in their head. They set goals, anticipate the likely consequences

of the action, select the course of actions which they believe would create the best outcome and avoid the actions which might lead to negative consequences (Bandura, 2001). People with a high sense of self-efficacy, believing that they have acquired the skill and knowledge, would choose to participate in the task and persist in engaging in the activities when they face difficulties. On the other hand, people with a low sense of self-efficacy, believing that they do not have the skill or knowledge, tend to avoid performing the task or give up when facing difficulties as they perceive themselves as not having control over the situation and expect negative consequences. When they avoid attempting the task, they avoid the negative consequences that will follow the failure (Schunk et al., 2014).

Bandura argues that self-efficacy is central to self-regulation of motivation through challenges, goal and outcome expectations (Bandura, 2001). The level of self-efficacy is not necessarily parallel with the actual performance. Self-efficacy beliefs are derived from self-persuasion based on cognitive processing of diverse sources of information (Dörnyei & Ushioda, 2011) and this forethought has determinative influences on the choice of activities people select and the goal they set depending whether they believe they have the capability to overcome future challenges and attain positive consequences (Bandura, 1999, 2001; Schunk et al., 2014). A healthy sense of self-efficacy, which allows learners to self-regulate their motivation to attain their goal, is slightly higher than their actual ability as overcoming challenges not only improves their knowledge or skill but also gives them self-satisfaction, a sense of pride and self-worth which motivates them to attempt even higher goals (Bandura, 2001; Schunk et al., 2014). A false sense of self-efficacy is dangerous for learning, as people with excessively high self-efficacy would expect a positive outcome and, when the outcome is not as expected, they would learn that their efforts do not lead to success. In contrast, people with a low sense of self-efficacy would not attempt challenging tasks despite acknowledging the value of success (Schunk et al., 2014).

Outcome expectation is people's judgement of likely consequences of their performance (Schunk et al., 2014). Since people's choice of activities and course of actions have been influenced by their self-efficacy beliefs, their outcome expectations for those actions are consequently influenced by their level of self-efficacy (Bandura, 1999). The expectation of positive or negative consequences from the outcome, then, in turn, regulates people's motivation to pursue the task or learning. Thus, this perceived efficacy is not only a causative factor towards accomplishment of the action but also a contributing factor towards building positive motivation in learning (Bandura, 1997).

Self-efficacy is often confused with other related concepts. It shares common characteristics with other self-concepts and self-perception in that they all are judgements of one's capabilities. However, self-efficacy differs from those concepts in that it pinpoints the actions or cognitive skills necessary for performance in a particular situation and it also a judgement in reference to a goal (Schunk et al., 2014). It also differs from self-esteem in that self-efficacy is the judgement of the ability while self-esteem is the judgement of self-worth (Bandura, 1999).

2.3.1.2 Source of self-efficacy

Social cognitive theory, unlike preceding behaviouristic theories which regard human behaviour as a reaction to environmental stimuli (Bandura, 2001), highlights the interaction between a person, the environment and their behaviour (Schunk et al., 2014) as seen in the model of triadic reciprocity (Bandura, 1997) in Figure 1 below.

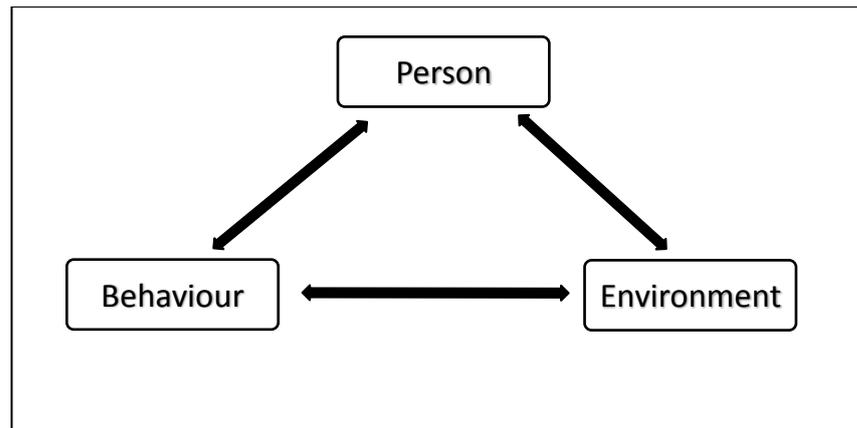


Figure 1 Model of Triadic reciprocity

The relationship between person and behaviour is strengthened by the sense of self-efficacy and the sense of self-efficacy can be fostered in the environment which is positively responsive to accomplishment (Bandura, 1997). Self-efficacy information derives from various cognitive and environmental sources (Bandura, 1997; Dörnyei & Ushioda, 2011; Schunk et al., 2014). Bandura categorised those sources as: enactive mastery experiences, vicarious experiences, verbal persuasion and physiological and affective states (Bandura, 1997).

The most influential source of learners' efficacy is enactive mastery experience (Bandura, 1997). It is learners' experience of performing a similar task and succeeding. A sense of efficacy is built by success while failure undermines it. Nevertheless, the success should be earned through effort. Easy success poses a potential threat to the sense of self-efficacy in the future as the learner would expect quick success and be easily discouraged when failing. In order to build a robust sense of self-efficacy, learners should be given the knowledge of the strategies required for performing the task at hand. They also need to be persuaded that they possess that knowledge and should be reminded, not only of the success in performance, but also of the control which they had over the performance. The most important factor for self-appraisal from failure is effort (Bandura, 1997). In addition, since enactive mastery experience

builds sense of efficacy through the outcome of previous experiences, the patterns of outcomes, either success or failure, and how learners attribute their outcomes also influences the level of learners' efficacy beliefs (Schunk et al., 2014).

Vicarious experience occurs when an individual learns that they have the ability to perform a certain task by observing similar people obtaining success on that task (Bandura, 1997). Modelling can raise the sense of self-efficacy, especially when the observer has little prior experience of the task. Similarity in the characteristics of the observer and the model is also important for building the sense of self-efficacy (Bandura, 1997; Schunk et al., 2014). The sense of self-efficacy increases not only by comparing oneself to the model, but also by acquiring the skill or knowledge of how the model deals with the situation (Bandura, 1997).

Verbal persuasion is the influence of appraisal from others. Appraisal may not prove to be powerful by itself but it can strengthen the sense of self-efficacy (Bandura, 1997). People who are given appraisal would exert effort in activities more than people who have self-doubt. In order for social persuasion to have influence on the learners' self-efficacy beliefs, the person who persuades them needs to have credibility or be the authority in the field that the learners want to acquire (Bandura, 1997; Schunk et al., 2014). The form of verbal persuasion which is most relevant in an educational context is in the form of feedback. The type of feedback which contributes to a stronger sense of self-efficacy is one which attributes success and failure to the amount of effort expended (Schunk et al., 2014) as it is a changeable and controllable factor.

Physiological and affective states refer to how individuals are influenced by the way in which they have interpreted their physical reactions and emotional state in a stressful situation (Bandura, 1997). People may negatively consider their negative physical and mood state as a sign of vulnerability. However, people who have high self-efficacy, may consider those states as self-arousal and as a sign to prepare themselves for what they will encounter.

2.3.1.3 Self-efficacy and attribution of success and failure

As mentioned earlier, the most important source of personal efficacy information is mastery experience or the learners' experience in gaining success in accomplishing similar tasks to the one being attempted (Bandura, 1997). Therefore, how learners interpret the outcome and the cause of the outcome, either success or failure, can have influence on their level of self-efficacy.

Attribution theory was developed by Bernard Weiner, denoting an individual's perceived causes of success and failure (Weiner, 1985). Attribution theory is based on two assumptions. First, that people want to understand and to be able to control the environment. The second assumption is that people constantly attempt to understand the environment and the cause of the behaviour of people around them as well as their own (Schunk et al., 2014; Weiner, 2005). The causal attribution, or the reason which people give to explain outcomes, is influenced by sources such as past personal history, social norms, perspectives and biases (Weiner, 2005). The perceived cause of either success or failure outcomes could be categorised on three dimensions; locus of causality, causal stability and controllability (Weiner, 1985). Locus of causality refers to the location of the cause, which is either internal or external of the attributor. Causal stability refers to the duration of the cause or whether the cause is permanent or temporary. Finally, the controllability refers to whether the cause can be controlled (Weiner, 2005). An adaptive attribution is constructed by attributing causality of success and failure to a factor which is internal, unstable and controllable, such as effort, whereas attributing success and failure to an external, stable and uncontrollable factor, such as luck, is maladaptive.

Attribution theory and self-efficacy are both relevant to learners' levels of achievement and stand in a reciprocal relationship to one another. Since a person's level of efficacy depends on their mastery experience, the manner in which past successes and failures are interpreted

influences their level of self-efficacy (Hsieh & Schallert, 2008). Adaptive attributions can enhance the sense of self-efficacy while maladaptive attributions can undermine it. By contrast, personal efficacious information can contribute to the cause of the outcome. People with high efficacious beliefs, believing they are capable of accomplishing the task, attribute their failure to their insufficient effort or unfavourable circumstances, which are adaptive factors. On the other hand, people with a low sense of self-efficacy would attribute their failure to their low ability (Bandura, 1999). Self-efficacy and attribution have rarely been researched in foreign language learning (Hsieh & Schallert, 2008).

2.3.1.4 Influence of culture type on self-efficacy and attribution

Social cognitive theory is based on the assumption that humans, their behaviour and the environment interact with each other. The environment in which individuals are embedded hence influences their experience and shapes how they interpret their experience of success and failure. Geert Hofstede divided the characteristics of national cultures along six dimensions and one of the dimension is the degree of individualism and collectivism (Hofstede, 2001, n.d.).

Low sense of self-efficacy affects people in both collectivist and individualist cultures similarly. The difference is that members of a collectivist culture may be more efficacious in group-oriented tasks while members of individualist cultures may be more confident about individual-oriented tasks. Nevertheless, there are collective and individual people in both collectivist and individualist cultures and the stereotype may not apply to all members of the culture (Bandura, 2001). Moreover, the degree of individualism and collectivism of the culture can also influence the type of goal which the learners set. While children in cultures with high individualism are expected to recognise their own potential through performance outcomes, children in highly

collective cultures are taught to set performance goals to meet the expectation of competencies which is set by the group (Oettingen, 1995). This type of performance goal is the result of collectivism cultures' members desire to have the sense of belonging to the group (Hofstede, n.d.).

In terms of attribution, it is more likely for members of collectivist cultures to attribute the outcome of their action to external factors and for members of individualist cultures to attribute their success and failure to internal factors (Carpenter, 2000). The result of a study from ethnographical data of sixteen cultures randomly selected from an archive, including central Thailand, revealed that people are likely to attribute their success to internal causes and failure to external causes regardless of culture types (Carpenter, 2000). In more collectivist cultures, attribution of failure tends to be more external and vice versa for more individualist cultures. In addition, while attribution to success in collective cultures does not have a strong relation to type of countries, the pattern of attributing failure to external factors is more apparent among members of collectivist cultures than individualist cultures (Carpenter, 2000).

Thailand has a collectivist culture and, according to Hofstede's index, it is a highly collectivist country. This means that people in that society take responsibility for fellow members of the group. Furthermore, it is very important for Thai people to preserve their face or not to feel ashamed in front of their peers. This includes behaving similarly to other members to preserve their place in the group and to prevent losing face or feeling embarrassed (Hofstede, n.d.). It was even found that a factor to which Thai learners attributed difficulties in learning English was a fear of being ridiculed when speaking English in native-like or non-Thai accent (Kirkpatrick & Young, 2014). Being members of a highly collective culture, Thai people are likely to have low levels of self-efficacy when dealing with individual-oriented situation and to attribute their failure to external factors. Listening and attempting to comprehend a foreign

language is an individual activity. Therefore, levels of self-efficacy among Thai learners are expected to be comparatively low. They might also attribute their failure to maladaptive external factors. Both expected levels of self-efficacy and outcome attributions indicate that Thai learners may face difficulties regulating their motivation to efficiently complete English listening comprehension tasks.

Thai and Japanese researchers conducted a collaborative study aiming to compare the attributions of success and failure of the language learning task outcome between 355 Thai and 350 Japanese English language learners in their first year of universities in Thailand and Japan (Mori, Gobel, Thepsiri & Pojanapunya, 2010). The investigated attributions consisted of internal attributions (ability, effort, strategy, interest, interest in grades, preparation and enjoyment) and external attributions (i.e. luck, teacher influence, task difficulty, class atmosphere and class level). At the end of a semester, the students were asked to complete two sets of questionnaires, one for successful experiences and one for unsuccessful experiences. First, the participants identified the activities in which they felt they had success or failure during the semester and then rated the six-item Likert scale ranging from strongly agree to strongly disagree with the statement about their causal attributions to the success and failure. The results indicated that learners from both countries attributed success to more external factors, such as teachers or classroom atmosphere, whereas they attributed failure to more internal factors, such as lack of ability or effort.

Another study investigated Thai English learners' attribution of success and failure in an international university context. The questionnaire eliciting personal data and learning was completed by 125 Thai undergraduate students and 20 of those participants were invited for the in-depth interview to explore the nature of their attribution. The results revealed that the most dominant factors to which the participants attributed their success were external, such as

teachers and class atmosphere, but internal and controllable factors, such as effort, strategy and interest, also played an important role (Phothongsunan, 2014). A qualitative examination of high achieving Thai university students perceiving themselves as failing in English usage suggested that they attributed the cause of their failure in that area to their own ability (Suwanarak & Phothongsunan, 2008).

2.3.1.5 Self-efficacy and self-regulation

Self-efficacy plays an important role in regulating motivation for learning (Bandura, 2001; Zimmerman, 1989). Self-regulated learners set challenging goals, find appropriate strategies or processes and use self-regulative influences to motivate and guide them through the course of actions (Zimmerman, Bandura, & Martinez-Pons, 1992). Furthermore, self-regulated learning, as proposed by Zimmerman (1989), consists of three elements: self-regulated learning strategies, self-efficacy perception of performance skills, and commitment to academic goals. Learners with a higher sense of self-efficacy use better learning strategies and have a higher degree of self-monitoring as they move towards their learning goal as well as task higher degree of persistence, task choice, effective study activities, skill acquisition and academic achievement (Zimmerman, 1989). Learners who have a high level of self-efficacy would also show adaptive motivational behaviour, characterised by challenge seeking and have high, effective levels of persistence when facing difficulties because they realise from their evaluation of their capability that a positive outcome is plausible. On the other hand, learners who have low self-efficacy tend to have maladaptive behaviours, such as avoiding challenging tasks and low persistence in the face of difficulty (Dweck, 1986). Self-efficacy also influences the learner's metacognitive beliefs. In the framework of Paris and Winograd (1990), metacognitive beliefs, or learners' beliefs about thinking and learning, were categorised into four categories; agency, instrumentality, control and purpose. Self-efficacy is an important

aspect of agency, which is the learners' beliefs about themselves and their capabilities, as it signifies the learners' beliefs in their competence.

Language learner strategies can promote self-regulation through metacognitive beliefs. The second element of metacognitive beliefs is instrumentality or the learners' belief about the connection between strategies and the outcome of their performance (Paris & Winograd, 1990). The learners' adaptive beliefs are developed when a connection between effort and achievement is established. The learners' awareness of their language learner strategy use reflects their effort in language performance and, hence, associating the effort in strategy use with their outcome achievement could foster positive metacognitive beliefs. The full discussion of the relationship between self-efficacy and language learners' strategies can be found in Section 2.4.

2.3.2 Empirical studies on self-efficacy, attribution theory and self-regulation

Despite the discussion of self-efficacy in the general education and educational psychology literature since the 1980s, studies looking at the role of self-efficacy in language learning are still limited. In 2005, Wong conducted a study to explore 74 Malaysian pre-service English teachers' language learning strategies, the relationship between their language learning strategies and self-efficacy beliefs, and the manner through which the learners with high levels of self-efficacy and low levels of self-efficacy improved their language proficiency. The participants were asked to rate their confidence in performing each language skill on a self-efficacy scale and they were also asked to report their language learning strategies and frequency of usage in a free format, with strategies coded later using a taxonomy based on Oxford's Strategy Inventory for Language Learning (Oxford, 1990). These processes were followed by interviews with some selected participants. A moderate correlation was found between the level of self-efficacy and the total strategy score and participants with higher level

of self-efficacy tended to use more language learning strategies. Nevertheless, the result of this study should be treated with caution, as the self-efficacy scale is not very specific. It consists of ten language tasks, which require more than one action to accomplish (i.e. each item is measuring more than one thing) (Wong, 2005).

In 2006, three studies looking into the relationship between self-efficacy and language learning were conducted over three continents. Mills, Pajares and Herron (2006) examined the relationship between self-efficacy, anxiety and gender on listening and reading proficiency. A questionnaire consisting of self-efficacy scales and listening and reading anxiety was administered to college students learning French in the United States. They were also asked to complete French listening and reading tests in order to elicit their level of proficiency. The result of this study suggested that, not only a stronger sense of listening self-efficacy correlated with stronger sense of reading self-efficacy, it was also negatively related to listening and reading anxiety. Listening self-efficacy was also significantly correlated with listening proficiency. Nevertheless, the authors also discuss the limitation of using self-report to elicit self-efficacy beliefs, as such beliefs may be misrepresented when responding to a questionnaire.

In Australia, Woodrow (2006) explored language learners' motivation, self-efficacy, anxiety and language learning strategies. A set of self-report questionnaires was administered to 275 students registered on a university English for Academic Purposes course. All participants were from Asian countries which had a common Confucianism history, such as China, Japan and Korea. This purposive selection was intended to observe the influence of a collectivist culture on learning in a Western individualist context. Forty-seven participants were also invited to interview sessions. The participants' oral language performance was measured using tests based on the International English Language Testing Service (IELTS). Using a range of statistical analyses, including Structural Equation Modelling and Path Analysis, Woodrow

argues that the study supports a model of adaptive language learning in which proficient learners show task goal orientation (i.e. focus on the process of learning and mastery), positive affect (high self-efficacy and low anxiety), and higher use of metacognitive strategies while less successful learners tend to show performance avoidance and negative affect.

In England, Graham (2006b) investigated language learning beliefs of French high school learners in England more qualitatively. The participants, drawn from a larger sample of nearly 300 students, completed a questionnaire eliciting their self-efficacy beliefs and were asked in an interview on how well they thought they did in French, the attribution of their performance and their expected outcomes. Data from ten participants, five with high self-efficacy and five with low self-efficacy, are presented to provide comparisons across the two groups. The results of this study revealed that the important difference between learners with high and low levels of self-efficacy was their attribution of success and failure. Two out of five low self-efficacy learners attributed their failure to low ability, which could reflect their belief in limited improvement if considering ability to be of a stable causality. While learners with high self-efficacy attributed their failure to inappropriate strategy use which is an internal, unstable and controllable factor, none of the low self-efficacy learners did. Some low self-efficacy learners attribute their failure in learning to their personality trait, while none of these comments was found among the high self-efficacy learners. The study also categorised learners into three types according to their attributions for success, which was also related to their levels of self-efficacy. The first type, the minimalists, was learners who believed that successful performance required minimum effort. However, two in this group explained success with minimal effort as a consequence of their own ability whereas another more negatively attributed minimal required effort to the ease of the task, with accompanying low ability. The second type was the stagnators, learners who also believed that a trait of a good language learner is effortless achievement, in other words, depends on ability not effort. Finally, the 'mastery' group

consisted of students who, by contrast, attributed success much more strongly to effort and less to high ability.

The participants from this 2006 publication were drawn from another study which Graham conducted with a larger sample in 2004. Exploring how students perceive language learning and how it might affect their persistence in language learning, Graham (2004) examined how English learners of French in Year 11 to 13 perceived their levels of achievement in French, their attributions of success in language learning and how these attributions related to success and their desire to continue studying French after the GCSE. The first phase of the study involved 594 students from ten educational institutions in the South of England. In this phase, the participants were asked to complete a set of questionnaires eliciting differences between their perceptions of their own performance and those from their teachers' view, the amount of effort required to succeed in French language performance, areas of language learning in which they believed they had success and failure, and finally explanation for their performance. The results from statistical analyses indicated that the students attributed their overall performance and performance in specific skills differently. The students in Year 11, 12 and 13 attributed their overall achievement to ability, effort, and effort and strategy respectively. However, for specific skills, Year 11 and 12 attributed their achievement mostly to effort while Year 13 attributed it to ability, followed by effort and strategy use. In terms of failure in language learning, Year 11 and 12 attributed their failure in overall performance to low ability while Year 13 attributed their failure to insufficient effort. Vice versa, Year 11 and 12 attributed their failure in performing specific skills to effort whereas Year 13 attributed it to ability. Another interesting point is that the students reported their levels of ability lower than their teachers' expectation and they believed that the underlying causes of their levels of their listening abilities were task difficulty or poor materials. However, according to their comments, little awareness of inappropriate use of strategy was found. The author commented that learners may

not realise the inefficiency of their strategy use or they may not be aware of more effective strategies. In addition, the students who intended to continue learning French seemed to attribute their success to adaptive internal attributions, namely effort, ability and strategies rather than external attribution such as luck.

A study conducted to examine how self-efficacy and attribution theories could lead to a better understanding of 500 undergraduate students' motivation in learning Spanish, French or German in the US was conducted by Hsieh and Shallert (2008). The participants completed a self-report questionnaire eliciting causal attribution, language achievement attribution, level of self-efficacy for the specific language they were learning, and language achievement scores, which learners were asked to predict once before a test, once after the test, and finally when they received their final grades. The findings of this study suggested that both attribution and self-efficacy were predictors of the learners' test scores, and self-efficacy was a strongest predictor of achievement. The result of regression analyses indicated that attribution of ability was a significant predictor of self-efficacy and learners who attributed their success or failure to effort tended to have higher language scores.

A recent study in a university in Australia (Phakiti, Hirsh, & Woodrow, 2013) aimed to examine the relationship between personal factors (motivation, self-efficacy, personal value or the perception of importance, interest and enjoyment in academic learning, and self-regulation), language proficiency and academic achievement. 341 English as a second language (ESL) students from many different language backgrounds who registered in a Foundation Studies programme completed the Personal Factors Questionnaire and provided the researchers with the final grades of the foundation programme and their grade point average (GPA). The result of statistical analyses using structural equation modelling suggested positive correlations between self-efficacy, personal values, motivation and self-regulation. The analyses also found

a close relationship between motivation, self-efficacy and self-regulation. In addition, self-efficacy had a direct connection to English grade, which consequently influenced the level of academic achievement.

Graham and her colleague also investigated self-efficacy beliefs and foreign language learning, particularly in listening (Graham, 2007; Graham & Macaro, 2008), and the extent to which both self-efficacy and listening proficiency might be enhanced through a programme of listening strategy instruction. Focussing on self-efficacy, Graham (2007) outlines how learners in an intervention and a comparison group completed listening tests before and after the strategy intervention and then after each test completed a self-efficacy questionnaire which asked them to rate how sure they were on a scale from 0-100 that they could demonstrate certain kinds of comprehension if faced with a similar task. The intervention group was sub-divided into two, one group receiving detailed listening strategy instruction as well as feedback on their strategy use, drawing their attention to the connection between the strategies used and their performance (drawing on the concept of *instrumentality* outlined by Paris and Winograd, 1990). Another group received listening strategy instruction only, i.e. without feedback. The results of the study indicated that the group which received both strategy instruction and awareness raising feedback improved their level of self-efficacy the most, closely followed by the group which receive strategy instruction only. The difference between the two intervention groups was not however statistically significant, a finding reported in more detail in Graham and Macaro (2008).

In a study of the influence of concept mapping instruction on achievement, self-regulation and self-efficacy among university level English as a second language students in a university language centre in the United States, 79 students were separated into a comparison and an intervention group (Chularut & DeBacker, 2004). At both pre-test and post-test, a survey of

learning behaviour, consisting of items eliciting self-monitoring, self-regulation, and self-efficacy, was followed by an achievement test. The results indicated that the intervention group, who received concept-mapping instruction, improved their levels of self-efficacy significantly more than the comparison group who were in individual study group.

The self-efficacy being investigated in the present study is the learners' perceived efficacy of their knowledge, skills or strategies. The goal which is being evaluated against, therefore, is not whether they can understand the listening text, but rather whether they possess the ability to perform the actions required to understand those spoken texts. Strategy instruction can make learners realise the potential of having greater control over the learning situation and the belief foster the sense of self-efficacy (Schunk et al., 2014)

2.4 Language learner strategies

The ultimate aim of this research study, as for many studies, is to find out a way through which learners can improve their language skills. As outlined above, self-regulation and self-efficacy play an important role in helping learners to improve. In order for learners to regulate themselves towards their learning goals, not only do they require self-regulated strategies, but they also have to have appropriate beliefs about their abilities. Learners with a higher sense of self-efficacy tend to use learning strategies more effectively, be better at self-monitoring, persist at tasks, do not avoid difficult tasks, as well as having greater success in language learning and academic achievement (Zimmerman, 1989). In turn, it can be hypothesised that improving learners' strategy use might also improve their self-efficacy, ability to self-monitor and their persistence. Heightening learners' awareness of how their use of language learner strategies can contribute to their progress also allows them to reflect on the progress they are making, which then may have a positive impact on their self-efficacy, as they come to

understand that they have the means of improvement within their own hands, i.e. in the strategies they employ.

2.4.1 Definition of language learner strategies

Despite a continuous development of the concept of language learner strategies from the 1970s until today, a consensus over their definition has not been reached and is still in a state of flux, with researchers still working on their versions of definition (Cohen, 2014; Grenfell & Macaro, 2007; Macaro, 2006). For the present study, I have adopted Macaro's (2006) definition as it is the most appropriate for examining listening comprehension and self-efficacy. Macaro (2006) sought to describe language learner strategies by outlining their characteristics or essential features, namely that they take the form of conscious mental activities which are applied in pursuit of a learning goal and are transferable to other situations.

This model of language learner strategy was developed from the perspective of cognitive psychology and information processing. According to this model, functioning processing of language learner strategies not only occurs in one's working memory, but they also control the central executive of the working memory (Macaro, 2006). Working memory is a temporary memory system which serves as a "mental workspace" for all everyday cognitive processing and storage of information, which has limited capacity due to its connection to attention (Gathercole & Alloway, 2006, p. 4). The model also proposes that language learner strategies occur only in working memory; if they feature elsewhere, they become something else, as in Macaro's view an action can only be strategic if the learner performs the action with awareness (Macaro, 2006).

Language learner strategies, which are conscious cognitive activities, differ from subconscious activities mainly in terms of control. The latter interact with implicit neurological processes

over which learners have no control (Macaro, 2006). For example, when listening, listeners do not have control over which part of the brain is activated when the input is being processed. Language learners cannot assign which part of the brain they want to process the audio input but can adjust the condition, such as selecting to focus on a particular prosodic feature, of the listening so that the processing will yield the result that they want.

One of the most widely used classifications of language learner strategies places them in three categories: cognitive, metacognitive, and affective/social (O'Malley & Chamot, 1990). Macaro's (2006) model proposed only two categories: cognitive and metacognitive strategies. Cognitive strategies are the strategies which are directly involved in working memory processing of input, such as decoding, processing or retrieval. Metacognitive strategies refer to all mental activities which control, regulate and orchestrate that cognitive processing, including strategies which are defined as affective and social in other models as they also regulate cognitive processing (Macaro, 2006). Language learner strategies have been strongly related to success in language achievement and proficiency (Grenfell & Macaro, 2007). Metacognitive strategies in particular have been found to relate to achievement in language learning in general (e.g. Carrell, 1992; Phakiti, 2008; Vandergrift, 2003) as well as to learners' specific achievement in listening, motivation and self-regulated learning (Buck, 1991; Goh, 2000; Vandergrift, 2005).

Metacognitive beliefs are learners' expectations regarding thinking and learning and the awareness of the metacognitive strategies is also crucial for the building learners' sense of agency or the belief that they have the ability to perform language tasks (Paris & Winograd, 1990).

In order for language learner strategy use to be efficient, different numbers of strategies from one to multiple strategies are required depending on the particular activity (Cohen, 2007;

Macaro, 2006). It is widely argued, however, that clusters or combinations of strategies are more effective (Cohen, 2007; Grenfell & Harris, 2014; Macaro, 2006). Strategy clusters are not static and language learners need to manage them through the use of metacognitive strategies (Cohen, 2007). It is argued that learners who have higher levels of metacognition perform language tasks better as they are able to select and discard strategies in the clusters in a way that is appropriate for the changing situation and goal (Macaro, 2006). Learners can effectively use strategies when they learn that “*if* in a learning situation/task X, *and* when the learning goal is Y, *then* try mental action Z.” (Macaro, 2006, p. 329).

A goal is also an essential feature of language learner strategy. A strategic action must be executed with consciousness and a goal in mind (Macaro, 2006). Goal setting not only enables learners to identify their progress towards success in language learning but also provides a criterion for learners to determine the number and types of strategies required to achieve that goal (Macaro, 2006; Oxford & Shearin, 1994). The goal is also crucial for metacognitive evaluation of what is required for the performance, learners’ existing skill and knowledge, and how well they perform (Bachman & Palmer, 1996).

The evaluation of learners’ existing skill and knowledge required to achieve the goal is executed through self-efficacy beliefs, or the learners’ belief of their own capability to perform a task to a certain level of achievement. In addition, for the learners to evaluate their progress towards the learning goal, they need to be able to recognise the goal. Studies into language performance appraisal, or the recognition of success in language test situations, indicate that learners’ judgement may not be ‘calibrated’ (Bachman & Palmer, 2010). Appraisal calibration, or previously termed as self-calibration, refers to the accuracy of the test-takers’ appraisal confidence, confidence of their performance accuracy, compared to their actual performance (Phakiti, 2005, 2016). In other words, while self-efficacy influences the learners’ beliefs about

their capability to perform a task in the future, performance appraisal has impacts on self-evaluation of the past performance. The appraisal calibration denotes the accuracy in the evaluation. If learners are underconfident about their past performance, they may not realise that they have reached their learning goals and, consequently, the higher sense of self-efficacy for future performance cannot be built. In the area of general education as well as language education, there is some evidence to suggest that certain groups of learners, including higher proficiency learners, tend to be underconfident about their own past performance and vice versa for lower proficiency learners (e.g. Hewitt, 2015; Phakiti, 2005, 2016; Simasangyaporn, 2009). A study in music education found a positive relationship between self-efficacy, self-evaluation of past performance and actual music performance among 340 students performing in a middle school band (Hewitt, 2015). Studies into the relationship between appraisal calibration and achievement in English language performance found a weak positive relationships (Phakiti, 2005, 2016; Simasangyaporn, 2009). Despite identifying this appraisal miscalibration, these studies still failed to establish a strong correlation between appraisal calibration and achievement in language performance. To date, studies which focus on both the influence of performance appraisal and self-efficacy are still scarce and limited in terms of culture variety.

Furthermore, as performance appraisal is evaluation of past performance and it enables recognition of goals, the learners' culture may have an influence on it. As mentioned in 2.3.1.4, people from collective cultures set performance outcome goals differently from those in individualist cultures. Their performance outcome goals are a benchmark of competence level which is set by the group, rather than the goals for self-improvement (Oettingen, 1995). Therefore, when people from collective cultures evaluate their performance, they compare their performance to a standard instead of comparing it to their previous performance. If they have not meet the standard, they may not recognise their success. In a worse case, if the preferred performance outcome which is set by the group is not correct or does not promote learning, the

learners may set an inappropriate goal which does not lead them towards language improvement or self-regulated motivation.

Language learner strategies may contribute to the development of higher sense of self-efficacy, adaptive attribution, self-regulation and motivation in language learning. Control over the learning situation is crucial to positive attribution of performance. Perceived level of control influences the level of persistence and motivation in language learning (Graham, 2011) as it convinces the learner whether the outcome can be changed. If the outcome can be controlled, they can change it. Attributing their performance outcome to controllable factors such as effort or strategy use can lead to such adaptive attribution (Graham, 2011). Language learner strategies, according to Macaro's (2006) model, are mental activities which learners consciously select to use in regards to the learning situation. Not only can the strategic plan, constructed from a combination of strategies, give learners control over the learning situation, the metacognition gained from using metacognitive strategies also provides explanation for their cognitive behaviour (Macaro, 2006), allowing learners to attribute or explain their performance with a changeable and controllable factor. Thus, learners are able to predict their future cognitive behaviour (Macaro, 2006). This prediction could relate to the learners' belief about their own capability to perform a task to a certain level of success, or to self-efficacy. For people to set a goal which regulates themselves towards learning, they must believe that they have the competence and a certain level of success is expected (Bandura, 1999, 2001; Schunk et al., 2014). The level of self-efficacy, which could be enhanced through language learner strategies, then influences whether learners would set a goal to avoid challenges or a goal to persist in challenging learning situations and regulate themselves towards learning (Bandura, 2001; Graham, 2011). The relationship might also be a reciprocal one since self-efficacy also determines whether learners are motivated to successfully implement the strategic plan (Macaro, 2006).

In Oxford 's (2011) Strategic Self-Regulation (S²R) model, language learner strategies are an integral part of self-regulation. The model highlights the importance of not only cognitive and metacognitive strategies but also learners' moods and feelings. While this definition of language learner strategies may serve well for other self-regulation elements, the broad range of characteristics of Oxford's definition makes it difficult to relate to listening information processing and the concept of self-efficacy, which is very specific. Researchers agree that motivated learners tend to use not only more language learner strategies, but also in a wider range and higher frequency (Chamot, 2005; Takeuchi, Griffiths, & Coyle, 2007). Whether this relationship is causal, however, and in which direction, is not clear.

2.4.2 Listening strategies

Despite the lack of consensus in the definition of language learner strategies, studies exist that explore their nature in each of the four language skills. Early studies into listening strategies tended to focus on the language learner strategies used by good listeners, the differences in strategy use between good and poor listeners and the relationship between strategy use and success in listening.

In 1985, O'Malley, Chamot, Stewner-Manzanares, Küpper, and Russo conducted a two-phase study of listening strategies (the second phase of the study is reviewed in 2.4.3). The first phase explored the range of strategies used in response to types of listening tasks, whether those strategies fit into existing strategy frameworks and whether proficiency level had an effect on the strategies used (O'Malley, Chamot, Stewner-Manzanares, Küpper, & Russo, 1985a). 70 high school ESL students were interviewed and the analysis revealed that the participants used a wider range of strategies than expected. Those strategies could be grouped into cognitive and metacognitive categories with the addition of a social mediation strategy. Multiple strategy use was found in both beginning and intermediate students. In terms of difference in strategy use

between the two proficiency levels, the intermediate learners used more metacognitive strategies than the beginners did. The metacognitive strategies were categorised into three phases; planning, monitoring and evaluation, administered at the before, during and after listening task. Most strategies reported were planning strategies, particularly involving self-management, advanced preparation, directed attention and selective attention. The most frequently reported cognitive strategies were repetition and note taking. Strategies which assist re-processing of the listening text, imagery, translation, transfer and inferencing, were also reported. The patterns of strategy use between the intermediate and the beginner learners, despite the different number of reported frequency, were relatively similar in most reported strategies. The beginners tended to use more translation, imagery and elaboration while intermediate learners tended to use more contextualisation.

O'Malley, Chamot and Küpper (1989) investigated the listening strategy use among 11-high school native speaker of Spanish students. The study aimed to examine whether listening comprehension processes differed during different phases of listening, whether the strategies could be identified and whether there was a difference in strategy use between effective and ineffective listeners. Using a think-aloud protocol, the participants were asked to listen to recordings in English and paused periodically to verbalise their thinking processes. After the listening text finished, the interviewer also asked comprehension questions about the main idea of the listening text or the meaning of specific terms. The results of a qualitative analysis of the think-aloud indicated that the listeners consciously employed multiple strategies to comprehend the listening text depending on the task requirements that varied according to phases of listening. The strategies used were grouped according to the phase of listening outlined in Anderson's (1990) model: perceptual processing, parsing and utilisation. The effective and ineffective listeners seemed to use different strategies in all phases. First, the effective listeners tended to closely monitor their level of attention while ineffective listeners

paid more attention to listening to individual words and did not monitor their comprehension. During parsing, only the effective listeners listened in large chunks, shifted their attention to word-level when needed, combined pieces of information into an overall meaning and made inferences using context clues. During utilisation, the effective listeners were able to relate new information to prior knowledge on multiple levels (world knowledge, personal knowledge and self-questioning). Interestingly, the authors categorised self-questioning, which is considered a monitoring strategy in the present study, as elaboration.

Vogely (1995) conducted a study aiming to explore learners' views regarding the characteristics of good listeners' strategies and the relative difficulty of authentic listening task, to identify the strategies which learners actually used during the listening task and the relationship between the strategy use and listening comprehension scores. The participants were asked to watch a television programme in Spanish and completed a listening comprehension test and respond to a Metacognitive Awareness Strategy Questionnaire. The findings indicated that all participants were aware of the strategies they believed were used by a good listener (such as listening for gist, using background knowledge) but they did not report using those strategies themselves. They reported trying to understand the overall meaning of the text, relating background knowledge to the listening text, understanding each word, focusing on the details, and mentally sounding out words and phrases.

Some participants who saw themselves as good listeners had unrealistically high level of confidence while some participants lacked confidence. The participants' reported different manner of use of strategies according to situations. They reported considering themselves active listeners but became passive listeners when they did not understand. They reported being aware of their own level of comprehension, despite some of them not knowing what to do when comprehension broke down. The comparison between participants of different levels of

proficiency indicated that less proficient learners focused more on word level rather than phrase level understanding and vice versa for more proficient learners. The study also found that learners who reported being more persistent in listening tasks and using strategies to solve problems did not have higher levels of listening comprehension than other groups. It seemed that those participants used strategies to compensate for a lack of comprehension rather than preventing loss of comprehension (indicating a lack of effectiveness of strategy use, rather than a lack of strategy use). In terms of strategies they reported using while dealing with difficulty in comprehension, the participants reported being persistent, waiting for clarification of information in the next section and guessing the meaning of the word using context clues. The results of this study highlight the importance of the efficiency of strategy usage.

Vandergrift (1997) also used think-aloud protocols to describe 21 French learners' strategy use. The protocols were coded using, though not exclusively, a predefined taxonomy by O'Malley and Chamot (1990) which separated strategies into three categories: cognitive, metacognitive and socio-affective strategies. The frequency of the strategy use reported was tallied. When participants were categorised by proficiency in listening (here, how long they had been learning French), intermediate listeners reported more frequent use of metacognitive strategies, such as comprehension monitoring, planning and problem identification, twice as much as novice listeners. Comprehension monitoring was the most reported metacognitive strategy. There were reports of planning, which was on-line due to the nature of the task. Eight cognitive strategies were reported: summarisation, elaboration, inferencing, translation, transfer, repetition, grouping and deduction/induction, with the highest frequency for the first three strategies. The distinction between novice and intermediate listeners seemed to be in the level of processing. While bottom-up or surface cognitive strategies were reported more by the novice listeners, the intermediate listeners reported more metacognitive strategies. In terms of listening ability, the distinction between successful and unsuccessful listeners, both novice and

intermediate, seem to be the use of metacognitive strategies, which the successful listeners reported twice as much, especially in comprehension monitoring and problem identification. There was no significant difference in the use of cognitive strategies between these two groups.

Using retrospective verbal reports and diaries, Goh (1998) investigated 16 Chinese ESL learners' listening comprehension strategies and whether higher-ability learners and lower ability learners use different strategies. 'Ability' refers to her division of participants into higher and lower proficiency groups on the basis of their listening test score within their intensive English programme, selecting participants from the top and bottom thirty percent of the students. Two passages in English were read out to the participants and the interviewer paused after short sections so that the participants could give a verbal account of how they tried to understand the passages. It is to be noted that Goh distinguishes between strategies and tactics. Strategies, in this study, denote the learners' awareness of general approaches to language comprehension, such as 'prediction strategy', while 'tactics' refer to specific action or steps which were observable evidences that strategies had actually been used, such as using prediction strategy by 'guessing the content of the text from its title'. Both strategies and tactics in this study were classified into cognitive and metacognitive strategies and tactics. The strategies and tactics from the retrospective interview and the diary were coded using a taxonomy derived from the general strategy research field and then tallied to give frequencies of reported strategies. The results indicated that the higher ability group reported six cognitive strategies, of which four were top-down strategies: inferencing, elaboration, prediction and contextualisation. The other two strategies were repeating or memorizing the sounds of chunks for processing later and reconstruction. The lower ability listeners reported only four of these six 'tactics' or the actual use of strategies: inferencing, elaboration, fixation and reconstruction. For metacognitive strategies, the higher ability participants reported using selective attention, directed attention, comprehension monitoring, real-time assessment of input and

comprehension evaluation. The lower ability participants reported using only selective attention, directed attention and comprehension monitoring. For the tactics or the actual use of strategies, the higher ability group reported to actually use the strategies approximately 35 percent more frequent than the lower ability group, as well as applied more types of cognitive and metacognitive tactics. The reported cognitive tactics were those under inferencing, elaboration, prediction, contextualisation, fixation and reconstruction strategies. The reported metacognitive tactics were those under directed attention, monitoring comprehension, input assessment and comprehension evaluation strategies. One of the issues which affected the lower ability group was the inability to shift their attention from difficult words or ideas back to the task while most of the higher ability group reported that they could. The study focuses, however, mainly on the characteristics of the successful language learner while those of the unsuccessful language learners are scarcely reported.

Vandergrift (2003) conducted a study examining 36 grade seven students' strategy use and the difference between higher proficiency and lower proficiency learners, who were classified by their listening test scores. Think-aloud procedures and three different French authentic texts were used. The think-aloud data were coded for strategies, then, analysed quantitatively and qualitatively. The participants reported mostly cognitive strategies, followed by metacognitive strategies and rarely socioaffective strategies. Analysis of variance (ANOVA) was conducted and indicated that skilled learners used a significantly wider range of metacognitive strategies than less skilled learners did. Also, the skilled learners reported comprehension monitoring significantly more frequently than did the less skilled learners. For cognitive strategies, the more skilled learners used questioning elaboration, or questioning and applying world knowledge to work out meaning at more than twice the frequency of the other group. The less skilled learners also reported using a translation strategy significantly more than the more skilled learners did. The qualitative analysis of two learners revealed that the less skilled learner

showed frequent use of translation by itself. This bottom-up strategy suggested a superficial engagement with the text and the strategy did not lead to meaningful interpretation. The more skilled learner, on the other hand, was successful in incorporating bottom-up strategies with top-down strategies, such as elaboration, input monitoring, prediction and planning, and constructed meaningful interpretations.

The results of these studies suggested that more experienced or proficient listeners seemed to report more use of metacognitive strategies whereas the less proficient listeners tended to report cognitive or bottom-up strategies. The lack of vocabulary knowledge of the less proficient listeners or their inefficiency in processing bottom-up information may influence these choices of strategies. More proficient listeners, whose bottom-up processing is more automatic, may be able to shift their attention strategies. These studies focus more on the strategy use of good language learners, comparing them to those of lower level learners as well as the relationship between language learner strategies and achievement in listening. However, there are limited numbers of studies investigating the relationship between listening strategies and affective factors and aspects of motivation such as self-efficacy.

In a rare study, Vandergrift (2005) examined the relationship between strategy use, motivation and listening proficiency among 57 French learners. Strategy use was elicited by the Metacognitive Awareness Listening Questionnaire (MALQ) and motivation levels were elicited by the Language Learning Orientations Scale questionnaire which categorises motivation into three types: amotivation, intrinsic and extrinsic motivation. The listening test scores were elicited by a French listening comprehension test. The result of a correlational analysis suggested a significant negative correlation between listening proficiency and amotivation, or that the learners saw no connection between their actions and the outcome of those actions. The correlation between listening proficiency and intrinsic and extrinsic

motivation indicated that the levels of motivation in these two categories were not good predictors of level of L2 listening comprehension. The correlation between orientations of motivation and strategy use revealed that amotivation was negatively correlated with the use of metacognitive strategies while intrinsic and extrinsic motivation were correlated positively with metacognitive strategies, though not at a significant level in all strategies.

A Thai researcher investigated factors affecting strategy use among Thai and Vietnamese learners of English using Oxford's (1990) Strategy Inventory for Language Learning (SILL) (Khamkhien, 2010). The participants came from two universities, one in Thailand ($N = 84$) and one in Vietnam ($N = 52$). The strategies in this study were classified into six categories: memory, cognitive, compensation, metacognitive, affective and social. In order to see whether level of motivation differentiated the number of strategy types used, participants from each country were separated into highly and lowly motivated groups. A *t*-test performed on the means of reported strategy use from each category showed statistically significant differences between the highly and lowly motivated Thai learners in all categories apart from memory strategies. This result should be treated with some caution, however, as some of the questionnaire items had quite radical wording which might have led the participants to avoid responses at the extreme end. For example, one item elicited self-efficacy in relation to the rather elusive goal of speaking English like native speakers.

The relationship between self-efficacy, anxiety and proficiency in reading and listening in French was investigated by Mills, Pajares, and Herron (2006). The participants were 95 college-level learners of French in the United States. Their self-efficacy levels were elicited by the French Self-efficacy Scale developed by the researchers, the anxiety levels were measured by an adapted version of an anxiety scale and, finally, the listening and reading proficiency scores were produced from a university proficiency test in French. The result of multiple

regression indicated that self-efficacy could predict the level of French listening proficiency only in female participants while listening anxiety was significantly associated with listening proficiency for all participants.

2.4.3 Listening strategy instruction

Few studies however have explored the causal relationship between self-efficacy, strategies and listening proficiency, i.e. whether it is possible to improve self-efficacy and listening proficiency by improving listening strategy use.

Despite the criticisms of the field regarding a lack of consensus over definitions of the construct of language learner strategies, some academics see the potential of language learner strategy instruction on language learning (Cohen, 2007; Grenfell & Macaro, 2007). Strategy instruction is important for learners at all levels. The beginning levels can benefit from using strategies as a part of self-regulated learning and they can also develop their self-efficacy belief as strategy instruction promotes control over the learning situation, giving learners the steps to reflect on their own development, as well as providing an environment in which accomplishment is rewarded, regardless of the outcome (Bandura, 1997). Strategy training has been studied in all language areas; reading (e.g. Dreyer & Nel, 2003), writing (e.g. De Silva & Graham, 2015; Sasaki, 2000), vocabulary (e.g. Rasekh & Ranjbary, 2003), speaking (e.g. Nakatani, 2005) and listening (see below), but the mixed findings of positive and negative impacts of strategy instruction have not led to a consensus regarding its benefits. Furthermore, systematic reviews of strategy instruction research studies (Hassan et al., 2005; Plonsky, 2011) indicate that strategy instruction in listening has been less frequently studied. Only five out of 61 studies in Plonsky's (2011) recent review focused on listening.

When a language teacher plans strategy instruction, there are many aspects to take into consideration. First, the decision need to be made whether the instruction would be explicit or embedded in regular language classes. The evidence on the relationship between language learners' success and metacognitive strategies suggests that explicit instruction might be more effective. Evidence also points to the greater effectiveness of strategy instruction when combining the learning of the strategy and the target language (Rubin, Chamot, Harris, & Anderson, 2007).

One of the most common models of strategy instruction consist of four steps.

1. raising awareness of the strategies learners are already using;
2. teacher presentation and modelling of strategies so that students become increasingly aware of their own thinking and learning processes;
3. multiple practice opportunities to help students move towards autonomous use of the strategies through gradual withdrawal of the scaffolding; and
4. self-evaluation of the effectiveness of the strategies used and transfer of strategies to fresh tasks.

(Rubin et al., 2007, p. 142)

From the review of listening strategy research, it can be seen that language learners of different levels of proficiency tend to differ in strategy use. However, there is also some evidence indicating that they employ relatively similar strategies at different degrees of frequency and in different ways. This leads to the question whether different kinds of strategy instruction should be tailored towards each level of proficiency. In the present study, the researcher chose to teach similar strategies to both higher and lower proficiency participants. Although the participants were presented with similar strategies, the participants were trained to reflect on their individual strategy use and selected the combinations of strategies which would suit their individual language learning requirements the most.

In terms of whether explicit training achieves more than natural exposure, i.e. just giving learners more practice in listening, Field and Ridgway answered the question through a series of journal articles responding to each other (J. Field, 2000; Ridgway, 2000a, 2000b). Ridgway questioned the method of eliciting listening strategies, the neglect of the value of practice, the attempt to use authentic texts which did not resemble authentic situations and the generalisation of strategy instruction from reading to listening (Ridgway, 2000b). Field (2000) argued that, for listening, the issue of process motivation was more important and that Ridgway's suggestions for extensive listening would only add the sense of failure in learners. Also, Ridgway's assumption that strategies would just transfer from the L1 to the L2 disregarded the argument that such transfer only occurs in learners who have reached a certain threshold of language proficiency (Alderson, 1984 as cited in J. Field, 2000). Finally, the method of simplifying listening texts to help with extensive listening may not work well with listening to connected speech, in Field's view.

A Singaporean researcher, Renandya (2012), argued that strategy instruction may not work with lower proficiency learners for five reasons. First, he claimed that there is weak supporting empirical evidence of the existence of L2 listening strategies. Second, that the knowledge required to implement strategy instruction is too demanding for teachers and neither teachers nor learners believe in such instruction. He also claimed that strategies were too complicated for lower level learners to learn and that strategies could be transferred from L1 to L2 without instruction. Renandya acknowledged learners may have a problem with bottom-up strategies but proposed that they would acquire top-down strategies from extensive listening. While acknowledging some of the points raised by Renandya, Cross (2012) also countered many of them by highlighting Renandya's failure to mention the development of listening strategy research in the past 15-20 years. He also argued that with proper training, teachers were

capable of becoming knowledgeable about listening strategies, and that Renandya's claim about his teachers' and learners' views were not supported by empirical evidence.

In the light of the debate between instruction based on extensive listening or on listening strategy development, the researcher agrees with Cross (2012) and Field (2008). Extensive listening and natural acquisition may be efficient for learners whose first language is not vastly different from the target language. However, with many differences between their L1 and English, Thai learners have to draw upon strategies because the processing of the input is not natural for them and the transfer of strategies from the L1 would be ineffective, as discussed in Section 2.2.2. Field also emphasised the value of training in bottom-up strategies such as lexical segmentation strategies, which vary between languages; furthermore, if learners persist in applying those strategies from their L1, it could negatively affect their lexical segmentation strategies in the L2 (J. Field, 2008).

It is far from clear whether listening strategies can be taught, and if not, then what viable listening instruction alternatives maybe. There is little evidence of language teachers incorporating listening strategy instruction into their teaching, with many using extensive listening or following methods that are more similar to testing. Field (2008) argues that it is common for teachers to follow three basic steps: using a pre-listening activity, asking learners to complete a listening task, and then simply checking the answers. This approach neglects the learners' affective responses to listening and their individual sense of self which could motivate them to be self-regulated learners. There is also a tendency for teachers to follow a familiar routine when teaching listening but not having any underlying rationale for approaching it in that way (Vanderplank, 2014). As mentioned earlier, there have been few listening strategy interventions and few following an experimental design (Hassan et al., 2005; Macaro, Graham, & Vanderplank, 2007; Plonsky, 2011).

As mentioned in 2.4.2, O'Malley, Chamot, Stewner-Manzanares, Küpper, and Russo conducted a two-phase study exploring vocabulary, listening and speaking strategy. In the second phase of the study (1985b), listening strategies were taught in a normal classroom environment. The participants were 75 high-school students enrolled in ESL course in three schools. The strategy instruction was implemented in all three school. The participants in each school were separated into three groups: metacognitive, cognitive and control groups. The metacognitive group received instruction on metacognitive strategies (selective attention), cognitive (note-taking) and socioaffective strategies (cooperation). The cognitive group received instruction only in cognitive and socioaffective strategies. The last group was the control group, which received normal school curriculum listening lessons. The strategy instruction was given in a fifty-minute session daily for eight days, in which the participants experienced at least two out of three activities involving listening: vocabulary learning, listening or speaking. The intervention groups were provided with multiple practice, both with repeated material and new materials. The pre-test and post-test listening task was four listening comprehension tasks with listening texts in the form of videotapes. The result of Analysis of Covariance (ANCOVA) suggested that the intervention groups performed significantly better than the control group in the first three tasks but did not differ in the last task. The explanation given was that the strategy instruction was intentionally faded out, in order for automaticity to form. However, owing to the short time of instruction, the fade out was too soon. The authors also discussed that the metacognitive and cognitive groups may not differ enough from each other because their choice of strategy taught, selective attention, could make little impact on learning.

Thompson and Rubin (1996) conducted an experiment to see the effect of strategy instruction on the listening comprehension of Russian. The participants were students who had had very little to no experience in authentic Russian in one-way listening situations. Two types of

measurement were used to elicit the participants' level of listening comprehension. The first was a 29 item open-ended guided recall test with both audio and video listening materials developed by the researchers. Another was a listening section of a standardised Comprehensive Russian Proficiency Test consisting of 22 multiple-choice questions based on simulated-authentic and authentic audio segments. These tests were administered at the beginning and the end of the instruction. The participants were randomly assigned into an experimental group and a control group. Both groups met for 50-minute sessions three times a week and were taught using the same course materials, as well as were exposed to all Russian listening materials in the same amount. Only the experimental group received metacognitive and cognitive strategy instruction. The metacognitive strategies included were planning, defining goals, monitoring and evaluating. The cognitive strategies included were predicting content, listening to the familiar input, listening for redundancies, listening to the tone of voice and intonation and resourcing. The statistical analysis revealed that the participants who received strategy instruction improved significantly on the listening performance on video material but such a significant result did not occur with the listening performance on audio only material. This study has a robust design in terms of strategy instruction and measurement. The lack of qualitative data, however, means we have little knowledge about the patterns of strategy use at pre-test and post-test.

Imhof (2001) studied the use of three self-monitoring strategies in listening: interest management, asking pre-questions and elaboration. Qualitative data were elicited through a self-observation log kept by the 35 participants after training in those three strategies. The training included raising awareness of the importance of the strategy for listening success, exploratory exercises, group discussion, and practice but varied in each strategy lesson. The results of this study indicated that, for interest management, though it was not possible to change their interest in the topic used in the listening material, the participants attempted to

modify their attitude, monitor their listening processes, modify their knowledge base, create social motivation, and change relevant aspects of the external situation. The impact of these strategies was found in learners' report of changes in motivation, mode of processing, social perception, cognitive structure and types of interference. Asking pre-questions involved the evaluation of learners' own ability and asking themselves questions about what needed to be done to understand the listening text. Participants reported the effect of the pre-questioning on their mode of processing, integration of new information, level of processing, motivation, activation of prior knowledge, types of interference, message structuring and self-evaluation. Elaboration referred to the association of new information to prior knowledge. The strategies most reported after elaboration training were mental imagery, getting emotionally involved with the material, summarisation and finding applications. This study is of an exploratory nature rather than an experiment, and did not involve a comparison between pre-test and post-test strategy use, so that a distinction between pre-existing strategies and ones generated from the instruction cannot be made.

A study investigating the effect of a listening strategy instruction using news videotexts was conducted on Japanese adult learners, aged 26-66 years old (Cross, 2009). The experimental group, consisting of seven learners, received explicit listening instruction while the comparison group, consisting of eight learners, received lessons with just listening activities using the videotexts. The strategies included in this study derived from the participants' responses of the questionnaire at the beginning of the study and consisted of metacognitive strategies (selective attention, self-management of comprehension and strategy use, planning, and self-evaluation), cognitive strategies (detection of prosodic and kinesic patterns, reconstituting or constructing interpretation from partial understanding, inferencing, elaboration, imagery, notetaking, and transfer) and social-affective strategies social-affective (cooperation by sharing, checking and pooling understanding/information, question for clarification, and self-motivation). After ten

weeks of strategy instruction, the *t*-test result of pre- and post-test listening test scores indicated that both the comparison and experimental groups improved their levels of listening comprehension but there was no significance differences in the gains between the groups. The non-significant result was possibly influenced by performing a statistical procedure on a very low number of participants. The author attempted to explain the gain each student made with the preference of bottom-up or top-down strategies reported at the pre-test. Unfortunately, there was not any post-test interview so the difference in strategy use at pre- and post- test cannot be compared. Furthermore, the author informed that the pre- and post-test were conducted in 'incidental' manner during the class, which may intend to elicit the natural behaviour which the students had during class, and the test mirrored the listening activities during lessons. However, the explicit strategy instruction included social-affective strategies such as cooperation or question for clarification, which encouraged learners to discuss with each other. These strategies were not allowed at post-test and, hence, the participants were deprived of some strategies which they may usually depend on for information. The data collection did not include classroom observation and, hence, the participants' dependency on these strategies during class and the effect of depriving these strategies could not be addressed.

Metacognitive awareness raising was the focus of the intervention conducted by Vandergrift and Tafaghodtari (2010) examining French as a second language. The 106 participants were divided into an experimental ($n = 59$) and control group ($n = 47$). Listening achievement was measured using the university's FSL placement test, which consisted of multiple-choice questions with a variety of audio text types. Metacognitive knowledge was assessed using the Metacognitive Awareness Listening Questionnaire (MALQ). Over the course of 13 weeks, the experimental group participated in listening activities which were accompanied by metacognitive awareness raising discussions. The procedure of instruction started with segmenting notepaper into sections for prediction, first time of listening, second time of

listening and reflection. Then, the participants were asked to make predictions by brainstorming the type of information and vocabulary they might hear. This process was done together as a class, then in groups, and then individually. Next, the participants got to listen to the text and verify the predicted information. Other information was noted down in a separate section. After the first time of listening, the learners would compare their predictions and information in pairs. The second time of listening, students listened to the text again and resolved comprehension difficulties. The participants listened for a last time for verification of their interpretation and comprehension. Finally, the participants completed a self-reflection on the activity. The data were analysed using a two-factor ANOCOVA. The result indicated that there was a difference between the listening performance of the participants who received metacognitive awareness raising and those who did not. Further analyses suggested, however, that when comparing the less skilled participants from each group, the less skilled learners in experimental group outperformed those in the control group and improved more. For the more skilled participants, the experimental group and the comparison group progressed at the same levels. In terms of strategy use, the authors argued that the less skilled participants from the experimental group showed a pattern of using mental translation, which may prevent lower level learners from learning.

In a rare study to explore this issue, Graham and Macaro (2008) also looked at the impact of strategy instruction on listening proficiency among 68 lower-intermediate French learners in England. The listening intervention was based on a needs analysis of strategies conducted in a pre-intervention phase with another group of learners and incorporating a strong metacognitive element. The pre-intervention phase had shown that learners used prediction and prior knowledge ineffectively, monitored their comprehension and predictions infrequently, and allowed top-down information to overrule evidence from bottom-up information. Learners also reported difficulties in speech segmentation. The participants' definition of key words was

simply words that they happened to understand or hear, without the relevance to the key idea of the text. These findings from the pre-intervention phase were then used to design instruction in the form of clusters of strategies to address effective prediction formation, confirming the evidence for predictions made, identifying real keywords, inferring the meaning of unknown words and recognizing word boundaries in the speech stream. The last strategy cluster was introduced to improve lexical segmentation strategies. The quasi-experimental study divided the participants into three groups: high scaffolding group, low scaffolding group, and comparison group, with scaffolding taking the form of feedback on strategy use (see below for further details). The study was conducted over the course of seven months during normal class time in a range of schools, with the instruction conducted by the normal class teacher. Listening comprehension levels were measured three times using a listening free-recall task developed for this study and self-efficacy levels were elicited by a questionnaire in which learners were asked to rate, from 0-100, whether they could perform the following tasks: understanding gist, understanding details, working out the meaning of unknown words and understanding opinions. The result of the statistical analyses indicated that, though the comparison group had the highest mean listening score at pre-test, the two intervention groups' listening comprehension score at post-test was significantly higher than the comparison group. A delayed post-test administered six months after the program also suggested that the intervention group still had significantly higher levels of listening comprehension than the comparison group. Also, the level of scaffolding seemed to have effect on the level of the listening performance, with an ANCOVA (using the pre-test scores as a covariate) indicating an advantage for the high scaffolding group over the low scaffolding group at post-test. At the delayed post-test, however, the low scaffolding group outperformed the high scaffolding group, which the authors attribute in part to the high rates of attrition on the course in question in the latter group (i.e. only the more

proficient and motivated members of the low scaffolding group continued into the second year of the course, skewing the results of the delayed post-test).

While Graham and Macaro (2008) gives details of the impact of the intervention on learners' self-efficacy, these are laid out more fully in Graham (2007), explaining further aspects of the scaffolding each intervention group received. The strategy instruction given to the high scaffolding group differed from that of the low scaffolding group firstly in the addition of an initial awareness-raising procedure at the start of the project, to encourage learners to reflect on their control over their own learning. That process of reflection was also continued for the high scaffolding group in the feedback given by researchers on their strategy use as well as on their reflective diary of their strategy use. The feedback provided guidelines for learners' improvement as well as aiming to direct their attributions for success and failure away from fixed factors such as ability or task difficulty and towards strategy use. These steps were taken to emphasise the connection between strategy use and the outcome of their listening. The statistical analyses suggested that most participants reported low levels of self-efficacy at pre-test. The high scaffolding group made the most gains in levels of self-efficacy in all aspects, followed by the low scaffolding group. The gain of these two groups were most prominent in understanding details and understanding opinions. However, there was no significant difference between the high and low scaffolding groups' gain scores.

This study not only is an example of a robust design but it also provides information on less mentioned areas such as self-efficacy, the use of lexical segmentation strategies and the retention of strategies after strategy instruction. Vandergrift and Cross recommended this study be conceptually replicated (Vandergrift & Cross, 2016). While they highlight the study's generally robust design, they suggest some areas where it could be enhanced. First, the use of a standardised listening test would provide a more reliable result. The fact that the intervention

was taught by different teachers makes it possible for the teachers' characteristics to confound the variables, although Graham and Macaro (2008) report monitoring the fidelity to condition through limited observation of teachers at work. In addition, the quantitative study only provided a general picture of the learners' strategy use, with more detailed information generated through qualitative procedures being preferable. Graham, Santos and Vanderplank (2011) argue, in a study exploring whether changes in strategy use and listening proficiency would occur in the absence of listening strategy instruction, that the number of strategies reported by learners may not provide a comprehensive picture of strategy use and qualitative procedures can greatly complement the data, especially on the manner of strategy use

There are issues concerning studies looking into listening strategy instruction. First, not only that the number of studies in this area is limited, some studies are also unpublished, e. g. unpublished thesis by McGruddy (1995) and Kohler (Kohler, 2002) and many include rather small numbers of participants. The low numbers prevent the studies from using more robust or complex statistical procedures. Only one of the studies reviewed in this section included lexical segmentation strategies and studies incorporating both bottom-up and top-down strategies in the intervention is still rare (Vanderplank, 2014). Vandergrift and Cross (2016) also proposed that if an experimental study of a robust design and addressing self-efficacy in the way that Graham and Macaro (2008) also employed a solid data collection instrument, such as the MALQ (Vandergrift & Tafaghodtari, 2010), the study could greatly contribute to the field of listening strategy instruction. The present study proposes to address this gap in the literature by considering the impact of strategy instruction on both self-efficacy and listening performance, focusing on bottom-up and top-down strategies within a large sample of learners from an under-researched population, namely lower-proficiency Thai learners of English.

2.5 Research questions

The research questions for the present study are:

1. What is the nature of self-efficacy in listening comprehension among Thai EFL learners?
2. What is the effect of strategy instruction on self-efficacy, English listening comprehension and the reported use of English language listening strategies?
3. Does the strategy instruction benefit learners of different levels of proficiency in a similar manner?

2.6 Summary

This chapter discusses the literature relating to the three variables which are the focus of the present study; self-efficacy, listening comprehension, and language learner strategies. First, the listening comprehension models were described. Then, the difference between first language and target language was taken into consideration. Next, the concept of self-efficacy, as well as associating concepts such as attribution theory and self-regulation, were reviewed. The definition of language learner strategies, listening strategies and listening strategy instruction were discussed. All of these sections were followed by discussion of studies addressing the variables.

Chapter 3 Methodology

3.1 Introduction

This chapter describes the methodology used in the present study. First, the design of the study, the context of the study participants and sampling are discussed. The next section concerns the materials and the procedures used in the study. The materials consist of three types of instruments; listening comprehension tasks, a set of questionnaires and stimulated recall protocols. The characteristics as well as the development of these instruments are described in this chapter. The procedures for collecting and analysing quantitative and qualitative data are explained in detail. The following section discusses validity, reliability and replicability relating to the quality of the study. Finally, data triangulation and ethical issues are explained.

The research instruments discussed in this chapter were designed to elicit information to answer the following research questions:

1. What is the nature of self-efficacy in listening comprehension among Thai EFL learners?
2. What is the effect of strategy instruction on self-efficacy, English listening comprehension and reported use of English language listening strategies?
3. Does the strategy instruction benefit learners of different levels of proficiency in a similar manner?

3.2 Design of the study

The present study is a quasi-experimental mixed method research study. As shown in the research questions, the aims of this study are to investigate if there is a relationship between self-efficacy and listening comprehension and whether listening strategy instruction may have an effect on these variables. The effect of listening strategy instruction was explored through

an intervention. The intervention consisted of seven sessions of listening strategy instruction, implemented in an authentic classroom context over the course of fourteen weeks. In order to observe whether there is a relationship between self-efficacy and listening comprehension performance as well as how listening strategy instruction may have an impact on the three variables, pre-test - post-test data collection instruments were implemented, consisting of a listening test, a set of questionnaires and a stimulated recall activity.

The study was conducted in a university in Thailand. The participants were students who were registered on foundation courses of the language institute of that university. The courses are offered mainly to first year students and the study was conducted in the first semester of the academic year. The participants were in four groups, using intact classes based on the assignment of students to classes by the institute according to their university entrance examination score in English. In those four groups, two groups were of a higher level of English proficiency and the other two were of lower level of English proficiency. One lower and one higher proficiency group were selected as the intervention groups and the others were comparison groups. Random allocation was not possible within the confines of a naturalistic, educational setting. The intervention groups received seven listening strategy instruction sessions throughout fourteen weeks of the course while comparison groups were given conventional listening instruction according to the language institute guidelines.

Both intervention and comparison groups were taught by the researcher only in order to maintain the consistency of teacher characteristics which may affect the result of the intervention. It is to be noted that the researcher taught both English listening and speaking throughout the semester. According to the language institute's policy concerning foundation courses, any teacher who teaches listening must also teach speaking and the language institute could only accommodate my research study if the condition was met. Moreover, at the same

time, there were two other teachers teaching English reading and writing skills to the participants; one for lower level and the other for higher level proficiency groups. The participants had an equal amount of time spent with these two teachers as with the researcher.

3.3 Context of the study

The university in the present study is one of the top public universities in Thailand and received a medium ranking in QS World University Rankings 2016 (QS, 2016b). The university accepts approximately 3,500 new students per year. Graduate employment rates are good. As mentioned in Chapter 1, English is a foreign language in Thailand and the learners' exposure to English are rather limited. The students who are at the tertiary level of education at the time of data collection had received at least twelve years of compulsory English lessons and had experienced the curriculum change from a more grammar-based approach to a more communicative language teaching approach (Mackenzie, 2011; Office of the Basic Education Commission of Thailand, 2009). As outlined in Chapter 1, the change has not brought about the expected improvements in learners' communicative skills and there is still an incompatibility between the curriculum and the national test, which does not include a form of listening test, meaning that the teaching of listening tends to be neglected.

3.4 Participants and sampling

As mentioned, the participants were students registered on foundation courses of the language institute of a university in Thailand. The courses were compulsory for every student in the university, except for students who gain exemption due to their higher English proficiency. Participants were assigned to classes by the institute according to their university entrance examination score in English. Students were assessed on their level of knowledge in vocabulary, grammar, reading and ability to understand daily life communication. These areas were

measured in a written test only and there was no listening test. The two lower proficiency classes consisted of students registered on foundation course 2, an intermediate foundation course, and the two higher proficiency classes of students registered on foundation course 3, which is the most advanced level among foundation courses. However, it is to be noted that the word advanced should not mislead our understanding about their levels. These foundation courses were designed to provide basic knowledge for first-year students. The students' competency levels were consequently anticipated to be in the range which is compatible to low to intermediate in international standards. The students came from different backgrounds in terms of social, financial, schools, hometown, and so on. Also, different levels of spoken English exposure, English learning and English listening experience were anticipated. The participants also came from different faculties, and their level of motivation and determination in learning English may consequently vary.

For the participants' demographic details, they consisted of male and female students aged 18-20 years old. Gender was not equally distributed as the grouping criterion was the language test score, not gender. Distribution of participants' gender is displayed in Table 2. They are students from different faculties; Law, Political Science, Liberal Arts, Economics, Science, Commerce and Accountancy, Allied Health Science, and Nursing.

Table 2 Number of participants

Section	No. of students	Male	Female
Lower Level Intervention (LLI)	31	5	26
Lower Level Comparison (LLC)	40	18	22
Higher Level Intervention (HLI)	52	16	36
Higher Level Comparison (HLC)	38	12	26
Total	161	51	110

3.5 Materials and procedures for pre- and post-test data collection

The design of this research study, as mentioned in 3.2, is quasi-experimental. Therefore, the materials and procedures were separated into two phases: the pre- and post-tests and the

intervention. In this section, the materials and procedures used for data collection are described. Three instruments were used the pre- and post-test phase to elicit details of the learners' self-efficacy, listening proficiency levels and their listening strategy use: listening comprehension tasks, an adapted version of the Metacognitive Awareness Listening Questionnaire (MALQ – Vandergrift, Goh, Mareschal, and Tafaghodtari (2006)), and the stimulate-recall protocols.

3.5.1 Listening comprehension tasks

A language test or assessment task is a tool to enable researchers or language teachers to make an inference about learners' language ability when they encounter an actual communication situation (Bachman & Palmer, 1996). The principles that should guide the creation of such a test are language constructs required for successful communication in those situations along with information needed from the result and the reason we need the information (Bachman & Palmer, 1996; Fulcher, 2010). The purpose will also determine the test format to be used, making a test for a particular purpose different from others (Fulcher, 2010; McNamara, 2000). Therefore, it is most appropriate to consider the purpose of this task before selecting the measurement method.

The purpose of utilising a language task in this study is to elicit English as a Foreign Language (EFL) listening performance in order to further explore whether there is a relationship between listening comprehension performance and the level of self-efficacy. Another purpose is also to elicit participants' usage of listening strategies in order to observe the effect of strategy instruction after the intervention. From these two purposes, the main constructs which need to be elicited are English listening comprehension and self-efficacy. In addition, this listening task was constructed based on the principle of a communicative test, which means that the test items should imitate authentic listening situation as much as possible (Buck, 2001).

Studies into listening comprehension, self-efficacy and listening strategies have adopted various methods to elicit listening comprehension, such as multiple choice questions (Vandergrift, 2003) and recall tasks (Graham, Santos, & Vanderplank, 2011; Vogely, 1995). These different methods were adopted due to different constructs of listening comprehension required for each study to make an inference about listening comprehension. For this study, the listening task formats selected were free-recall and listening comprehension question tasks.

The first task, a free-recall task required the participants to listen to an audio text and, after the text finished, report what they could understand from the text in writing. In the present study, the participants were asked to listen to four dialogues and write down what they understood, in their native language Thai, when each dialogue finished. Free recall was chosen since the purpose of administering the task is to elicit listening comprehension with minimum factors affecting comprehension. As the participants needed to simply report what they understood, this direct test minimised possible irrelevant effects of response format on cognitive processing required for listening comprehension, which may affect the validity of the task result (Weir, 2005). Though the participants were required to write, they were asked to write in Thai which is the language in which they were most comfortable to report. A simple task format requires fewer mental activities to deal with the complexity of the task at hand and, consequently, allows working memory to operate at its full potential to construct the meaning of the audio text. In addition, the exclusive use of Thai for reporting was influenced by the findings from the pilot study which showed that when the participants were given the choice to respond either in English or in Thai, some of the participants just wrote down some words they heard in English in the same manner as a dictation task, rather than expressing their levels of comprehension of the texts.

Furthermore, the listening task chosen in this study was intended to imitate an authentic listening situation as much as possible. The listening situation which tertiary students may be exposed to the most is listening to lectures. Listening activity occurring in lectures is most likely to be non-reciprocal listening in which the listeners need to comprehend the text, and may take some notes if necessary. Free recall was used as an “authentic listening test” (p.44) by Vogeley (1995) to elicit how learners of Spanish perceive strategy use during a listening comprehension task and it was used to observe the listening strategy use of good and poor learners of English in Taiwan (Chien & Wei, 1998).

The final part of the listening tasks was a listening comprehension question listening task. This task requires the participants to listen to the same dialogues once again and provide short answers, usually consisting of two or three words, to the questions either in Thai or in English. Answer keys with correct answers of each question as well as alternative answers were used for scoring the task. This listening task format can also be found in standardised tests such as IELTS. In this study, the participants were allowed to use either English or Thai to answer the questions as only comprehension of the listening test was to be elicited. Unlike the free-recall task, the anticipated responses were short and asking them to answer in Thai might mislead them to attempt to translate word by word. The short-answer question listening task was included in this study on two grounds. First, each type of task is different in physical characteristics, characteristics of test rubric, characteristics of the input, characteristic of expected output and construct-relevant variance (Buck, 2001). These differences cause task performance to vary. Therefore, having different types of listening tasks may cover a wider range of listening processes than only one type. In addition, short-answer question is a listening test format which is more familiar to the participants. This may help elicit the participants’ listening strategies in a way that is similar to what they have experienced in the past.

3.5.1.1 Development of listening task

The listening texts were developed for the present study. Listening text development began with topic selection. A topic about university life was chosen for the listening text based on criteria relating to familiarity and vocabulary range. First, this topic was chosen because it was a familiar area to the participants, making association between their world knowledge and the text more accessible and prompting listening conditions for inferencing strategies to be used. Next, the required vocabulary knowledge to comprehend a text about university life did not exceed the vocabulary level which secondary education graduates should have. This was ensured by checking the list of vocabulary used in the ONET test provided by Thailand's National Institute of Educational Testing Service. In addition, the topic covers a range of sub-topics which vary in level of difficulty in terms of vocabulary and content. After the topic was selected, a list of questions was created to be used for interviewing four native English speakers. The questions used for authentic interviews were:

1. What did you study in your bachelor degree and what did you learn in that subject area?
2. How was life in university when you were a bachelor student? (social life/ class/ friends/ activity)
3. How did you spend your time during your bachelor degree?
4. Did you live at home during university? Can you describe the type(s) of accommodation you lived in?

(Note: During the development of the script, answers to questions four were not included in the script in order to limit the length of dialogues.)

Once the interviews had been completed, they were transcribed in detail. Every hesitation, pause and mistake was included. The interview transcriptions were cut to retain a length of less than two minutes per dialogue. The interviews were later developed into scripts for a listening

text recording in an effort to retain authenticity of the text. Situations, which were rather common in daily life, were added to some dialogues in order to avoid having a stereotypical interview in every dialogue. Hesitation, pauses and mistakes were retained as disfluency can provide useful processing cues for listeners (Rost, 2005).

Before the recording session, the scripts which had been developed from the conversation were given to the people who would record the conversation to study in advance. During the recording session, the person who gave the interview read the dialogue, as well as keeping pauses, hesitation and mistakes, as naturally as possible. The researcher also timed each dialogue to get as close to the designated duration for each dialogue as possible to retain an appropriate speech rate. After recording, dialogues, instructions and silent periods were combined into one audio file and it was edited digitally to eliminate unnecessary noises. It is to be noted that a few seconds of noises were left at the end of silent periods in order to signal to the participants that the silent period was going to end.

3.5.1.2 Listening task characteristics

As mentioned, the listening task consisted of a free-recall task and a more conventional open-ended question task. Eight different dialogues were used for pre-test and post-test, four for each test. Each dialogue lasted approximately 1.30- 1.45 minutes. The speech rate of the interviews was between 120-140 words per minute. Approximately 80 to 90 percent of the vocabulary was high frequency words (K1). The dialogues varied slightly in focus of content (e.g. what they study in their bachelor degree, how to succeed in studying, etc.) and, therefore, were arranged so that the topics were equally distributed. There were two versions for pre-test and two for post-test. Each version differs in order of dialogues (see Table 3).

Table 3 Passage arrangement and details of listening comprehension task

Group	Version	Pre-test				Version	Post-test			
		Passage	Length (min)	WPM *	Vocab level		Passage	Length (min)	WPM *	Vocab level
Lower Level Comparison group	A	Passage 1: Edward 1	2.30	144	81% K1	B	Passage 1: Jackie2	2.30	135	89% K1
		Passage 2: Mary 2	2	123	81% K1		Passage 2: Mary 1	1.45	144	87% K1
		Passage 3: Jackie 1	2	129	78% K1		Passage 3: Jake 1	2.50	125	84% K1
		Passage 4: Jake 2	1.45	176	91% K1		Passage 4: Edward 2	2.25	148	83% K1
Higher Level Intervention group	B	Passage 1: Mary 2	2	123	81% K1	A	Passage 1: Jake 1	2.50	125	84% K1
		Passage 2: Jackie 1	2	129	78% K1		Passage 2: Edward 2	2.25	148	83% K1
		Passage 3: Edward 1	2.30	144	81% K1		Passage 3: Mary 1	1.45	144	87% K1
		Passage 4: Jake 2	1.45	176	91% K1		Passage 4: Jackie 2	2.30	135	89% K1

(*WPM = word per minute)

In the free-recall task, each dialogue was played twice consecutively, followed by three minutes of silence for the participants to write down what they understood in the answer sheet before the new dialogue began. The participants were also given a blank piece of paper to make notes if they wished.

In the comprehension question task, the participants were able to listen to the texts once again. The comprehension questions were previously distributed and there was one-minute silence for the participants to study the questions. There were instructions in both the audio text and the answer sheet to follow. The instructions were in Thai. All the dialogues along with the instructions and pauses were recorded into one audio file in an effort to retain consistency, especially in time allocation, and to maximise the reliability of the listening task.

The comprehension questions consisted of eight questions in total, two for each passage. Each question was constructed to elicit a specific listening strategy e.g. selective attention, verification, inferencing. Types of question were pre-determined before question construction

and were used in both the pre-test and post-test in order to retain the reliability of pre-test and post-test data. The listening comprehension questions are given in Appendix A. The answer sheets were especially designed for the study with all the instructions included (see Appendix A).

3.5.2 Questionnaire

The listening tasks were created to elicit participants' listening comprehension. A part of the rationale behind using the listening tasks is to create a condition for participants to reflect on their own beliefs and attitude towards English listening comprehension as well as their listening strategies. The purpose for the reflection was to explore the level of their self-efficacy and their listening strategy use as well as to observe changes, if there were any, before and after administering strategy instruction. In order to elicit these variables, the participants were asked to report their thoughts and beliefs through two approaches, a questionnaire and a stimulated recall protocol after the listening task.

Self-efficacy in language learning and listening strategies has been studied through various approaches. A self-efficacy scale and retrospective verbalisation were employed in a study into language learning strategy use and self-efficacy among pre-service teachers in Malaysia by Wong (2005). Mills, Pajares and Herron (2006) used a French self-efficacy scale to investigate the relationship between self-efficacy, anxiety and reading and listening proficiency in French. In Hsieh and Schallert's (2008) study into the relationship between self-efficacy, attribution and language proficiency, self-efficacy scale and attribution scales and the scores they received in the semester were observed. In investigating the effect of strategy instruction and French listening comprehension, Graham and Macaro (2008) utilised a self-efficacy questionnaire. For listening strategy use, O'Malley et al. (1989) used think-aloud procedures, to explore L2 listening comprehension strategies (O'Malley et al., 1989). To examine listening

comprehension ‘tactics’ (p.187), Goh (2002) used immediate retrospection to elicit how learners utilise listening strategies. Vandergrift and Tafaghodtari (2010) used the Metacognitive Awareness Listening Questionnaire (MALQ - Vandergrift et al. (2006)) to observe changes in metacognitive knowledge about listening in one semester after learners had been given strategy instruction. In the present study, a questionnaire and stimulated recall protocols were used. In this section, the questionnaire will be discussed in detail while stimulated recall protocols will be discussed in the next section.

With a large group of participants in this study ($N = 161$), interviewing or using think-aloud protocols would not be possible with all participants and insight into participants’ cognitive and metacognitive awareness can only be achieved through a more convenient instrument. A questionnaire was the most appropriate instrument for the second part of quantitative pre-test post-test data collection. A questionnaire is one of the most popular quantitative instruments in social science research due to its convenience in construction, adaptation and the large amount of information it can gather, which can be gathered at once in an accessible format (Dörnyei, 2007).

As mentioned, previous studies also utilised questionnaires to elicit participants’ cognitive and metacognitive strategy use (Hsieh & Schallert, 2008; Vandergrift & Tafaghodtari, 2010; Vogely, 1995) and level of self-efficacy (Graham & Macaro, 2008). These studies have become the foundation for development of the questionnaire in the present study.

Reliability of the questionnaire can also be maintained by using statistical analysis such as calculation for internal consistency. For example, the Strategy Inventory for Language Learning (SILL) is claimed to have a Cronbach alpha of between .91-.95 (Oxford, 1990). The Metacognitive Awareness of Reading Strategy Inventory (MARSII) was found to have high internal consistency and a Cronbach alpha of .89 (White, Schramm, & Chamot, 2007). In the

same way, the Metacognitive Awareness Listening Questionnaire (MALQ, Vandergrift et al., 2006) gained high internal validity and good reliability statistical scores.

Questionnaires, however, do have certain disadvantages. First, respondents may claim to use strategies or not to be using them for many reasons (White et al., 2007). The respondents may simply not know the answer to some particular items or may not provide an actual answer as they may think that some particular results are expected and people could also provide inaccurate self-description responses to retain self-value (Dörnyei & Taguchi, 2010). It is also possible for respondents to misunderstand the description of language strategy presented in questionnaire items and respond according to that misinterpretation (White et al., 2007). Also, as respondents are required only to respond according to designated items, it limits the opportunity to probe for in-depth understanding of strategy behaviour (Dörnyei & Taguchi, 2010; White et al., 2007).

Despite the shortcoming of the questionnaire, it is to be noted that a questionnaire which is administered at the beginning of a study can also serve as a stimulant to the rest of the data collection. Questionnaires are often complemented by qualitative methods such as retrospective interviews or stimulated recall in order to probe for insights into learners' behaviour. Questionnaires can remind participants of attitudes and behaviour which they may have never been aware of before (Dörnyei & Taguchi, 2010). With such a context as that of Thai learners, who were unlikely to have ever been exposed to language strategy instruction, a questionnaire could be used to raise learners' awareness or even to introduce the concept of language strategy in language learning.

Furthermore, the questionnaire in this study was completed immediately after the task. Task-based questionnaires have an advantage in that they are administered along with the task or test, reducing the time gap between listening task performance and questionnaire completion.

The participants can thus reflect on their listening comprehension performance without having to recall their past experiences, which may not be accurate or detailed. Consequently, their beliefs and strategy use reported in the questionnaire will be more reliable than the account of these variables given from memory. Moreover, the questionnaire in this study was also very task specific as it was constructed especially for the study and it was also piloted and analysed for validity and reliability, as well as improved according to the results of this analysis before the main study data collection.

3.5.2.1 Development of the questionnaire

The development of the questionnaire will be explained in four separate sections for each part of the questionnaire as each part was intended to elicit different variables.

The items in the first part of the questionnaire were intended to gather the participants' demographic information (e.g. gender), as well as some information concerning their English learning experiences, such as number of years of English learning and ONET score.

The second part of the questionnaire, which was intended to elicit the participants' strategy use, was adapted from the Metacognitive Awareness Listening Questionnaire (MALQ). This questionnaire was derived from previous literature (Vandergrift et al., 2006; Vandergrift & Tafaghodtari, 2010). The MALQ has been developed in order to assess awareness and regulation of L2 listening comprehension processes as well as to serve as an awareness raising tool and reflection on strategy use (Vandergrift et al., 2006). Even though the questionnaire contains some items eliciting respondents' beliefs and attitudes, it was mainly designed to elicit listening strategies, problem-solving, planning and evaluation, translation, person knowledge, and directed attention. Self-efficacy was only assessed through a small number of items. Therefore, in the present study, twelve items intending to probe participants' attitude and

beliefs in their own capability and control over learning and learning situations were added to the twenty-one-item questionnaire.

The third part of the questionnaire was constructed in order to investigate the participants' attributions of success and failure and their possible influences on the level of self-efficacy. The level of adaptive attribution can influence the development of a higher sense of self-efficacy. Learners tend to attribute success and failure to different reasons and the culture to which the learners are exposed can have influences on the manner in which they explain their performance outcome. People tend to attribute their success or failure to the task or task difficulty when their levels of achievement are similar to others (Schunk, Pintrich, & Meece, 2010).

There are not many studies on Thai people's attitude towards failure and success in language learning. A qualitative study suggested that some Thai high achieving learners in an international university, in which all instruction was in English, still viewed themselves as failing in learning English and needing to do a lot more to improve their skills (Suwanarak & Phothongsunan, 2008). However, a small-scale study by Thai and Japanese researchers (Mori, Gobel, Thepsiri, & Pojanapunya, 2010) suggested that more Thai language learners thought that they could be successful in listening activities. However, it is still doubtful whether the result of this study could be generalised to the entire population. First, the study was intended to be a comparative study between Thai and Japanese students rather than an exploratory study and there were only 70 Thai participants. Also, the data collection was done at the end of a one-semester course of English lessons in an institution which is known to promote students' use of task-based method to teach technology and engineering students. Listening activities the participants experienced in this particular study could be limited in genre. The focus of this study was also on all four skills, rather than targeting the listening skill. Moreover, the result

of this study also contradicts a common view about language learning among Thai people that they are not very good at language learning and an explanation to this phenomenon was not provided. Therefore, in the present study questions eliciting the learners' attributions for their success and failure were added to the questionnaire to explore the manner of attribution of the learners.

The last part of the questionnaire is a self-efficacy scale which has been adapted from the questionnaire in Graham and Macaro (2008). The questionnaire in the previous study was based on a study on language learning strategy use and self-efficacy by the US National Capital Language Resource Center (2000). The scale in Graham and Macaro (2008) was developed for the particular study and, hence, contains only items relating to their task requirements. Only items which were related to the listening task in the present study were kept and some more suitable new items were added.

In the final stage, the questionnaire was translated from English into Thai by the researcher. Then, the first draft of the Thai version was translated back to English by a Thai university lecturer who teaches English and has been speaking English for more than 12 years. The differences between the English translation and English original version were observed and changes made in order to ensure that the Thai version of the questionnaire would elicit information intended as in the original version. These measures were performed in order to ensure the reliability of the Thai version of questionnaires.

The questionnaire was piloted. The adapted MALQ questionnaire data gained from the pilot study were processed through Exploratory Factor Analysis (EFA). Factor analysis is used to identify groups or cluster of variables by combining variables that are collinear and it is the statistical analysis used when the MALQ was constructed. The analysis is beneficial to understanding the structure of a set of variables, especially for latent variables in a large data

set, to constructing a questionnaire to measure an underlying variable and also to reduce the size of a data set (Dörnyei, 2007; A. Field, 2013). The result from the EFA on the pilot study data revealed a seven-factor solution with 16 items from the original MALQ questionnaire items. The factors were determined based on their eigenvalues which were greater than one. However, the researcher decided to retain all 21 items in the adapted MALQ on the grounds that the data from the pilot study were gathered from only 169 participants, compared to more than one thousand participants from various backgrounds and countries, who participated in the MALQ validation study (Vandergrift et al., 2006). Moreover, the MALQ has been used in studies investigating listening strategies (such as Goh & Hu, 2014; Vandergrift & Tafaghodtari, 2010). Retaining the original items from the questionnaire, hence, may enable comparison between listening strategy studies in the future.

3.5.2.2 Summary of questionnaire characteristics

The questionnaire is in Thai and consisted of four parts. Part 1 consists of five questions designed to gather demographic and background information about the participants' previous English language learning experiences for baseline analysis. Part 2 is intended to elicit the participants' awareness of cognitive and metacognitive listening strategies as well as their beliefs towards English listening. There are 33 questions overall in this part with a six-interval Likert scale, in which the participants were asked to rate their opinion from strongly disagree to strongly agree. Part 2 was designed to further elicit participant's evaluation of their overall listening ability and their attributions of success and failure when performing a listening task. This part consists of a statement with two word options, which can indicate their self-assessment of their ability. Another part consists of two statements with open-ended gaps for them to express to what factor they attribute their success and failure. There is an example to demonstrate how to choose the options above the statement. Finally, the purpose of Part 4 is to identify levels of self-efficacy in using each particular strategy which is presented in the

intervention. The participants were asked to rate in percentage terms their confidence that they can exercise each strategy. The questionnaire can be found in Appendix B.

3.5.3 Stimulated recall protocols (Interview)

The listening comprehension task and the questionnaire provide information about the participants' listening abilities, their level of self-efficacy and their reported strategy use. While the questionnaire can provide useful information about strategy use and level of self-efficacy, information gained from the report is still restricted due to the nature of questionnaires, which does not allow the participants to elaborate on their thoughts. In addition, the answers from the questionnaires are self-reports, which may not portray the participants' actual strategy use but rather a belief of their strategy use. In order to gain better insight into the actual processes and also to validate their answers, another data elicitation tool needed to be introduced into the study.

An instrument which was utilised to gather information concerning listening strategy use in many studies is think-aloud protocols. This involves the researcher asking the participant to verbalise their thoughts while performing an online task, which may present conditions for the participants to solve comprehension issues or use strategies to achieve comprehension (Rost, 2011). Bowles (2010) categorised think-aloud into two types: concurrent and retrospective verbal reports. The concurrent think-aloud protocol is the type in which the participants verbalise their thinking process as they are performing the task while retrospective verbal report is a think-aloud protocol in which the participant would verbalise during predetermined pauses, when they would like to pause or immediately after the task is finished.

The underlying presumption of think-aloud protocols is that participants are able to verbalise mental activities relating to listening which are occurring in their working memories

(Vandergrift & Goh, 2012). This seems a very daunting task for the participants. Still, studies into listening strategies via think-aloud suggested that the participants were able to give their account while listening (e.g. O'Malley et al., 1989; Vandergrift, 2003). Nevertheless, think-aloud is still controversial as it is still uncertain whether the articulated information given is reactive processes occurring because of the think-aloud or a reflection of language processes as claimed (Bowles, 2010). Moreover, in the present study, listening strategy use is a reflection of control over the situation. It was the researcher's fear that the higher load on working memory caused by the protocols could lead to participants feeling a decreasing sense of control which would indirectly influence their level of self-efficacy, one of the major variables explored.

Bowles (2010), in discussing think-aloud issues, acknowledges the use of stimulus in order to increase truthfulness of the participants' retrospective account. A stimulated-recall protocol resembles a think-aloud protocol in that they both depend on verbalisation of what goes on in the participants' mind. However, a stimulated-recall protocol is conducted after the actual language performance is completed without any interference from data collection procedures. A stimulus was used during the procedure to help the participants to recall the thoughts and beliefs towards listening comprehension during the performance and give a credible account on the matter. These protocols were conducted in an effort to elicit mental activities and consequently maintain the validity of the interview data.

In the present study, the stimulated-recall protocol was conducted. Sixteen participants were selected from all four groups of participants according to the criteria of level of self-efficacy and listening comprehension task performance. The self-efficacy score and listening comprehension task performance scores of participants in each group were ranked and calculated for the top and bottom thirty percent of the group. The top thirty percent of the scores

were considered higher level while the bottom thirty percent and the rest of mid-range scores were considered lower and medium level respectively. In each condition, one participant who performed the listening task in the higher ranks and who had a high self-efficacy score and one participant who performed the listening task in the lower ranks and had a low self-efficacy score would be invited to participate in the stimulated-recall protocol phase. The other two participants from each group were selected from medium range listening comprehension and self-efficacy scores, especially ones with interesting profiles, such as high listening comprehension score yet with a low self-efficacy score. Interesting patterns of relationship between self-efficacy and level of performance in listening comprehension were also taken into consideration. Unfortunately, two participants, one from the lower proficiency level intervention group and one from the higher proficiency level comparison group, were dropped from the stimulated-recall protocol phase due to issues concerning availability at pre-test. Substitute participants could not be recruited because the gap between the pre-test and the time at which the interview could be arranged was too large. The total number of participants for this phase was, then, fourteen.

Each interview lasted approximately 30-45 minutes and the interview was conducted in the participants' native Thai language. The stimulated-recall interviews at pre-test and post-test were slightly different. In order to gain insight into the participants' language learning backgrounds, the pre-test interviews started with background information questions. There were three open-ended questions which were intended to elicit information about how long the participants had been learning English, their attitude towards language learning and exposure to English in daily life.

At the first interview, the participants were asked to give the researcher a pseudonym which they thought would represent themselves the most or any pseudonym they liked most. The

participants were then referred to by those pseudonyms throughout the study. The interview was arranged in a private office, where the conversation could not be heard by anyone else. Both pre-test and post-test interviews occurred between within one to two weeks after the listening tasks and questionnaires were completed.

In the stimulated-recall activities, the participants were asked to look at their answer sheet to the listening tasks and their questionnaire for a few minutes before listening to the dialogues they had listened to previously. When they listened, they were asked to simply think back on how they felt, what thoughts came to their minds, and how had they come up with the answers for the listening tasks. The participants were given freedom to stop the audio text whenever they want. However, on some occasions, the researcher might stop the audio text for them if signalled by the participant or if the participants went through a very large chunk of listening text without giving any response. Some probing questions were used when necessary and they were all in open-ended format. Before the protocol started, the researcher first modelled the protocol for the participants to observe using another listening text. The model was performed at the beginning of both pre- and post- test stimulated recall interviews in order to ensure the participants' understanding of the protocols.

3.6 Intervention

The selection of strategy instruction as an intervention for the present study is related to the two main variables for this study: listening comprehension and self-efficacy. There have been many attempts to explore and improve language learners' listening comprehension through various methods and views, such as focusing on bottom-up and top-down information and raising metacognitive awareness (for full review, see 2.4.3). Not only that the intervention for this study is intended to improve language learners' level of listening comprehension, the present study also addresses the language learners' level of self-efficacy, a variable which has

not been widely explored and investigated yet in language learning. Therefore, an intervention was selected based on the requirements of these two variables.

Self-efficacy denotes a personal belief in one's own capabilities to successfully perform a particular task to a certain level of success (Bandura, 1997; Schunk et al., 2010). This belief affects the choice of activity in which to engage, effort exerted on the activity and the level of persistence when facing challenging situations (Schunk et al., 2010). The sources of self-efficacy, as discussed in 2.3.1.2, are enactive mastery experiences, vicarious experiences, verbal persuasion and psychological and affective states (Bandura, 1997). Among these sources, learners' personal mastery experience seems to be the most influential efficacy information used to construct a sense of self-efficacy. Generally, experience of success builds a higher sense of self-efficacy while failure could undermine it. However, the success which can contribute to building high self-efficacy is one which is earned through difficulty while easy success not only does not promote self-efficacy but also intensifies the negative effect of failure (Bandura, 1997). Consequently, an intervention which can improve self-efficacy must expose learners to challenges as well as giving them opportunity to learn and master the task so that they can experience success.

A strong efficacy belief can also be constructed through appropriate attribution of success and failure. Factors attributed to success and failure can be situated along the dimensions of stability, locus and control (Weiner, 1979; 1986 cited in Paris & Winograd, 1990). The "healthy attributions" (Hsieh & Schallert, 2008, p. 528) occur when learners attribute their performance outcome to internal, unstable or changeable, and controllable causes such as effort or their use of strategies. However, language learners have been found to attribute their listening failure to factors which are perceived to be uncontrollable and unchangeable such as task difficulty and their lack of ability (Graham, 2006b). Explicit instructional approach can provide learners the

control over learning situation and allow learners to realise that their success and failure are related to internal and unstable causes.

In the current trend of English listening teaching practice, self-efficacy does not seem to be taken into consideration when constructing a lesson. The type of listening instruction practised in many language classrooms can be characterised by learners listening to texts, completing exercises and checking answers, overusing comprehension questions and this makes lessons similar to listening comprehension tests (J. Field, 2008; Seigel, 2014). The three-stage listening lesson typically consists of pre-listening, listening and post-listening. With an attempt to activate schemata, language teachers tend to focus on the pre-listening phase and excessively pre-teach vocabulary or the content of the listening text (J. Field, 2008). These procedures may be conducted repeatedly on the basis of providing extensive listening, believing that more exposure to spoken texts will benefit listening skills. However, if learners use the ‘listen-answer-check’ pattern repetitively, it not only potentially fossilizes and limits their flexibility in listening strategy use, but, without addressing listening processing issues, learners are also likely to continue struggling to understand the text and may experience repeated failure, which increases their sense of failure (J. Field, 2000). Consequently, a series of struggles and failures could contribute to low level of self-efficacy and might even develop into “learned helplessness” (Paris & Winograd, 1990, p. 29) or the belief that they do not have control over their own process of thinking if they continue.

Strategy instruction differs from the mentioned approach in that this explicit instruction targets what underlies listening comprehension. Learner strategies are “the raw material of conscious cognitive processing” which are used to achieve a goal in a particular learning situation (Macaro, 2006, p. 325). Through instruction, language learners may become more aware of cognitive and metacognitive strategies which they can employ as a course of mental activities

required for comprehending spoken texts. Strategy instruction, if delivered appropriately, may assist learners in making a connection between strategy use and learning outcomes. When a learner approaches a listening situation with listening strategies at hand, they can learn that changes in the amount of effort and strategy use can determine their performance. Attributions for success and failure then become based on internal, unstable and controllable factors. With the power of control, learners should be able to develop a higher sense of self-efficacy in listening.

Many previous strategy interventions have followed a common model, which was also employed in the present study, based on a sequence of four steps outlined by Rubin et al. (2007) – awareness raising, teacher presentation and modelling, practice, and evaluation as mentioned in Section 2.4.3 (p. 61). This model was used as a basis of lesson plan construction in accordance with the institute’s course outline for foundation course 2 and 3 in order to balance strategy instruction with the objectives of the courses.

3.6.1 Strategies included in the intervention

Strategies included for the intervention were chosen in order to suit the research context and participants. First, the strategies were selected in the form of a cluster. In defining language learning strategies, Macaro suggested that they should be conceptualised with a goal in mind, because effectiveness of a strategy is related to the specific learning situation and the specific learning goal (Macaro, 2006). The goal of strategy use also determines the number of strategies, either single or multiple strategies, required to achieve in a learning situation and generally, one independent strategy cannot sufficiently function to achieve the task (Cohen, 2007). In order to promote learning, a “strategy cluster”, multiple strategies working simultaneously, or a “strategy chain”, multiple strategies working in sequence, are required (Cohen, 2007; Macaro, 2006). Moreover, successful application of strategy clusters positively contributes to higher

levels of self-efficacy (Macaro, 2006) because strategies to be modelled in the intervention were grouped in clusters in order to maximise their effectiveness.

On the other hand, strategy clusters are not static. The effectiveness of strategies also depends on learners' ability to select and discard strategies according to the listening goal and situation, which may evolve. Therefore, learners must not only be encouraged to use strategies in clusters but also to evaluate the appropriateness of strategy use according to changing situations and goal, through a metacognitive strategy or a series of metacognitive strategies (Cohen, 2007). The learners should also be able to evaluate the strategy requirement depending on their individual needs.

The next consideration was the participants' level of English listening proficiency. Participants were first year undergraduate students and their level of experience in the English listening classroom ranged from moderate to little or no experience. In a study of language learners of French, Harris (2007) found that listening strategies were reported by beginner learners of French to be more difficult to acquire in comparison to reading strategies, perhaps because of the cognitive overload resulting from a large number of strategies they had to perform at the same time. Consequently, the level of motivation after strategy instruction slightly decreased (Harris, 2007). For this reason, advanced and sophisticated strategies were not included in the present study as added complexity may negatively influence the sense of self-efficacy in listening comprehension.

Also, listening comprehension requires two sources of information, bottom-up, integration of perceptual information into larger units, and top-down, or the use of learners' existing knowledge, in order to make sense of the language (J. Field, 2008). Despite a current research trend focusing more on top-down strategies, comprehension requires information from both sources and the lack of bottom-up strategies, especially among learners with lower proficiency,

can lead to communication breakdown (J. Field, 2008). In less skilled learners, when contextual information conforms with the top-down expectations, the perceptual information will be overruled by that expectation (Tsui & Fullilove, 1998). Also, with limited bottom-up strategies, learners may inappropriately use scanning strategies and easily breach the word boundaries if they find some sounds that match with the word they know without looking at the context (J. Field, 2003). In spite of this, research studies on listening instruction incorporating both bottom-up and top-down strategies are still rare (Vandergrift & Cross, 2016; Vanderplank, 2014)

Moreover, language specific listening bottom-up strategies in each language are different and may not be transferable (Cutler, 2000). As discussed in 2.2.2, the participants' native language is Thai, which is a tonal language. Not only that the consonant and vowel phonemes sound different, the lexical segmentation strategies of English and Thai are very different. Strategies through which the learners process Thai prosodic information cannot be immediately transferred to listening to English. In order for the learners to use prosodic cues to assist word recognition, they need to be trained to use the lexical segmentation strategies of English. These issues do not concern only lower proficiency learners, but also concern higher proficiency learners as well. It might be argued that bottom-up strategies are not necessary for higher proficiency learners, whose word recognition skills are more automatized and they may have better bottom-up skills (Vandergrift, 2004). However, evidence from reading strategy research suggests that even good language learners can retreat back to poorer language behaviour when facing difficult situations (Clarke, 1980).

Finally, the intervention was conducted as a part of regular classes and, hence, strategies which were taught had to reflect course objectives in order to ensure that the participants in the study would be able to achieve in the listening test encountered at the end of the courses. The

institute's listening test mainly aimed to examine the participants' ability to listen for gist and listen for detailed information, which are relatively common aspects found in listening test tasks. Therefore, the strategies required to perform these two aspects of listening were included.

With evidence from previous studies and these considerations in mind, six clusters of cognitive and metacognitive strategies were selected for the study. The clusters are *prediction and verification* (Graham & Macaro, 2008; Vandergrift & Tafaghodtari, 2010), *lexical segmentation strategies* (J. Field, 2008; Graham & Macaro, 2008), *planning monitoring and evaluation* (Goh, 2002; Vandergrift & Goh, 2012), *strategies required for listening for gist*, *strategies required for listening for detailed information including selective attention* (Vandergrift & Tafaghodtari, 2010) and *inferencing* (Graham & Macaro, 2008; Vandergrift & Tafaghodtari, 2010).

Prediction and verification are cognitive strategies which deal with schemata activation and adjustment of the prediction according to the text. A prediction cluster was used in other listening strategy intervention studies (Goh, 2002; Graham & Macaro, 2008). There are two prediction strategies used in this study. One is making a prediction of which word learners will hear and the other is making a prediction of the content of what they will hear from the topic, context or any source of information at hand. These two prediction strategies were used simultaneously. Verification is a metacognitive strategy which is a form of monitoring strategy, functioning in association with the prediction strategy. It is possible that when contextual information in the text matches the prediction, learners may overlook the use of contradictory bottom-up information (J. Field, 2004; Tsui & Fullilove, 1998). Verification of the prediction against the text could help learners to improve comprehension. In addition, verification of the hypothesis formed could also enhance the accuracy of the comprehension.

Lexical segmentation strategies are cognitive strategies which assist word recognition, which is difficult to accomplish in a continuous stream of speech (Eysenck & Keane, 2005). Lexical segmentation is a part of first language acquisition and prosodic cues are naturally utilised as a part of lexical segmentation strategies to facilitate identification of sentence structure, intended meaning and word boundaries (Cutler, 2000; Eysenck & Keane, 2005). However, speech segmentation is language specific and each language utilises different prosodic cues as rhythmic structure to identify word boundaries (Cutler, 2000; Cutler & Butterfield, 1992).

English native speakers utilise stress syllables as identifiers of a new word and organise word identification around that stressed syllable (Cutler & Butterfield, 1992; Eysenck & Keane, 2005; Rost, 2011). In the participants' native Thai, which is a tonal language, it is more likely that pitch movement marks the beginning of new words and stressed sounds do not have a significant function other than in poetry. Therefore, lexical segmentation training may prevent learners from using their native language segmentation strategies with the target language and help them direct their attention to the right prosodic cues in spoken texts, in order to facilitate the detection of word boundaries. These strategies were included in the study in order to facilitate obtaining the perceptual information necessary for comprehension, providing assisting clues as well as a sense of control over the process. Lexical segmentation was used by Graham and Macaro (2008) with French learners in England. The participants were taught French lexical segmentation strategies as part of the listening intervention. Vandergrift and Tafaghodtari (2010) also comment that their listening intervention might have been more successful, with higher proficiency as well as lower proficiency learners, had they included a bottom-up element alongside the training in metacognitive strategies. The lexical segmentation strategies taught during the intervention in the present study included using lexical stress as prosodic cue to assist recognition of the beginning of a new word as well as language specific phonology which assists lexical segmentation, such as common consonant sounds at the

beginning and the end of a word and the vowel sounds. These strategies were introduced early on in the intervention and the participants were encouraged to use these strategies in all listening activities.

Planning, monitoring and evaluating are metacognitive strategies which are essential to promoting a sense of control and consequently a sense of self-efficacy. They deal directly with effectiveness of strategy use, which may have influence on the level of learners' sense of self-efficacy (Macaro, 2006). These strategies were taught in a chronological sequence; before listening, during listening, and after listening, in order to make the listening processes more transparent for the learners to plan their strategies. First, planning determines strategies which are required to comprehend the listening text in accordance to the task and their individual requirements. The participants were also taught to prepare a plan of action for the anticipated listening breakdown or problems. Then, while listening, learners can monitor their choice of strategies, assessing whether they work efficiently and which chosen strategy is appropriate for the current listening situation. Moreover, in order to select and discard strategies in response to learning situations, the participants were also trained to monitor their level of comprehension, to identify the parts which they had not understand, as well as to monitor their level of attention. Evaluation concerned evaluating their strategy use, the effectiveness of strategies and self-evaluation of performance. These evaluations might occur online while listening or at the end of the listening situation. The information from these evaluations served as a source for the decision to change the strategy while listening or for the planning stage when they listened the next time. After the introduction of these strategies, planning, monitoring and evaluating strategies were modelled and practised throughout the listening situation. Using planning, monitoring, and evaluation gave structure to the listening situation. Approaching a listening situation with a procedure, it was hoped that learners would develop a higher sense of control over the situation.

Listening for gist is an aspect of listening which is commonly found in many listening tasks and the participants required it for the listening test at the end of the semester. Listening for gist denotes listening to understand the general meaning of the text. One of the strategies which language learners believed important for comprehension was listening to keywords. However, when probing into what ‘keywords’ meant to them, in many occasions they were simply the words they could recognise. In the present study, the participants were trained to identify the actual keywords by taking the topic and their prediction of topic and the general themes emerging from the words they recognised as guidelines. As the participants had a low or lower intermediate levels of listening comprehension, it was anticipated that most of them would be able to recognise fragments of words or chunks rather than full sentences. Therefore, they were taught to construct general understanding of the listening text by observing their identify words for emerging themes which could lead to comprehension of the gist. This strategy was intended to convince them that strategies could lead them to comprehension despite not being able to recognise every word in the listening text, which is important especially for improving sense of self-efficacy especially among lower proficiency level learners. Furthermore, the structure of the task and the text could also provide the clues to the gist of the listening text. The participants were taught to evaluate the structure of the task which they were performing, to observe the structure of the text which they were listening to, and to compare it to their prediction. These strategies were included as the participants’ ability in English listening ranged from lower to intermediate and their ability to gather bottom-up information was anticipated to be limited. Top-down information from the task structure may compensate for insufficient bottom-up information or even complement their understanding.

Listening for detailed information or selective attention is a cluster of strategies denoting learners focusing their concentration on some particular part of information necessary for comprehension. The listening test at the end of the semester would test participants’ ability to

extract detailed information from the listening text. Selective attention ranges from directing attention to words (listening to words in groups, listening to familiar content words, or listening to specific parts of the input), to linguistic features of the text (intonation features and repetition) and to the message (listening to gist and noticing how information is structured) (Goh, 2002; Vandergrift & Tafaghodtari, 2010). In the present study, the participants, first, were taught to focus on a particular part of the listening text. Then, they were trained to evaluate the listening requirement, such as the listening task questions, information needed for verification, or the parts of the text which could complete their comprehension, and to focus their attention on the information needed. They were also trained to shift their attention when the focused information was already obtained.

Inferencing is a top-down cognitive strategy. Inferencing was also used in Graham and Macaro's study (2008) as inferring the meaning of unknown words. Inferencing denotes the process of using different sources of information, such as co-text, context clues, familiar content words, knowledge of the world and the target language, to make an inference about unknown words or a missing piece of information. Contextual information could vary from something listeners had previously heard, surrounding words, collocations, and grammatical structure. Teaching learners to utilise information at hand to compensate for gaps in understanding may help them realise that it is not necessary to catch and understand every spoken word to understand the content. Moreover, it may also emphasise that control can be exercised even when there is a lack of information.

3.6.2 Strategies sequence

The strategies were taught during the intervention in the sequence as shown in Table 4. Prediction and verification, which are top-down strategies, were placed at the beginning of the intervention as they are more accessible and simple strategies, giving the participants some

idea what listening strategies were and preparing them for more complex strategies to come. Lexical segmentation strategies were introduced next, rather early into the intervention as these strategies facilitate the participants' bottom-up information processing at the perceptual level. The rest of the strategies were top-down strategies. The arrangement of strategies was adapted from the order used in the pilot study. Changes of the sequence from the pilot study will be discussed in detail in 3.7.1.4.

Table 4 Strategies sequence

Strategy sequence
Prediction – verification
Lexical segmentation strategies
Planning – monitoring – evaluating
Listening for gist
Listening for detailed information
Inferencing

3.6.3 How the intervention was implemented

The intervention was incorporated into regular listening-speaking classes of foundation course 2 and 3. It consisted of seven listening strategy lessons over the course of fourteen weeks. Listening-speaking classes met once a week and each session lasted one and a half hours. Each week the lessons alternated between listening and speaking. As mentioned earlier, the strategy instruction, as well as the comparison class instruction, was implemented by the researcher in order to avoid a teacher effect from influencing the result of the study. The strategy instruction was given in Thai in order to ensure that the participants understood what they were doing.

As mentioned above, the lesson consists of four stages; awareness raising, teacher's presentation and modelling of listening strategies, participants' multiple practice, and self-evaluation of strategy effectiveness and plan for the next class. In the awareness raising stage,

the participants were asked to complete a listening strategy checklist, in which they were asked to report the listening strategies they had been using or learnt from previous lessons (see Appendix C). They were also asked to write down the strategies they were planning to use in that class session (see Appendix C). In presentation and modelling, the teacher presented the strategy using the listening text from the course core materials to model and modelling differed for each strategy. Then, the participants practised with the same material a few times or until the teacher was certain the participants understood the concept. After that, another listening text was introduced so that they could practise applying the strategy in a new listening situation.

During the lessons, the participants were also divided into groups of 4-5 students and they were asked to discuss, give feedback and help each other in practising listening strategies. Having small groups also made it possible for the teacher to go to each group and try to scaffold the participants' strategy use in each group in a classroom with 30-45 students.

At the end of every class, the participants were asked to recall the strategies they had learnt in the lesson, evaluate the effectiveness of their own strategy use and make a plan of what to do in the next session to improve their listening. All of the written recall sheets, as well as the strategy checklist, were kept by the participants and the teacher asked them to revisit these documents in the awareness raising stage of the next class session.

3.6.4 Classroom context

The listening and speaking parts of foundation course 2 and 3 constitute one half of the courses. This half is taught separately from the reading and writing part and sometimes focuses on very distinct areas of English. It is important to describe how listening instruction was given to participants in comparison groups in order to find contrasts between intervention and comparison groups.

The regular listening and speaking classes in foundation course 2 and 3, in which the intervention was embedded, have characteristics similar to the three-stage listening lessons often found in listening classrooms as outlined in the previous section. The course outline prepared by the course coordinator provides only a broad guideline of what topic should be taught in which week. Lesson plans, though varied between teachers, could be characterised as the three-stage listening lesson, consisting of pre-listening, listening and post-listening (J. Field, 2008). Some schemata activation activities might be used during contextualisation at the beginning of the class by some teachers, but not all. The comparison groups of participants were taught in a similar manner to other classes as described here.

3.7 Pilot study

The pilot study was conducted in the first semester of the academic year 2013 from June 2013 to the end of September 2013. The pilot study was intended to be a mock-up to the main study in order to test out the data collection instruments and procedures and also to establish any limitations which the researcher might encounter during the main study.

Table 5 Number of participants in pilot study

Section	No. of students	Male	Female
Lower Level Intervention (LLI)	38	14	24
Lower Level Comparison (LLC)	42	24	18
Higher Level Comparison (HLC)	44	14	30
Higher Level Intervention (HLI)	45	10	35
Total	169	62	107

The pilot study was separated into two phases: pre-test and post-test data collection and the intervention. Initially, the researcher aimed to conduct this study with participants of three levels of proficiency, meaning there would be six groups of participants. However, due to administrative constraints, the lowest proficiency groups had to be excluded from the study.

This step was taken with the knowledge that the number of participants in the other two levels was ample to perform significant statistical analysis. After pre-test and post-test data collection, issues concerning the instruments arose, which are discussed in the next section.

3.7.1 Changes in the main study due to the result of pilot study

3.7.1.1 Changes in listening task

After the administration of the listening tasks in the pilot study, some issues were raised. First, the length of the listening text was too long, making the text rather too difficult for the participants' level. The listening text script was, hence, cut at natural points of the conversation to retain validity of the instrument. Apart from issues mentioned above, some words which may mislead the participants to misunderstand the text were revised. For example, in one dialogue, the speaker said '...graduated with merit' and the lack of knowledge about Western educational system led to some participants' conclusion that the spoken word 'merit' was 'marry' and thought that the situation was in a wedding. Finally, the researcher had been replaced with another lecturer for the recording of the passages. In the original listening texts, the listening task was developed and voiced by the researcher and four English native speakers. The nature of the conversation is in interview style and the researcher acted as the interviewer in all conversations. By the end of the intervention period, the participants had developed familiarity with the researcher's voice and this gave them the benefit when performing the post-test listening task. Consequently, except for the instruction parts, the researcher did not play any character in the audio text of the main study.

3.7.1.2 Changes in questionnaire

Some issues were also found with the questionnaire after the pilot study. After pilot data collection, Exploratory Factor Analysis (EFA) was conducted with the questionnaire data to

see how each item related to each other. As mentioned earlier, the researcher decided to retain all items. The only change was that, during the pilot study, a questionnaire layout issue arose with the second part of the questionnaire, where the items looked similar to the rubric and were overlooked by the participants. The layout was improved after the pilot study.

3.7.1.3 Changes in stimulated recall protocol

Stimulated recall protocol in the pilot study not only served to pilot the instrument but also as training for the researcher to master the protocols. During stimulated recall sessions, the researcher was required to ease the participants' feelings and attitudes towards the protocols and also to facilitate the recall without leading the participants, as well as giving instructions and retain consistency in procedures. This multi-tasking may appear to be daunting for a naive researcher but practice prior to the actual data collection, in the pilot study, helped the researcher to familiarise herself with the protocol and to anticipate issues that may arise during the session (Gass & Mackey, 2000).

This argument proved to be valid as during the pilot study the researcher had encountered a few issues concerning the protocols. First, during the pre-test phase, one participant with lower listening comprehension refused to even listen to the audio text again. This may be the result of the researchers' inability to assure the participant that she was not being asked to perform this difficult task again (Gass & Mackey, 2000). The similar issue did not arise during the main study data collection.

3.7.1.4 Changes in intervention

Data from the pilot study are presented in Table 6. These data were analysed using 2×2 ANOVA with time as a repeated measure (pre-intervention vs. post-intervention) and one independent sample (condition: intervention group vs. control group).

A 2×2 ANOVA with one independent sample (condition: intervention group vs. control group) and one related sample variable (time: pre-test vs. post-test) was conducted with the free-recall scores. The result suggested a main effect of time, $F(1,141) = 9.38, p = .003, \eta_p^2 = .062$, such that all the participants improved at post-test. However, there was no significant interaction between time and condition, $F(1,141) = 1.076, p = .301, \eta_p^2 = .008$, which means that the intervention and comparison participants in the pilot study improved at the same rate.

A 2×2 ANOVA with one independent sample (condition: intervention group vs. control group) and one related sample variable (time: pre-test vs. post-test) was conducted with the listening comprehension question scores. The result also suggested a main effect of time, $F(1,142) = 5.530, p = .020, \eta_p^2 = .037$, such that all the participants improved at post-test. However, there was no significant interaction between time and condition, $F(1,142) = .050, p = .823, \eta_p^2 < .001$, which means that the intervention and comparison participants in the pilot study improved at the same rate in this task as well.

Table 6 Mean performance of intervention and comparison groups at pre- and post-tests of the pilot study

Task	Groups	Pre-intervention		Post-intervention	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Free recall	Intervention group	.44	.22	.49	.18
	Control group	.38	.24	.40	.22
Comprehension questions	Intervention group	.57	.26	.52	.23
	Control group	.50	.26	.45	.23
Average of free recall and comprehension questions	Intervention group	.49	.23	.51	.19
	Control group	.44	.24	.43	.20

In summary, the result of 2×2 ANOVA suggested that the intervention did not make a significant difference to intervention groups. According to the findings of the pilot study, it was hypothesised that the sequence of strategy presentation might be a cause contributing to the lack of clear efficiency of the intervention. Therefore, changes were made to the sequence of strategies taught and a further version of the intervention developed. In the pilot study, the lexical segmentation strategy, a bottom-up strategy, was placed at the beginning of the

intervention. However, the participants in the pilot study struggled with modelling and practising this cluster of strategies. It was hypothesised that even though the lexical segmentation strategies should be able to facilitate perceptual information processing, the fact that these strategies were new to students and no similarities can be found in their native language made the strategies a lot more complex. The difficulty of strategy use could consequently cause the level of self-efficacy to decrease in a similar way to Harris' findings that the motivation of participants in her study decreased when presented with difficult strategies (Harris, 2007). Harris also found that learners reported strategies to have different levels of difficulty and the strategy sequence may be related to effectiveness of strategies. In the present study, the participants found prediction-verification, top-down strategies, more accessible in the pilot study. For these reasons, prediction – verification strategies were introduced before lexical segmentation strategies in order to create more positive attitudes towards listening strategies for them. The changes made to the sequence are summarised below.

Table 7 Differences in strategy arrangement in pilot and main studies

Pilot study	Main study
<i>Lexical segmentation strategies</i>	<i>Prediction - verification</i>
<i>Prediction – verification</i>	<i>Lexical segmentation strategies</i>
Planning – monitoring – evaluating	Planning – monitoring - evaluating
Listening for gist	Listening for gist
Listening for detailed information	Listening for detailed information
Inferencing	Inferencing

3.8 Data collection procedures in main study

This study aims to explore the relationship between level of self-efficacy and listening comprehension performance, as well as the effect of listening strategy instruction on English learners in Thailand. In order to do so, a listening task, a questionnaire and stimulated recall protocols were implemented in the study. The listening task yielded information about the participants' listening performance and also functioned as a stimulus for the participants to

think about how they go about listening to English when they completed the questionnaire. The questionnaire was intended to elicit the level of self-efficacy, strategy use and also cultural aspects which may be related to the level of self-efficacy. These quantitative procedures were followed by stimulated recall sessions. Data collection for both quantitative and qualitative data occurred twice, at the beginning and at the end of the study. The section below explains the procedures.

3.8.1 Quantitative data collection procedures

The process of quantitative data collection took approximately one hour and ten minutes to complete. The pre-test quantitative data collection was conducted at the second session of the class during class time. The post-test quantitative data collection was conducted at the last session of the semester during class time.

3.8.1.1 Listening task data collection

At pre-test, the participants were asked to perform a listening comprehension task about university life. The task consists of two parts; free-recall and listening comprehension questions. They were asked to write their answers on a given answer sheet and blank papers were also distributed for note taking. The listening texts as well as instructions and pauses had been recorded in one single file so that all groups of participants were given same amount of time to prepare, listen and complete the task. Before the task began, the researcher emphasized to the participants that the task was not a test and had no consequence for their academic results. They were asked to do the best they could but did not have to strain themselves. A sound test was done to ensure that the participants could hear clearly and the volume was at the right level.

The post-test listening task was administered in a similar manner to the pre-test right after the intervention was completed. The difference was that the participants were more familiar with the procedure and, consequently, they required less oral explanation from the researcher.

3.8.1.2 Questionnaire data collection

At both pre- and post-tests, the questionnaire was administered right after the listening task to minimize the gap between task and questionnaire as the participants were asked to reflect on their strategy use and beliefs about their own listening capability. Instructions could be found at the beginning of each section and the researcher orally gave the instructions again to make sure that the participants understand what they needed to do. The questionnaire was distributed after the listening task answer sheet was collected to ensure that statements in the questionnaire would not influence strategy use in the listening task.

3.8.2 Qualitative data collection procedures - Stimulated recall protocols

After the quantitative data collection procedures, data were processed to see the levels of participants' listening comprehension and level of self-efficacy. After that, sixteen participants, four from each class, were selected to be invited to the recall interviews based on their level of self-efficacy. The participants with highest, lowest and medium level of self-efficacy in the groups were invited to the data collection. The pre-test interviews were conducted during the first week of the semester and not more than two weeks after the data collection and the post-test interviews were also conducted within one or two weeks after data collection in order to minimise the effect of a time gap. In addition, the pre-test interviews were scheduled before the listening strategy instruction started to avoid the influence of the instruction on the stimulated recall. This was possible as the researcher also taught speaking lessons so speaking was taught until the stimulated recall interviews were completed.

As mentioned, the stimulated recall protocols were slightly different at pre-test from the post-test. The pre-test began with questions about the participants' language learning experience and attitudes. Then, the researcher showed the participants their own listening task answer sheet, note paper and the questionnaire. They had a moment to look at them and, when they were ready, the audio text was played. Before the texts were played, they were given clear instructions that they could pause whenever they wanted to verbalise what went in their mind while listening to that particular part of listening text. The instructions were given by reading out from a written script to retain consistency as slight changes in wording may have an effect on how the participants understand what the protocols required of them (Gass & Mackey, 2000). During the interview, the participants were assured that they were not being asked to do something that they felt difficult and did not wish to do and if they had trouble verbalising, the researcher assisted them with care not to lead the participants. As the researcher was also their class teacher, it was important to keep the atmosphere of the interview relaxed to reduce the researcher's sense of authority which the participants may not dare to challenge (Gass & Mackey, 2000). The different roles of the researcher in the classroom and during the interview session were clearly explained to the participants. In an attempt to emphasise the point, the researcher also dressed in semi-casual clothes which students would not see in class, in order to reduce the sense of authority that came with formal attire and to convey the different roles the researcher was taking.

The audio texts which were used as stimulus were the original text without repetition and silent gaps, which were deleted due to excessive length of the original. The texts were played on a computer to give the participants freedom to pause, go back or go forward as many times and in any way they wanted. The participants were given the computer mouse for full control of the computer program. The researcher also demonstrated how the recall might be performed in order to avoid misinterpretation of the protocol. In addition, in order to retain confidentiality,

the participants were asked to provide a pseudonym by which they preferred to be referred. They, then, were referred to by that pseudonym throughout the study.

3.8.3 Intervention procedures

The intervention was implemented after the pre-test quantitative data collection and lasted over the course of fourteen weeks. The listening strategy lessons were taught every other week, alternating with the speaking lessons. Only two assigned groups were given listening strategy instruction while the comparison groups were given regular foundation course 2 and 3 listening lessons. Both groups were informed that they were in a study but they were not informed which other classes were also in the study. Moreover, they were not informed whether they were in the intervention or the comparison group in order to prevent the Hawthorne effect. However, there is a possibility that the comparison group participants may think that they were given the intervention due to the difference between teaching methods and contents in the university level which may differ from the lessons they had experienced.

3.9 Data analysis procedures

The data analyses were separated between quantitative and qualitative data. For quantitative data analysis, many statistical procedures were employed to answer all three research questions. The qualitative data which were obtained through the stimulated-recall protocols, were processed and analysed to examine the frequency of listening strategies occurrence and the manner of strategy use.

3.9.1 Quantitative data analysis

Before quantitative data preparation and analysis took place, all participants were given pseudonyms in the form of number ID; the groups were denoted through initials (for example

higher-level proficiency intervention group became HLI). Numbers were written on the answer sheet, questionnaire and notepapers. All non-numerical data required for statistical analysis were coded.

3.9.1.1 Data preparation and marking

There are two parts of quantitative data deriving from the listening task and the adapted MALQ questionnaire. The preparation of data was done separately according to their characteristics.

Listening task data preparation

After the listening task data collection, the free-recall listening task was scored by using a rubric with performance bands and the comprehension questions were scored using the answer keys with suggested answers. In all tasks, despite the instruction to give answers in Thai, some participants still incorporated some English words into their responses. Those English words were considered case by case according to whether they seemed to have been used out of convenience in writing or lack of comprehension.

For the free-recall task, seven performance bands were used (see Table 8) and applied to participants' performance on each passage. Bands ranged from 0 (no comprehension) to 6 (very high level of comprehension). The bands were constructed in terms of what participants could and could not perform or understand. In addition, an overall 'impression' description was given for groups of bands (see Table 8). The main points in the listening texts were also listed to be used as a guidance for scoring (see Appendix D). Overall performance on the listening tasks was calculated by combining the obtained bands for all four passages and the combined score could range from 0 to 24.

Table 8 Free-recall task band description for scoring

Band	Band description	General impression
0	Has no recognisable responses Does not show any sign of comprehension	Overall, these 3 levels will look like incoherent bits and pieces put together. The participants may write in Q&A format.
1	Is able to show understanding of a few isolated words Shows very little understanding in any part of the text Does not show ability to identify details in the dialogue Does not show ability to follow the change in the direction of the dialogue and speakers' opinion or information	
2	Is able to recognise isolated words and some basic sentences Shows very little understanding of the gist Shows very little ability to identify details Does not show ability to follow the change in the direction of the dialogue and speakers' opinion or information	
3	Is able to recognise some sentences and some words Shows some understanding of the gist Shows some ability to identify details Shows slight ability to follow the change in the direction of the dialogue and speakers' opinion or information	
4	Is able to recognise half of the sentences and some words Shows fair understanding of the gist but some gist is still missing Shows fair ability to identify details but some important details are still missing Shows fair ability to follow the change in the direction of the dialogue and speakers' opinion or information	Overall, these 3 levels will appear very coherent. The participants may still write in Q&A format but there is more connection in the content of the dialogue.
5	Is able to recognise most sentences but still missing some sentences Shows fairly high understanding of the gist with little information missing Shows rather high ability to identify details but some minor details are still missing Shows high ability to follow the change in the direction of the dialogue and speakers' opinion or information	
6	Is able to recognise almost every, if not all, sentences. Some words could be missing but does not affect understanding of gist or details Shows fully understanding of the gist Shows full ability to identify details (some very minor details missing accepted) Shows high ability to follow the change in the direction of the dialogue and speakers' opinion or information	

A mark scheme was drawn up for the short-answer listening comprehension questions, giving clear guidance as to what would be accepted for different marks (Note: the guidance is not included as it is mainly in Thai). As the questions were dichotomous, correct answers were

given one point while incorrect answers got zero. The maximum score the participants could achieve in this task was eight.

All marking and scoring was performed by the researcher in order to retain consistency. Also, rater bias was taken into account and the answers were also marked and scored by another teacher in the language institute who had taught the course before. After that, the two raters' scores were compared and an inter-rater reliability value calculated at .91 for the free-recall task and .72 for the listening comprehension question task. Differences in ratings were resolved through discussion.

Questionnaire data preparation

As mentioned earlier, the questionnaire consisted of three parts; the adapted Metacognitive Awareness Listening questionnaire (MALQ), the open-ended questions to elicit factors to which the participants attributed their success and failure, and self-efficacy scores for specific strategies. They were designed to elicit different variables and each of them utilised different types of scales and responses, hence they were processed separately.

The adapted MALQ data was already in number format and could immediately be entered into IBM SPSS. Some items in the MALQ were questions referring to negative strategic behaviour or attitudes. Therefore, the responses from those items were reversed to facilitate further calculation. The distribution of the data was examined and descriptive statistic calculated. The Cronbach's alphas of the total adapted MALQ were .806 at pre-test and .775 at post-test. As the adapted MALQ data consists of many components, the items must be grouped in order to see how strategy use might have changed. The grouping was based on the groups from the original MALQ groupings as presented in Vandergrift et al. (2006). There are five strategy groups from the original MALQ and two strategy groups from the added items as seen in Table

9. The Cronbach's alphas of each strategy group calculated from the data from the present study, however, were not very high and were very low for some groups. The low Cronbach's alphas could be affected by the low number of items in each group, low number of participants and the homogeneity of the participants' responses to the scale items (Pike & Hudson, n.d.; Tavakol & Dennick, 2011). As the groups from the original MALQ (Vandergrift et al., 2006) were generated from performing an Exploratory Factor Analysis followed by a Confirmatory Factor Analysis on the data which had collected from more than one thousand participants from various backgrounds, the Cronbach's alphas the groups from the original MALQ were high. It was therefore decided to retain the original strategy groups for the analysis, but the lower alphas obtained for the data from the present study should be borne in mind as a possible limitation. Furthermore, 'Mental translation', which had the lowest Cronbach's alpha, is an important grouping in studies conducted by Vandergrift and colleagues, and the desire to allow some comparability with that body of work was another reason why the strategy grouping was retained.

Table 9 Cronbach's alphas of the adapted MALQ strategy groups

	Factor group	MALQ items	Cronbach's alpha	
			Pre-test	Post-test
Original MALQ	Directed attention	2, 6, 12,16	.562	.684
	Mental translation	4, 11, 18	.337	.155
	Planning & evaluation	1, 10, 14, 20, 21	.637	.657
	Problem solving	5, 7, 9, 13, 17, 19	.673	.755
	Person knowledge	3, 8, 15	.161	-.058
Added items	Attitude and belief	22, 23, 24, 32, 33	.670	.616
	Attribution to success and failure	25, 26, 27, 28, 29, 30, 31	.639	.578
All items			.806	.775

The open-ended items in the second part of the questionnaire were intended to elicit participants' attributions for their perceived successes or failures. The responses needed to be classified using a set of codes, developed by looking at all pre-test and post-test responses and creating categories to cover all responses (see Appendix E). The categories were classified into two groups; internal and external factors since, theoretically, people who attribute their success and failure to internal, non-static and controllable factors tend to have higher sense of self-efficacy and vice versa (Schunk et al., 2014). The attribution responses were coded by the researcher and a number of randomised items were sent to another researcher for independent coding and calculation of inter-rater reliability.

The last part of the questionnaire elicited levels of self-efficacy for the seven different strategies which were taught to the intervention groups. As the participants were asked to rate their self-efficacy as a percentage, the data could be entered into SPSS without further modification. The seven different types of self-efficacy were also combined into an overall level of self-efficacy in listening comprehension. As before, normality tests were undertaken and histograms and descriptive statistics produced.

3.9.1.2 Quantitative analyses according to research questions

Before analyses were selected, some statistical procedures were performed in order to see data distribution and whether the data meet assumptions for the selected statistical data analyses. Then, the statistical analyses were selected with regards to the research questions. More details of the analyses according to each research question can also be found in Chapter 4.

Descriptive statistics and test of normality

For each analysis undertaken, care was taken to ensure that the assumptions for each test were met. First, descriptive statistics were obtained including minimum, maximum, mean, skewness and kurtosis. The mean of each type of score was used to roughly observe data

distribution, whether there was any difference between conditions and proficiency level group.

Tests of normality were also conducted and a histogram created for each score set. As the data were collected from two main groups and the post-test data from each group were anticipated to be different, distribution of this data set were anticipated to have dual peaks, which consequently may cause non-normal data distribution. Therefore, in order to reduce the effect of dual peaks, a predicted value and standardised value of the listening test scores and self-efficacy average score were generated using ANCOVA with ONET score, the university entrance exam English score, and condition groups as covariance. Then, the standardised values were used to for test of normality.

Tests of normality were performed in order to select the appropriate data analysis. As further steps required analyses of the entire sample as well as in condition groups, the tests of normality were performed twice. The first test was performed with all participants as the dependent variable. The pre-test self-efficacy scores and post-test free-recall scores were the only two variables with normal distribution of data ($p > .05$ for Kolmogorov-Smirnov and Shapiro-Wilk) while post-test-self-efficacy scores, pre-test free-recall scores, pre-test listening comprehension question scores and post-test listening comprehension question scores had non-normal distribution of data ($p < .05$ for Kolmogorov-Smirnov and Shapiro-Wilk).

The other test of normality was performed with experimental condition as independent variable and both condition groups as dependent variables. The test of pre-test and post-test self-efficacy scores showed that all self-efficacy scores of all groups at both test had normal distribution of data ($p > .05$ for Kolmogorov-Smirnov and Shapiro-Wilk), except for post-test self-efficacy scores of intervention group which had non-normal distribution of data ($p < .05$ for Kolmogorov-Smirnov only). For free-recall task and listening comprehension question task

scores, only post-test free-recall scores of intervention group had normal distribution of data ($p > .05$ for Kolmogorov-Smirnov and Shapiro-Wilk). The rest of the variables had non-normal distribution of data ($p < .05$ for Kolmogorov-Smirnov and Shapiro-Wilk).

From these results, it seems that the assumption of normality was violated. Some non-parametric statistical analyses such as the Spearman's correlation coefficient or the Mann-Whitney test, were used. However, for the comparison of the effect of strategy instruction, the parametric test ANOVA was still selected, despite the violation of normality assumption, based on the principle of Central Limit Theorem.

Central Limit Theorem refers to the increasing of tendency for the data distribution to be normally distributed as the number of sample increases (A. Field, 2013; Woods, Fletcher, & Hughes, 1986). If the sample increase, the mean could still remain at the same level while the standard deviation might decrease according to the increasing number of participants. The number of participants in this study is 161. The sample size is not very small but it is a sample of a much larger population. The size of sample can affect the distribution of data and is possible to be the underlying cause of non-normal data distribution (A. Field, 2013; Woods et al., 1986). The data distribution of some scores did not meet assumption of normality but, the histograms of the data distribution indicated a single mode, roughly symmetrical and not severely skewed histograms. Therefore, based on the Central Limit Theorem, it was assumed that the sample in the present study was representative of a larger population and the data distribution would be normal if there were more participants (Woods et al., 1986).

Furthermore, for all the analyses using ANOVA, the assumption of homogeneity was tested using the Levene's Test of Equality of Error Variance, which tests the null hypothesis that the variance of the participants are similar (A. Field, 2013). The results suggested that the assumption of homogeneity had not been violated and both the intervention and comparison

groups' variances were similar. Similarly, the assumption of independence was not violated as the data were collected individually from each the participants. The data and result generated from these data should be interpreted with this information in mind.

Analyses for research question 1: What is the nature of self-efficacy in listening comprehension among Thai EFL learners?

In order to explore the nature of the self-efficacy for listening comprehension among Thai EFL learners, the level of self-efficacy at pre-test, its relationship with the learners' levels of listening comprehension and the level of adaptive attribution to success and failure, which may contribute to the level of self-efficacy, were investigated.

The levels of self-efficacy were explored through descriptive statistics including minimum, maximum, mean and standard deviation. The relationship between the level of self-efficacy and the level of listening comprehension was examined through Spearman's correlation. As mentioned earlier, according to tests of normality results, some variables had non-normal data distribution. Therefore, Spearman's correlation coefficient were selected as it is a non-parametric ranked-based statistical analysis and, therefore, could minimize the effect of assumption of normality violation (A. Field, 2013). The correlational analysis was performed on the listening task scores (free-recall task and listening comprehension question task), along with the combined self-efficacy score. The analyses for the relationship between the self-efficacy and the free-recall task score and between the self-efficacy and the listening comprehension task score were performed separately. The correlation coefficient of all the participants, the intervention group and the comparison group were also produced separately.

The adaptive attribution levels were derived from the coded attribution of success and failure. As mentioned in 3.9.1.1, the open-ended answers were classified using codes. Each participant's attributions for success and failure were rated on the attributional scale according

to these codes. The attributional scale ranged from one (most maladaptive) to six (most adaptive) (see Appendix F for the scale). The scale was developed with an expert, who also rated 10 percent of the data to compare for inter-rater reliability. The ratings of the researcher and the expert were in agreement, with differences less than one scale point, by 69 percent of attribution of success at pre-test, 79 percent of attribution to failure at pre-test, 72 percent attribution of success at post-test, and 76 percent attribution of failure at post-test. The disagreements of more than one scale point were discussed and ratings were adjusted according to the agreement with the expert. Next, the adaptive attributional scores for success and failure were processed for descriptive statistics, including minimum, maximum, mean and standard deviation.

Analyses for research question 2: What is the effect of strategy instruction on self-efficacy, English listening comprehension and their reported use of English language listening strategies?

This research questions consists of three sub-research questions. The effect of listening strategy instruction on the self-efficacy on levels of listening comprehension and on reported language learner strategy use were investigated separately as they encompass different aspects of language learning.

Effect on Self-efficacy

The effect of listening strategy instruction on the language learners' levels of self-efficacy was investigated firstly through correlational analysis. Similar to the first research question, Spearman's correlation coefficient was used to calculate the relationship between the self-efficacy and the listening comprehension of all the participants, the intervention group and the

comparison group at pre-test and post-test. The comparison of coefficient would show the degree of correspondence between the level of self-efficacy and the learners' level of comprehension. It is to be noted that a high correlation between the two variable is preferable but, according to Bandura (2001), a healthy sense of self-efficacy which will regulate learners to attain the goal is slightly higher than their actual performance. Therefore, if the level of self-efficacy is higher than their actual ability, the level of correlation could be slightly lower.

Possible changes in the participants' level of self-efficacy were then explored by performing a 2×2 ANOVA using SPSS Generalized Linear Model (GLM). A 2×2 ANOVA with one independent sample variable (condition group: intervention vs. comparison) and one related sample variable (time: pre-test vs. post-test) was conducted. If the time×group interaction was significant, the Bonferroni correction was used in order to reduce the accumulated error (A. Field, 2013).

For the adaptive attributional scores, as mentioned in 3.9.1.1, the attribution for success and failure open-ended answers were classified using codes (as described in 3.9.1.1) and transformed into adaptive attributional scores (as described in the first research question data analyses). Non-parametric tests were chosen as the adaptive attributional scores were rated on a scale. The Mann-Whitney U test was used to compare the levels of adaptive attribution for success and failure of the intervention and the comparison groups at each time of the data collection. The Wilcoxon Signed Ranked test was used in order to examine how the levels of adaptive attribution of participants in each condition (intervention or comparison) changed between the pre-test and the post-test.

Listening comprehension

For the second sub-research question in Research question 2, in order to observe any changes between the pre-test and post-test listening task scores and whether the changes differed between the intervention group and the comparison group, a 2×2 ANOVA was employed using SPSS GLM with one independent sample variable (condition group: intervention vs. comparison) and one related sample variable (time: pre-test vs. post-test). The analysis was performed on the free-recall task scores and the listening comprehension question task scores separately as they elicited different constructs and were marked with different types of scales. Another similar 2×2 ANOVA was also performed with the level of self-efficacy as a covariate. The self-efficacy score was introduced into the comparison of the listening comprehension scores because the self-efficacy and the listening comprehension score correlated. The correlation suggested that a higher level of self-efficacy may contribute to the increase of the listening comprehension score, and the level of self-efficacy at pre-test between groups were not at the same level. Therefore, the self-efficacy score was incorporated to reduce the error that might be caused by the non-equal levels of self-efficacy. The presence of a covariate does not only reduce error causing by unexplained variance, but also decrease biases which may cause by unmeasured confounding variables (A. Field, 2013).

Strategy use

For the third sub-question of Research question 2, the analyses to elicit the learners' reported use of strategy consisted of two parts. The first part of the analyses used a 2×2 ANOVA and the second part of the analyses used Hierarchical Cluster Analysis. First, the 2×2 ANOVA using SPSS GLM with one independent sample variable (condition group: intervention vs.

comparison) and one related sample variable (time: pre-test vs. post-test) was performed with the adapted MALQ responses according to strategy group, as mentioned in 3.9.1.1.

Additionally, the Hierarchical Cluster Analysis was also used to classify participants according to their patterns of strategy use. Cluster analysis is a multivariate exploratory and descriptive procedure which classifies homogeneous variables or cases into small clusters by observing dissimilarities or distance between the variables (Staples & Biber, 2015; Woods et al., 1986). Cluster analysis is useful for grouping cases which have many variances together and it is beneficial for research into language learner strategies as it provides information on the manner of the learners' strategy use, beyond using strategy to determine good and bad learners (Staples & Biber, 2015; Yamamori, Isoda, Hiromori, & Oxford, 2003). In the present study, the participants were clustered using Ward's method to reduce potential error from an increase in overall sum of the squared within-cluster distances and Minkowski interval was selected because the data were not normally distributed (Kaufman & Rousseeuw, 2009). The result of the cluster analysis was displayed in a tree-like dendrogram. The clusters were decided using the dendrogram as a guide. The characteristics of the participants in each cluster group were also explored.

Analyses for research question 3: Does the strategy instruction benefit learners of different levels of proficiency in a similar manner?

The benefit of the listening strategy instruction on the level of self-efficacy and listening comprehension of different levels of learners was examined. A 2×2×2 ANOVA using SPSS General Linear Model (GLM) with two independent sample variables (group: intervention vs. comparison, proficiency: higher vs. lower) and one related sample variable (time: pre-test vs. post-test) was conducted. The analyses were performed separately for the self-efficacy scores, the free-recall listening task scores and the listening comprehension task scores. Since the SPSS

does not provide an option to add two independent sample variables, the syntax used for data analyses were written by the researcher and checked by an expert before the analyses were performed.

3.9.2 Qualitative data analysis

The qualitative data were gathered by using stimulated recall protocol, in which the participants were asked to verbalise what went through their minds while completing the listening tasks, including their thoughts, feelings and strategy use. They were given their unmarked listening task answer sheet to look at and the same listening passages were played again. The participants were given the freedom to pause to describe at any time. After the data collection, the interviews from the protocols were transcribed and coded for strategies which they used during completion of listening tasks by using the taxonomy as outlined in 3.9.2.2. After the coding, profile of strategy use was created for each participant individually and the all the strategies reported by all participants in the qualitative phase were added to the strategy grid to compare the differences in the participants' strategy use when dealing with the same part of the listening text.

3.9.2.1 Interview transcription

There were overall 28 interviews from the stimulated-recall protocol sessions: 14 from pre-test and 14 from post-test. The recall interview recordings were transcribed by the researcher as the researcher who was present at phases of data collection might have extra insight into the participants' verbalisation (Gass & Mackey, 2000). The stimulated-recall protocol sessions were conducted in Thai and the interviews were transcribed in Thai, which is the participants' and the researchers' first language. The use of the native language made it possible for the participants to fully convey their thoughts process. As the thought processes including their

feelings and strategy use were the focus of the data analyses, the transcription was done verbatim, with all the pauses, hesitation, correction and repetition included in the transcription. The transcription was done using the MS Word 2013 program. An example of a transcription can be found in Appendix E.

3.9.2.2 Strategy coding and taxonomy

A taxonomy was constructed by combining codes and definitions from previous literature (Santos, Graham, & Vandergrift, 2008; Young, 1996). The taxonomy consists of two types of strategies, metacognitive and cognitive strategies (see Appendix H). The taxonomy was piloted on a transcript, which was translated into English and coded by the researcher and an expert, to ensure the reliability of coding. The expert agreed with 78 percent of the researchers' coding and the disagreements were discussed for resolution. After the pilot coding, some codes were added to the taxonomy in order to cover the entire range of strategies used by the participants in this study.

The coding process was performed in Microsoft Word using the comment feature and consisted of two steps. During the stimulated-recall protocol, the participants would stop from time to time while listening to reflect on their strategy use or how they came up with the responses and sometimes they did not stop until the end of the dialogue. Each time they stopped to recall, there could be more than one strategy present. Therefore, the first step for coding was to break the transcript into the smallest possible segments. At times these segments included one strategy, at others clusters of strategies occurred. Then, the taxonomy was applied to each segment. After the data were coded, the researcher used a check-recheck procedure to ensure the reliability of coding. The coded transcriptions were revised after they had been left for a certain period of time in order to see whether the researcher would agree with the previous

coding. Some changes were made after the re-check but in the majority of cases the original coding was found to hold good.

3.9.2.3 Qualitative data analyses

Although the data from the Stimulated Recall were qualitative, some quantification was also carried out. After the initial coding, the coded strategies were analysed to explore any differences in the frequency and the manner of strategy use at pre-test and post-test between the intervention and the comparison groups. The analyses were facilitated by the use of individual strategy profile sheets and the strategy grid sheet. After that, the frequencies of all strategy use were tallied and the main strategies which were included in the strategy instruction were observed for their co-occurrence with other strategies in order to examine the patterns of selecting and discarding strategies from the strategy clusters the participants used at pre- and post-tests.

Individual profile

The listening passages were separated into sections according to the main points of the listening texts. As the strategies were coded on the Microsoft Word program, it was rather difficult to observe the strategy occurrence in relation to these sections of the listening passages. Therefore, the strategies were transferred on to the individual profile sheets (as seen in Appendix I), where the strategies or clusters of strategies were placed next to the parts of the listening text that they referred to.

Strategy grid

The strategy grid was created in order to allow the comparison between patterns of strategy use of all fourteen participants. The strategies from each participant's individual profile were transferred onto the strategy grid (see Appendix J) which were separated into listening passage

sections. The grid also contained a section s for the strategies used before the listening text began and for comments made after the listening passage had finished.

Analyses of strategy use

First, all of the strategies that appeared in the coding of all fourteen participants were counted by using the MS Word search function to facilitate the tally. The frequency of strategies reported by the intervention group participants and the comparison group participants were presented separately. The instances of strategy use which led to inaccurate comprehension were also counted and presented.

Then, the focus of the analysis turned to the main strategies which were used during the intervention in order to investigate whether the strategy instruction had had an effect on the manner of strategy use and whether there was any difference between the manner of strategy use found in the intervention and the comparison group participants. These strategies were examined for their co-occurrence with other strategies. The strategies which each participant used in combination with the main strategies were noted and compared.

3.10 Ethical issues

Ethical issues were considered from many perspectives. Many approaches were implemented in an effort to ensure ethical research conduct in this study. First, approval from the Institute of Education Research Ethics committee was obtained before the study began. The procedures in every phase, pre-test, intervention and post-test, were reviewed by the committee. The listening task procedure, the questionnaire, and stimulated-recall procedures were also scrutinised for any possible ethical issues there might be. Changes were made according to comments given by the committee to ensure the highest ethical conduct possible.

Before the fieldwork began, consent to conduct a research study in the institute in Thailand was obtained from the director before any procedure was undertaken. Before data collection started, consent was obtained from the participants. The broad objectives of the study, to explore listening comprehension, participants' roles and my roles in the study and what was required through participation were explained in Thai, both orally and in information sheets. The explanation also included the nature of the listening tasks and questionnaire. However, no anticipated result, hypothesis or the fact that students were in the intervention or comparison groups were shared since it might affect the participants' attitudes and behaviours. The researcher also stressed that the participants could withdraw from the study any time if they did not wish to continue and that their participation or non-participation would not affect their university grades. Finally, measures to ensure the participants' anonymity and data protection measures were explained. All participants provided signed consent forms (see Appendix K for ethics documents).

During the intervention, the strategy instruction was constructed in accordance to the foundation course 2 and 3 curriculums to ensure that the participants would be able to meet the courses' objectives. Once the data had been collected, the participants were given pseudonyms in order to preserve their identities. The participants in the quantitative data collection were given a number to use instead of names and the participants in stimulated-recall protocols chose their own pseudonyms. The stimulated-recall protocol sessions were also conducted in a private office outside of class time.

3.11 Summary

This chapter discusses the methodology of the present study. First, the design of the study, the context of the study and participants and sampling were explained. Then, all the materials and procedures utilised and conducted in the research study, quantitative instruments, qualitative

data collection procedures and the strategy instruction in the intervention, were described in detail. The pilot study and changes to the main study according to the result of the pilot study were also reported. The data collection and data analysis procedures for the quantitative and qualitative data were explained. Finally, the procedures followed to ensure ethical conduct in the study were outlined.

Chapter 4 Quantitative data analysis and results

4.1 Introduction

This study aims to investigate the effect of strategy instruction on Thai learners' self-efficacy, awareness of strategy use and listening comprehension. This chapter reports the results of quantitative analyses which were utilised to answer the research questions. To answer each research question, more than one statistical analysis was employed in order to portray the clearest picture of the phenomenon.

4.2 Descriptive statistics

Descriptive statistics were generated in order to assess data distribution as well as to give an overview of the self-efficacy scores and the listening task (free-recall and listening comprehension). Table 10 shows the mean scores of reported self-efficacy level at pre-test and post-test. It is also to be highlighted that the self-efficacy score used is an averaged score derived from responses to the seven items in part three of the questionnaire. The scores were in percentages, ranging from 0-100.

Table 10 Self-efficacy score descriptive statistics

Condition	Pre-test				Post-test			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Intervention	10.00	90.00	49.23	12.788	27.14	85.71	54.72	11.566
Comparison	15.71	72.86	43.23	13.250	15.71	70.00	47.74	12.856
All participants	10.00	90.00	46.56	13.286	15.71	85.71	51.86	12.547

These results indicate that the levels of self-efficacy were slightly increased at post-test regardless of condition. When all participants were combined, the mean self-efficacy score at post-test was higher than pre-test by 5.26 percent. The gain score of participants in the

intervention group is 5.49 while the gain score of participants in the comparison group is 4.51. From this result, it can be seen that there was not a large difference between pre-test and post-test self-efficacy scores.

Table 11 shows descriptive statistics for the free-recall task at pre-test and post-test. It is to be noted that the free-recall scores used in this and further analyses are accumulated scores from all four passages. As each passage score can range from 0 to 6, the total score ranges from 0 to the maximum of 24.

Table 11 Free-recall task score descriptive statistics

Condition	Pre-test				Post-test			
	Min	Max	Mean	<i>SD</i>	Min	Max	Mean	<i>SD</i>
Intervention	2	19	9.35	3.937	3	22	11.59	4.195
Comparison	3	20	8.53	3.688	2	22	8.95	4.029
All participants	2	20	9.00	3.84	2	22	10.50	4.32

From these descriptive statistics, it can be seen that the means of free-recall task performance at post-test were slightly higher than the pre-test regardless of the condition. The difference between pre-test and post-test mean scores with the two groups combined is 1.5. When the two conditions are separated out, the means suggest that the intervention group performance increased more than the comparison group. For the intervention group, the difference between pre-test and post-test mean scores was 2.24 while the difference between pre-test and post-test mean scores of the comparison group was .42. This different level of increased performance should be noted as it may influence the correlations between level of performance and level of self-efficacy in the next section.

Table 12 presents descriptive statistics for the pre-test and post-test listening comprehension task scores across both conditions. The comprehension question scores used for the analyses were the aggregate score of all questions with a minimum of 0 and maximum of 8.

Table 12 Comprehension question task score descriptive statistics

Condition	Pre-test				Post-test			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Intervention	1	8	4.11	1.649	0	8	5.72	1.443
Comparison	0	8	3.68	1.818	1	8	4.79	1.509
All participants	0	8	3.93	1.731	0	8	5.34	1.535

Similar to the free-recall task, the mean scores at post-test are higher than the pre-test scores across conditions. For all participants, the mean score at post-test was higher than the post-test by 1.41. The pre-post test gain score for the participants in intervention group was 1.61 while the gain score for the comparison group participants it was 1.11.

In summary, the descriptive statistics shows that all the participants have gained higher level of listening performance in both free recall and comprehension question tasks, as well as a higher level of self-efficacy belief. The intervention group seems to have improved their listening performance more than the comparison groups, especially for the free recall measure. However, the groups showed more equivalent gains in levels of self-efficacy.

4.3 Analyses and results relating to research questions

4.3.1 What is the nature of self-efficacy in listening comprehension among Thai EFL learners?

The nature of Thai EFL language learners' self-efficacy in listening comprehension was explored by examining the relationship between their perceived self-efficacy and their performance in listening comprehension. The manner in which the learners attributed their success and failure was also studied in order to find out how adaptive their attributions were. The relationship was investigated using Spearman's correlation and the learners' level of adaptive attribution were analysed by using non-parametric statistical procedures.

4.3.1.1 What is the relationship between self-efficacy and EFL listening performance?

Correlations were calculated to explore relationships between the level of self-efficacy and success in EFL listening performance (see Table 13). Data were not normally distributed; thus, Spearman's correlation, which is a non-parametric, ranked based test, was selected. The self-efficacy scores were separately correlated with the free-recall task score and listening comprehension question task score and correlations were calculated for all participants, and for the intervention and comparison groups separately.

There were positive correlations between level of self-efficacy and listening comprehension performance in both tasks. As can be seen from Table 13, for all participants combined, the strength of the relationship between self-efficacy and free-recall slightly decreased at post-test. On the contrary, the strength of the relationship between self-efficacy and listening comprehension question task scores slightly increased at post-test. The comparison group

Table 13 Spearman's correlation coefficients between scores on self-efficacy and the two listening tasks

Condition	Free recall task				Listening comprehension question task			
	Pre-test		Post-test		Pre-test		Post-test	
	r	sig.	r	sig.	r	sig.	r	sig.
Intervention	.436**	.000	.289*	.011	.284*	.013	.224*	.048
Comparison	.461**	.000	.420**	.002	.347**	.008	.390**	.003
All participants	.485**	.000	.387**	.000	.337**	.000	.344**	.000

**Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

also showed this pattern. However, for the intervention group, there was a trend of all coefficients decreasing at post-test in both tasks. The decrease, especially in the free-recall task, is due to the fact that while the group's listening performance improves at post-test, their self-efficacy levels did not change very much from pre-test levels. This fluctuation between level of self-efficacy and listening performance may suggest that though the participants in the

intervention group improved their listening comprehension, the improvement was not accompanied by a corresponding increase in self-efficacy.

4.3.1.2 *What is the learners' level of adaptive attribution to EFL listening performance?*

The nature of self-efficacy concerning English listening comprehension in Thai language learners was further investigated by exploring factors underlying their level of self-efficacy. How learners attribute their success and failure indicates how adaptive they were to changes and, therefore, the extent to which they perceive themselves as being able to comprehend English spoken texts.

The participants were asked to answer two open-ended questions probing their attribution to their success and failure in listening comprehension. The responses were, then, rated on the adaptive-maladaptive scale as seen in 3.9.1.2 in Chapter 3 into adaptive attribution scores. The adaptive attribution scores range from 0, which is the most maladaptive level, to 6, which is the most adaptive level. Analyses of attribution were separated between attributions to success and failure as differences in attributing to these factors were shown in the literature (Carpenter, 2000; Hsieh & Schallert, 2008). Also, it is to be noted that some participants chose to answer only one question out of two as they perceived themselves to be on only one side of the continuum. Descriptive statistics were produced in order to see the overview of adaptive scores with all participants combined and the intervention group and comparison group considered separately.

Table 14 Descriptive statistics of adaptive attribution of success

Condition	Pre-test				Post-test			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Intervention	1	6	3.58	1.913	1	6	4.36	1.679
Comparison	1	6	3.33	1.940	1	6	3.90	1.714
All participants	1	6	3.47	1.918	1	6	4.17	1.699

Table 14 presents the descriptive statistics of the participants' attribution to success. It can be seen from the table that both the intervention and comparison groups showed improvement in their levels of adaptive attribution scores towards their success in listening comprehension at post-test. The intervention group's adaptive attribution score increased by .78 at post-test and the comparison group's score increased by .57 at post-test.

Table 15 Descriptive statistics of adaptive attribution of failure

Condition	Pre-test				Post-test			
	Min	Max	Mean	SD	Min	Max	Mean	SD
Intervention	1	6	2.39	1.469	1	6	3.17	1.784
Comparison	1	6	2.19	1.480	1	6	3.08	1.850
All participants	1	6	2.30	1.472	1	6	3.13	1.804

Table 15 presents the descriptive statistics of the participants' attribution to failure. When comparing to the attribution to success, the overall adaptive attribution scores were lower than those attributed to success. Similar to the attribution to success, descriptive statistics indicated that both groups improved at post-test. The intervention group's adaptive attribution score improved by .78 while the comparison group showed improvement by .89 at post-test.

4.3.2 What is the effect of strategy instruction on self-efficacy, English listening comprehension and the reported use of English language listening strategies?

As this study aims to investigate whether strategy instruction had any effect on Thai learners' self-efficacy, awareness of listening strategies, and English listening comprehension, a variety of statistical analyses were employed to investigate whether the participants who received strategy instruction differed from ones who did not. Statistical methods used for each construct varied according to the nature of each construct.

4.3.2.1 *What is the effect of strategy instruction on self-efficacy?*

In line with our approach to exploring the nature to self-efficacy, the effect of strategy instruction on self-efficacy was investigated by looking at self-efficacy in two ways. We analysed the self-efficacy score and also the adaptive attribution scores for the listening comprehension task. The self-efficacy scores were analysed using 2×2 ANOVA to examine differences in self-efficacy scores before and after instruction and differences between conditions. Non-parametric analyses were used to investigate whether the participants attributed their success and failure differently at post-test.

Self-efficacy score

Means and standard deviations for the self-efficacy score are presented in Table 10 and are replicated in Figure 2 on the next page for ease of reference. A 2×2 ANOVA with one independent samples variable (group: intervention vs. comparison) and one related samples variable (time: pre-test vs. post-test) was conducted. This revealed a main effect of time, such that the level of self-efficacy was higher at post-test than at pre-test, $F(1,121)=29.978, p < .001, \eta_p^2 = .198$; there was also a main effect of group with the intervention group showing higher overall self-efficacy than the comparison group, $F(1,121)=8.793, p = .004, \eta_p^2 = .068$. However, the time by group interaction was not significant, $F(1,121)=1.471, p = .228, \eta_p^2 = .012$.

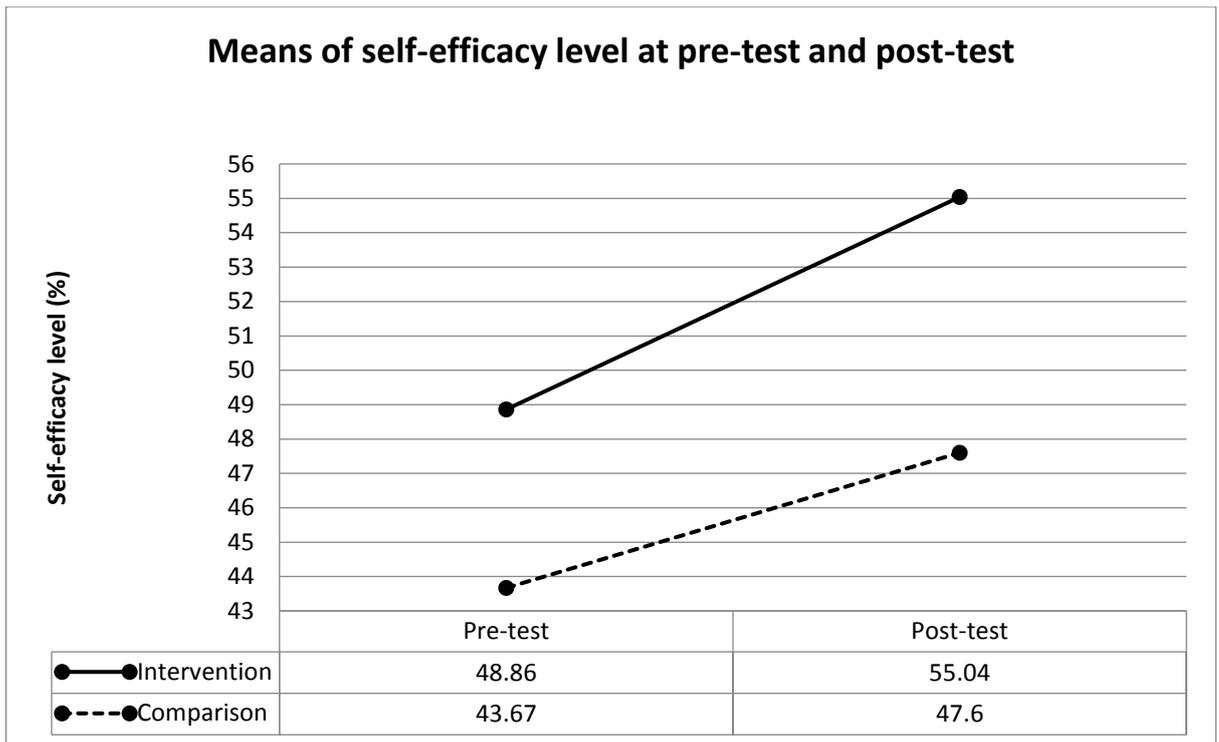


Figure 2 Means of intervention and comparison groups' self-efficacy score

Adaptive attribution scores

The adaptive attribution scores were ordinal in nature and were not normally distributed. Therefore, non-parametric analyses were selected to compare the difference in adaptive attribution scores between the intervention and comparison groups at pre-test and post-test. As mentioned earlier, the analyses were performed separately for attributions for success and attributions to failure. A two-independent samples test, the Mann-Whitney U test, was used to compare groups at pre-test and post-test. In all cases below, 2-tailed statistics are reported.

First, comparisons between the groups at pre-test and post-test were made. For attributions for success, the Mann-Whitney U test suggested no significant difference between the intervention group ($Mdn = 4.00$) and the comparison group ($Mdn = 3.00$) at pre-test, $U = 925.50$, $z = .7$, $p = .485$, $r = -.0734$. Likewise, the test indicated that the levels of adaptive attribution to success

of the intervention group ($Mdn = 5.00$) did not differ from those of the comparison group ($Mdn = 4.00$) at post-test, $U = 973.00$, $z = 1.32$, $p = .186$, $r = -0.125$.

For attributions for failure, the Mann-Whitney U test suggested that the levels of adaptive attribution to failure of the intervention group ($Mdn = 2.00$) and the comparison group ($Mdn = 2.00$) did not differ at pre-test, $U = 1925.50$, $z = -1.06$, $p = .291$, $r = -0.0922$. In the same way, the test indicated that the levels of adaptive attribution to failure of the intervention group ($Mdn = 3.00$) and those of the comparison group ($Mdn = 3.00$) did not differ at post-test, $U = 1747.00$, $z = .28$, $p = .781$, $r = -0.0254$.

Then, the comparison between pre-test and post-test was made separately for each condition using the Wilcoxon Signed Ranked test. For attributions for success, the intervention group's levels of adaptive attribution were significantly different between pre-test ($Mdn = 4.00$) and post-test ($Mdn = 5.00$), $z = 2.06$, $p = .039$, $r = .330$. However, for the comparison group, their levels of adaptive attribution to success between pre-test ($Mdn = 3.00$) and post-test ($Mdn = 4.00$) were not significantly different, $z = 1.13$, $p = .260$, $r = 0.205$. In other words, the intervention group's attribution to success had become more adaptive at post-test while the comparison group had not.

For attributions for failure, the intervention group's levels of adaptive attribution were significantly different between pre-test ($Mdn = 2.00$) and post-test ($Mdn = 3.00$), $z = 2.93$, $p = .003$, $r = 0.369$. This was also true for the comparison group - The pre-test ($Mdn = 2.00$) and post-test ($Mdn = 3.00$), $z = 2.887$, $p = .004$, $r = 0.412$.

4.3.2.2 *What is the effect of strategy instruction on English listening comprehension?*

As described in descriptive statistics in section 4.2, for the free-recall task, the participants' scores at post-test were slightly higher than at pre-test regardless of condition. It is also to be noticed that the intervention group's mean score increased more than that of the comparison group. For listening comprehension question task, the mean scores of the participants in both conditions were also higher at the post-test. Similar to the free-recall task, the intervention group's mean score increased more than the comparison group. From the descriptive statistics, we could estimate that there were some differences in the performance of the intervention and the comparison groups at the end of the data collection period. It is to be explored whether the differences are significant and whether the differences are the effect of strategy instruction by using 2×2 ANOVA. Furthermore, since the level of self-efficacy at pre-test of the intervention group were higher than that of the comparison group and level of self-efficacy may have effect on listening performance, another 2×2 ANOVA was utilized with self-efficacy score as a covariate to control for its effect on the listening performance.

Free-recall

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. This revealed a main effect of time, such that performance was higher at post-test than at pre-test, $F(1,126)=28.381$, $p < .001$, $\eta_p^2 = .184$, there was also a main effect of group with the intervention group outperforming the comparison group, $F(1,126)=6.743$, $p = .011$, $\eta_p^2 = .051$. This was qualified by a significant time×group interaction, $F(1,126)=9.841$, $p = .002$, $\eta_p^2 = .072$. Post-hoc tests (with Bonferroni correction) were conducted to investigate this interaction further. These indicated that group performance did not differ at pre-test, $p = .226$, but did differ at post-test,

$p = .001$. Further, while the comparison group did not show improvement from pre-test to post-test, $p = .155$, the intervention group did, $p < .001$.

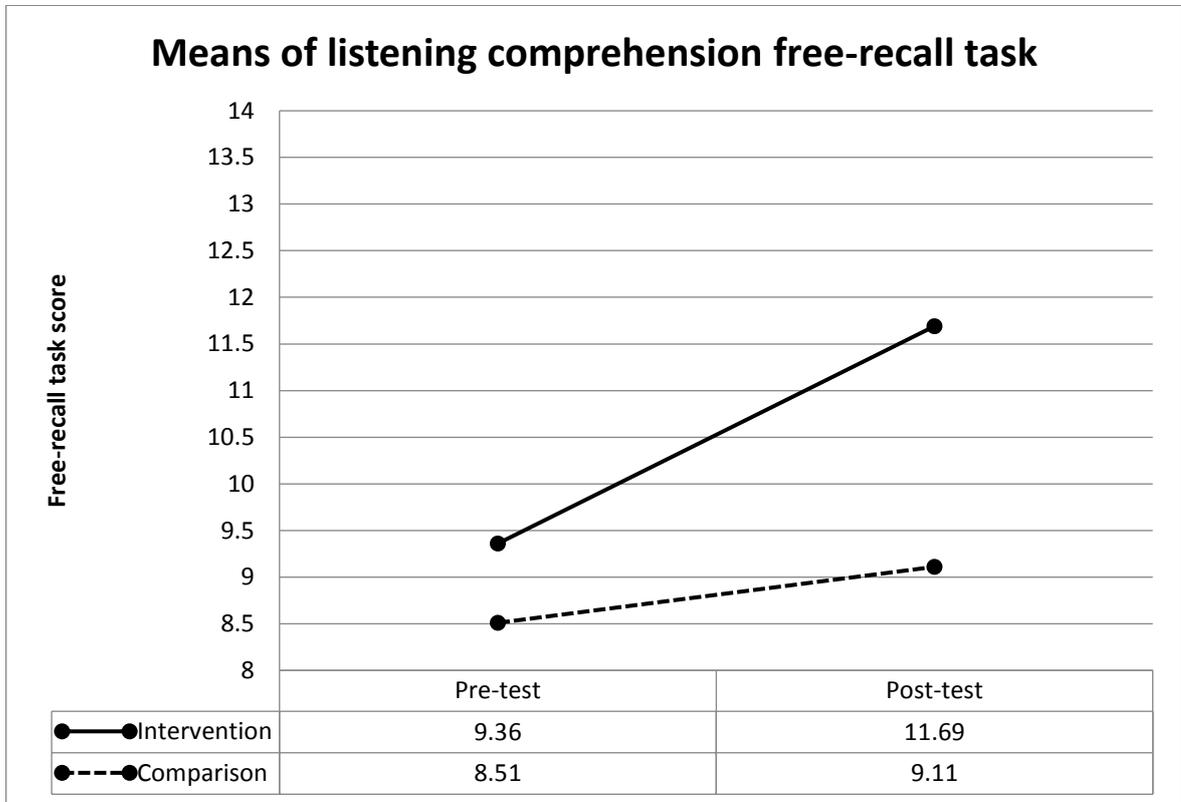


Figure 3 Means of intervention and comparison groups' free-recall score

Another 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted with self-efficacy score as a covariate. As above, this revealed a main effect of time, such that performance was higher at post-test than at pre-test, $F(1,120) = 7.122$, $p = .009$, $\eta_p^2 = .056$, but this time there was no main effect of group, $F(1,120) = 3.881$, $p = .051$, $\eta_p^2 = .031$. There was a significant time×group interaction, $F(1,120) = 11.874$, $p = .001$, $\eta_p^2 = .090$, and post-hoc tests (with Bonferroni correction) indicated that group performance did not differ at pre-test, $p = .721$, but did differ at post-test, $p = .003$. Further, while the comparison group did not show improvement from pre-test to post-test, $p = .317$, the intervention group did, $p < .001$.

Comprehension question

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. This revealed a main effect of time, such that performance was higher at post-test than at pre-test, $F(1,123) = 93.584$, $p < .001$, $\eta_p^2 = .432$, there was also a main effect of group with the intervention group outperforming the comparison group, $F(1,123) = 7.816$, $p = .006$, $\eta_p^2 = .060$. This was qualified by a significant time*group interaction, $F(1,123) = 4.475$, $p = .036$, $\eta_p^2 = .035$. Post-hoc tests (with Bonferroni correction) indicated that both the intervention group and the comparison group showed improvement from pre-test to post-test, $p < .001$. However, group performance did not differ at pre-test, $p = .236$, but did differ at post-test, $p < .001$.

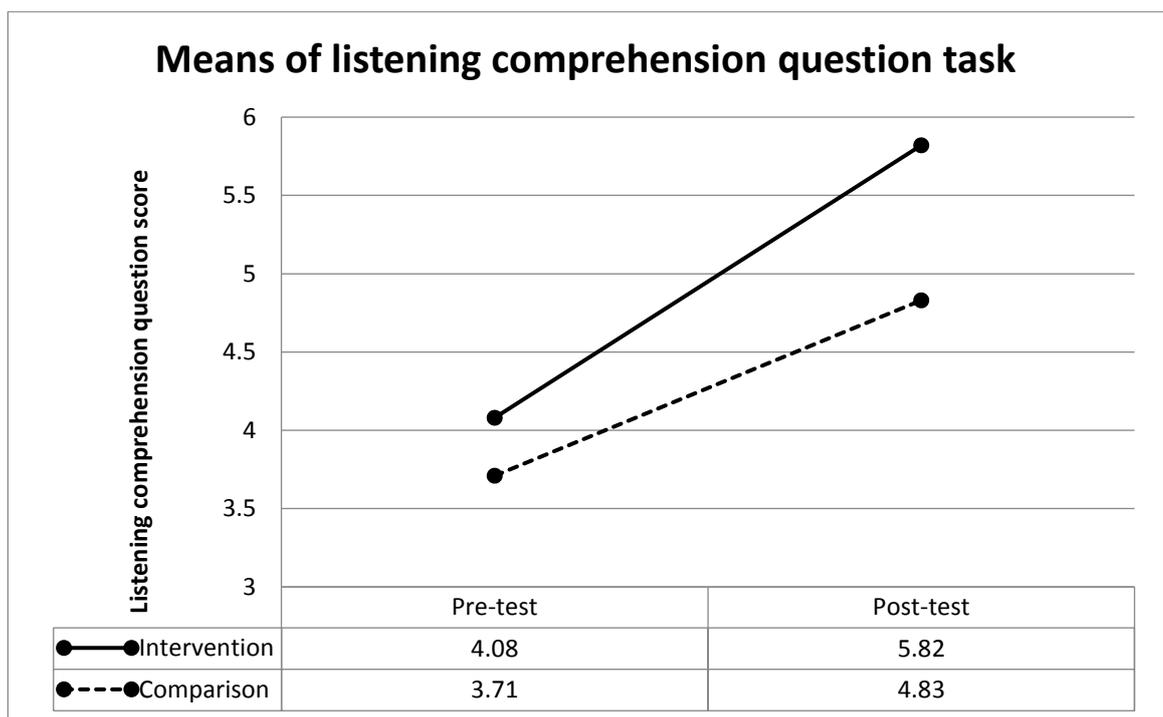


Figure 4 Means of intervention and comparison groups' comprehension question score

The 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison), 1 related sample variable (time: pre-test vs. post-test) and self-efficacy score as a covariate was also conducted. This revealed a main effect of time, such that performance was higher at post-

test than at pre-test, $F(1,118) = 5.737, p = .018, \eta_p^2 = .046$, but there was not a main effect of group, $F(1,118) = 3.813, p = .053, \eta_p^2 = .031$. There was a significant time \times group interaction, $F(1,118) = 4.921, p = .028, \eta_p^2 = .040$ and post-hoc tests (with Bonferroni correction) indicated that group performance did not differ at pre-test, $p = .781$, but did differ at post-test, $p < .002$. However, as in the previous analysis, both the intervention group and the comparison group showed improvement from pre-test to post-test, $p < .001$.

4.3.2.3 What is the effect of strategy instruction on the reported use of English listening strategies?

The participants' awareness of strategy use was elicited by the adapted MALQ questionnaire which the participants reported immediately after they completed pre-test and post-test listening tasks. A variety of statistical analyses were utilised to investigate the effect of strategy instruction on Thai learners' awareness of listening strategies. First, ANOVA was performed to explore the effect of condition on the change in responses from the intervention and comparison groups between pre-test and post-test. Next, the questionnaire items were grouped together into strategy group according to previous literature (Vandergrift & Tafaghodtari, 2010). Descriptive statistics were processed to explore the difference in reported strategy use in the intervention and the comparison groups. Finally, the data on reported strategy use was utilised to classify participants according to the similarities in their strategy use through hierarchical cluster analysis. After the participants were classified into clusters, the number of participants from the intervention and the comparison groups in each cluster were examined and the difference of each cluster in their levels of self-efficacy and listening comprehension performance were explored through one-way ANOVA.

Strategy group comparison

As a process of validating the Metacognitive Awareness of Listening Questionnaire (MALQ), Vandergrift, Goh, Mareschal and Tafaghodtari (2006) used exploratory factor analysis to investigate factors constituting metacognitive awareness of L2 listening as well as identifying items to be excluded from the questionnaire. The analysis resulted in a five-factor solution with 21 items, which has been adopted as five groups of strategies in the present study. The five groups of items relate to directed attention, mental translation, planning and evaluation, problem solving and personal knowledge. During the questionnaire construction process, twelve items were added to the MALQ questionnaire to further explore learners' beliefs and attitudes towards learning listening comprehension, and learners' attribution to their success and failure in listening comprehension. The added items were grouped into two groups for analysis. Each strategy group from the questionnaire is summarised in Table 16.

Table 16 Strategy groups

	Factor group	MALQ items
Original MALQ	Directed attention	2, 6, 12, 16
	Mental translation	4, 11, 18
	Planning & evaluation	1, 10, 14, 20, 21
	Problem solving	5, 7, 9, 13, 17, 19
	Person knowledge	3, 8, 15
Added items	Attitude and belief	22, 23, 24, 32, 33
	Attribution to success and failure	25, 26, 27, 28, 29, 30, 31

Note: (For the explanation of each questionnaire item, see Appendix B)

A 2×2 ANOVA was utilised to examine whether there was any difference in the participants' reported use of strategies at post-test and whether the intervention and comparison groups differed at post-test. The ANOVA was performed separately for each strategy group. It should be noted that some items were negative questions and the responses were reversed so that all items would portray positive strategy use. Another fundamental point for interpreting the

following analyses is that when participants respond to the MALQ, they may be thinking about their overall listening experience and not just their experience of doing the task in the present study. At pre-test, the participants, though they were rather similar in English proficiency, had different backgrounds of English lessons before entering university and had been exposed to different levels of English listening experience as they were from different schools all over Thailand. The listening texts that were designated from the institute to use in class were also at a higher level of proficiency than what they would have been exposed to in high school. Furthermore, the listening texts constructed for this study were designed to be difficult for some participants so that we could distinguish between learners with different levels of listening comprehension ability as well as allowing them to use strategies to cope with a challenging situation.

Directed attention

This strategy group depicts the learners' reported use of strategies to concentrate and to continue completing the task. It is to be noted that item 16 asked whether the learner would give up when facing difficulty, and was originally regarded as a strategy used to help with concentration, whereas, in the present study, the act of perseverance was perceived to be more complicated in that it portrayed the learners' level of self-efficacy.

A 2×2 ANOVA with one independent sample variable (group: intervention vs. comparison) and one related sample variable (time: pre-test vs. post-test) was conducted. This revealed that there was not main effect of time, $F(1,124)=1.316$, $p = .254$, $\eta_p^2 = .011$. However, there was a main effect of group with the intervention group reporting to use directed attention strategies more than the comparison group, $F(1,124)=4.826$, $p = .030$, $\eta_p^2 = .037$. A significant time×group interaction was found, $F(1,124)=7.381$, $p = .008$, $\eta_p^2 = .056$. Post-hoc tests (with Bonferroni correction) were conducted to investigate this interaction further. These indicated

that the intervention and comparison groups did not report different levels of directed attention strategy use at pre-test, $p = .493$, but did report different levels at post-test, $p = .002$. Further, while the intervention group reported only a slightly higher use of directed attention strategies from pre- to post-test, $p = .233$, the comparison group reported a significantly lower level of directed attention strategy use over time, $p = .012$.

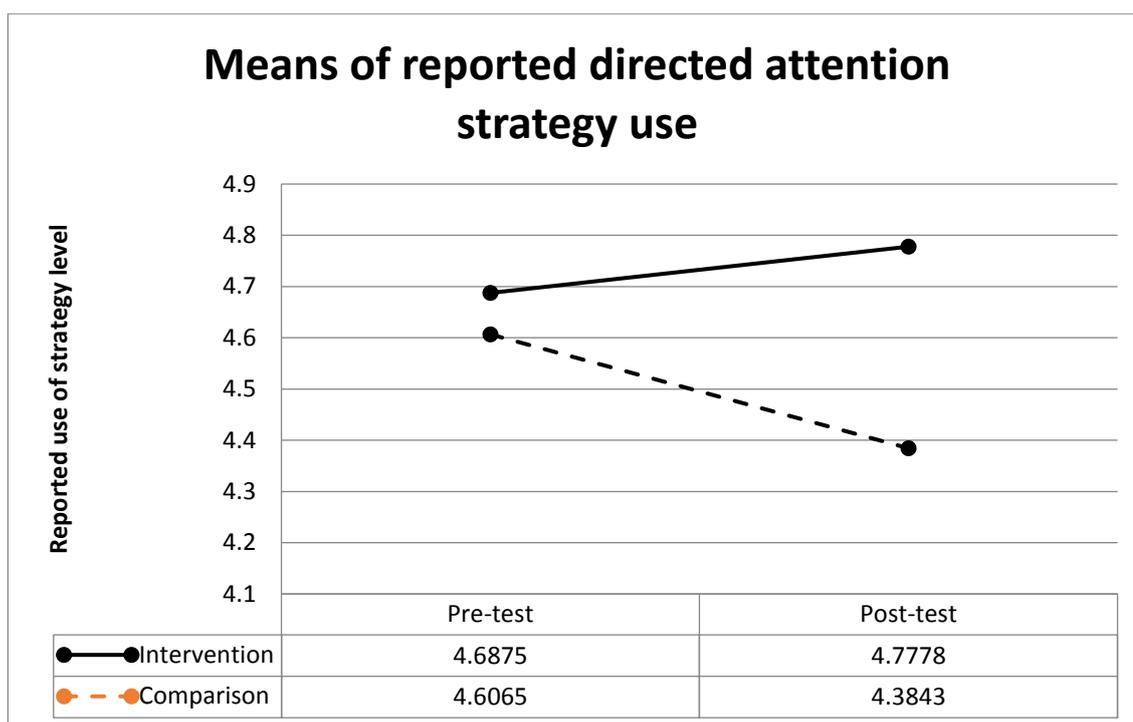


Figure 5 Means of intervention and comparison groups' reported use of direct attention strategies

Mental translation

This strategy group aims at eliciting translation strategy occurring during listening task. It ranges from the translation in general (item 4), to more detailed translation strategies; translation of keywords (item 11) and word-by-word translation (item 18). It is to be noted that the results from this strategy group should be interpreted with caution due to the low levels of Cronbach's alpha of this strategy group at both pre-test and post-test (for Cronbach's alpha, see 3.9.1.1 in Chapter 3).

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. This revealed main effect of time, such that the participants reported to use less mental translation strategies at post-test than at pre-test, $F(1,126)=6.044, p = .015, \eta_p^2 = .046$. Nevertheless, there was not a main effect of group, $F(1,126)=.976, p = .325, \eta_p^2 = .008$ and no significant time×group interaction, $F(1,126)=3.605, p = .060, \eta_p^2 = .028$.

Planning and Evaluation

This strategy group was intended to elicit strategies learners use to prepare themselves for listening as well as evaluating their performance (Vandergrift et al., 2006). This group consists of planning, goal setting, prediction or schemata activation of similar text they may have listened to, monitoring and evaluation of their performance.

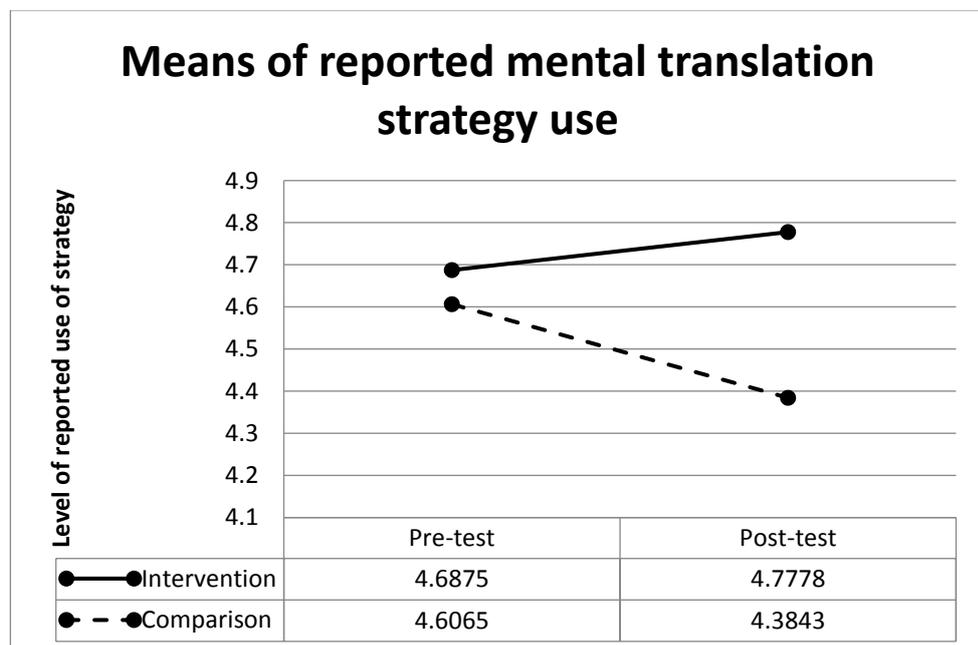


Figure 6 Means of intervention and comparison groups' reported use of direct attention strategies

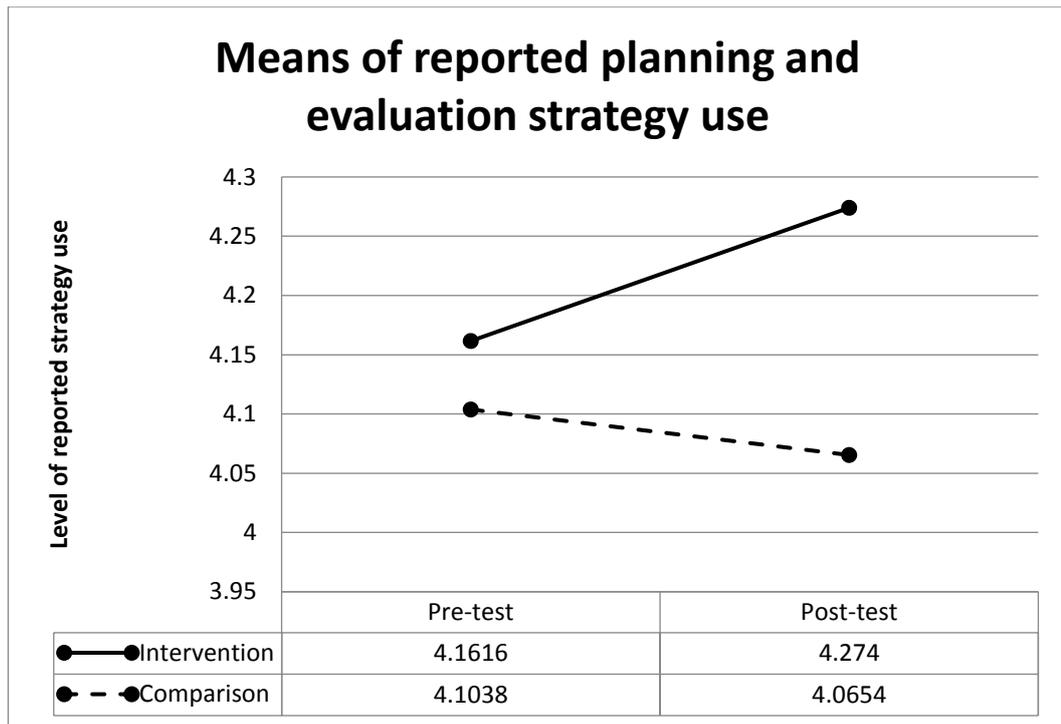


Figure 7 Means of intervention and comparison groups' reported use of planning and evaluation strategies

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. Neither the main effect of time, $F(1,123)=.342$, $p = .560$, $\eta p^2 = .003$, group, $F(1,123)=6.743$, $p = .213$, $\eta p^2 = .051$, nor the time×group interaction, $F(1,123)=1.427$, $p = .235$, $\eta p^2 = .011$, was significant.

Problem solving

This group of strategies aims at eliciting strategies that the participants use to make inferences and monitor the accuracy of the inferences (Vandergrift et al., 2006). Problem solving strategies range from inferencing using words or general ideas, monitoring and verifying comprehension and interpretations, schemata activation, and verifying inferences.

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. This did not show a main effect of time, as the reported level of problem solving strategies in both intervention and

comparison groups very slight increased at post-test, $F(1,123)=.260$, $p=.611$, $\eta_p^2= .002$. Similarly, there was also no main effect of group, $F(1,123)=.676$, $p = .413$, $\eta_p^2= .005$, or time \times group interaction, $F(1,123)=2.055$, $p = .154$, $\eta_p^2= .016$.

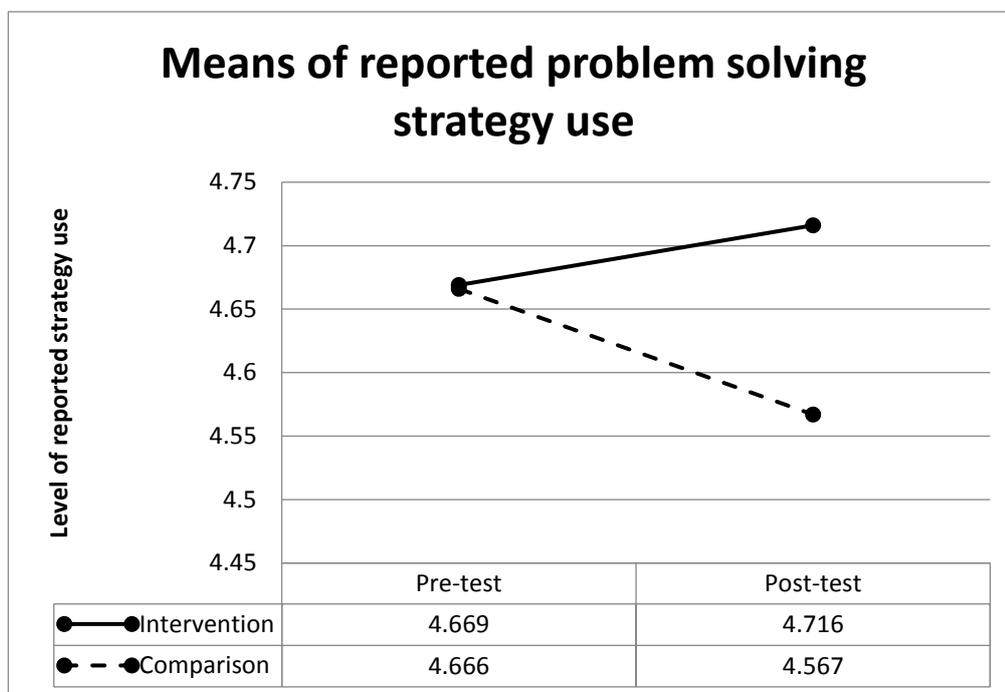


Figure 8 Means of intervention and comparison groups' reported use of planning and evaluation strategies

Personal Knowledge

This group of strategies elicited learners' perceived difficulty with English listening, comparing it to other skills, and also learners' confidence in English listening comprehension and the levels of anxiety they had when listening (Vandergrift et al., 2006). There are two aspects of this analysis to be noted. First, as mentioned earlier, learners' beliefs and attitudes were treated as strategies in the original MALQ. However, in the present study, they were considered as factors contributing to the levels of self-efficacy. Also, the Cronbach's alpha of this strategy group during were very low, .161 at pre-test and -.058 at post-test. This may be due to the small number of items (three) in this strategy group (Tavakol & Dennick, 2011).

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. This revealed a main effect of time, such that the participants reported higher levels of these strategies at post-test than at pre-test, $F(1,126)=16.867, p < .001, \eta_p^2= .184$. However, there was no main effect of group, $F(1,126)=2.096, p = .150, \eta_p^2= 2.096$ and no significant time×group interaction, $F(1,126)=1.503, p = .222, \eta_p^2= .012$.

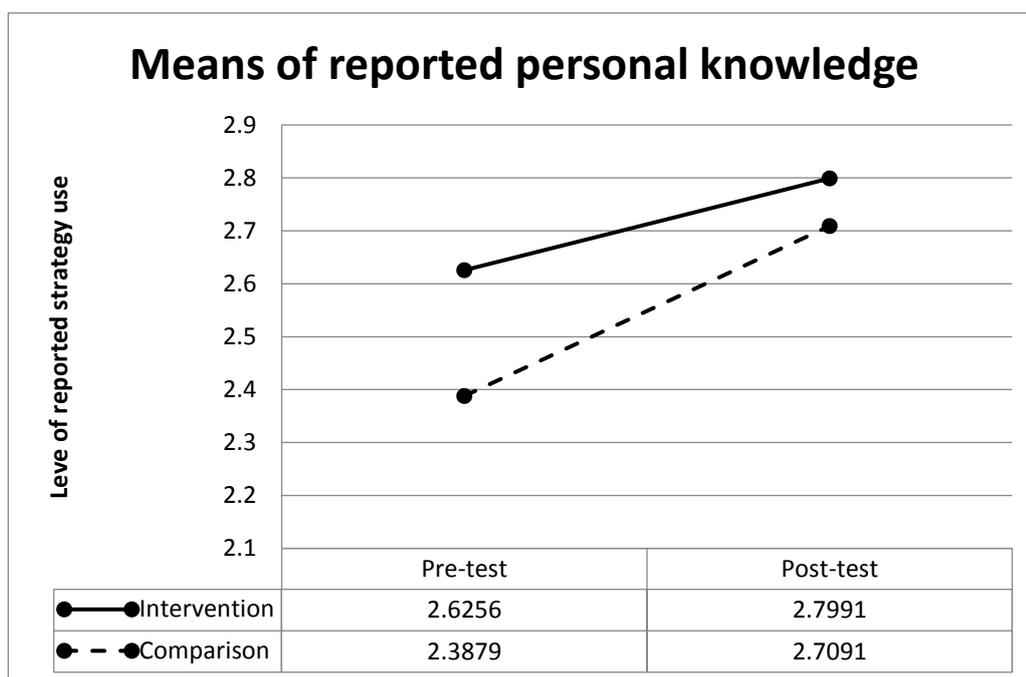


Figure 9 Means of intervention and comparison groups' reported personal knowledge

Attitude and belief

Attitude and belief is the first strategy group which is formed from items added to the original MALQ for the present study. This group consists of items to elicit learners' general attitudes towards English and its difficulty concerning phonological differences, their general self-efficacy concerning peer Thai learners, and confidence when listening to English, either in class and or on their own.

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. The analysis did not show a main effect of time $F(1,124)=.845, p = .360, \eta_p^2= .007$, there was, however, a main effect of group, with the comparison group consistently having a higher level of positive attitude towards English listening than the intervention group, $F(1,124)=4.074, p = .046, \eta_p^2= .032$. The time×group interaction was not significant, $F(1,124)=.034, p = .854, \eta_p^2= .000$.

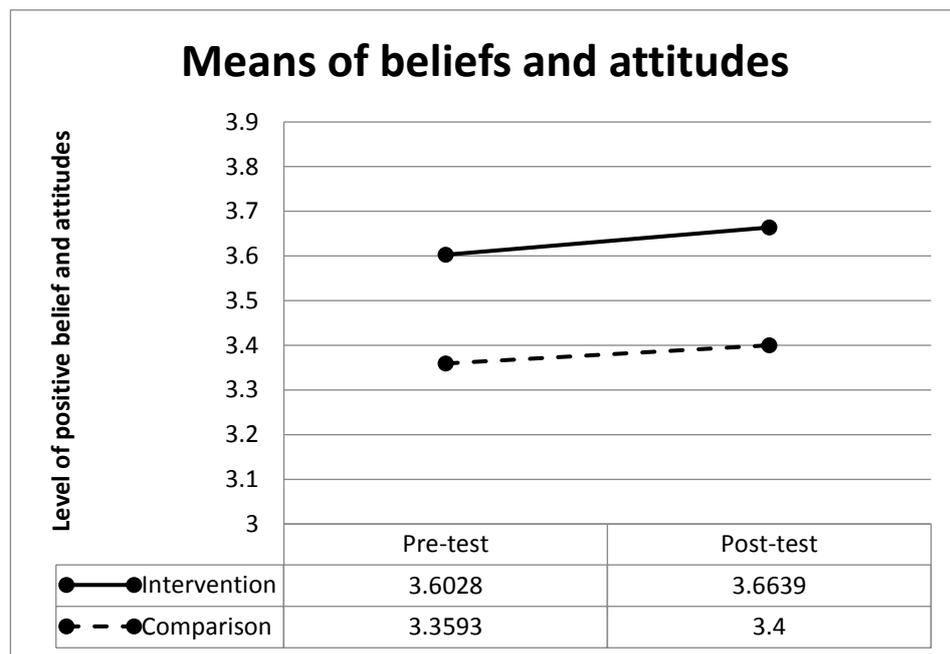


Figure 10 Means of intervention and comparison groups' beliefs and attitudes

Attribution to success and failure

The items in this group aim to elicit the participants' attribution of their success and failure in listening comprehension. Items 25, 26, 27 and 31 refer to attribution of success and failure to uncontrollable and external factors, such as luck or the teacher, while items 28, 29 and 30 refer to attribution of success to controllable and internal factors, such as effort. It should be noted that items 25, 26, 27 and 31 elicit maladaptive factors and were reversed for comparison, so that all items would reflect positive behaviour.

A 2×2 ANOVA with 1 independent sample variable (group: intervention vs. comparison) and 1 related sample variable (time: pre-test vs. post-test) was conducted. Since the participants reported almost no change in attribution, the analysis did not show a main effect of time, $F(1,124)=.001$, $p = .9700$, $\eta_p^2 = .000$. Similarly, there was also no main effect of group, $F(1,124)=.149$, $p = .700$, $\eta_p^2 = .001$. This contributed to a non significant time×group interaction, $F(1,124)=2.397$, $p = .124$, $\eta_p^2 = .019$.

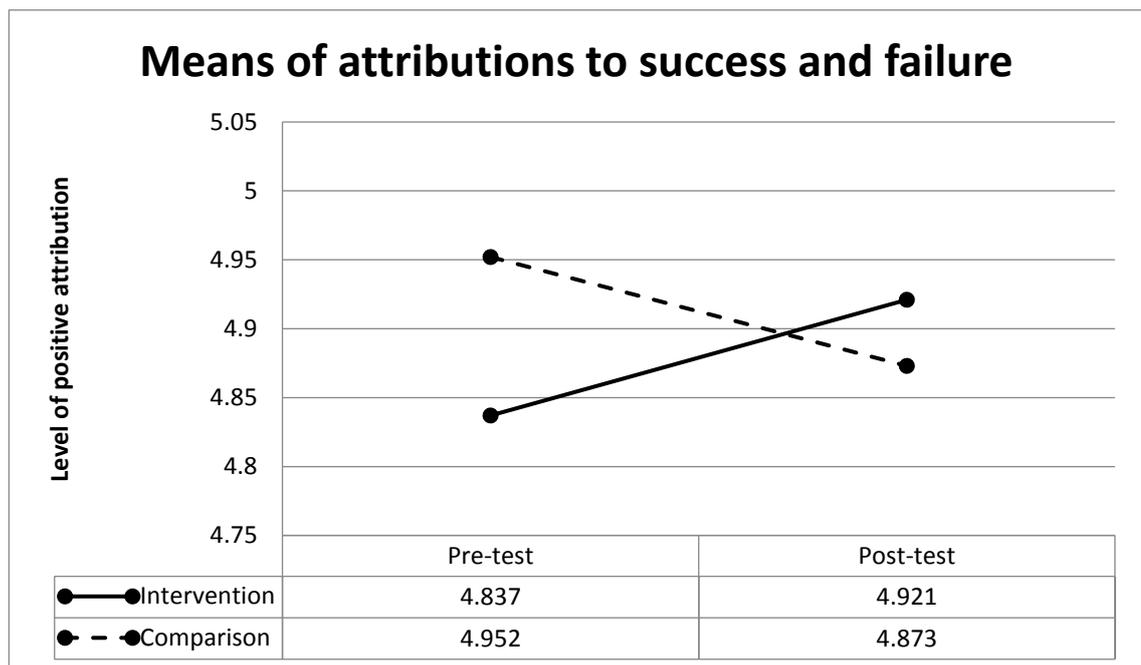


Figure 11 Means of intervention and comparison groups' positive attributions to success and failure

Hierarchical cluster analysis

Hierarchical cluster analysis was performed on responses from all participants to the adapted MALQ in order to classify the participants according to the pattern they report for their strategy use. The participants who responded to questions in a similar manner were classified into clusters and then the clusters that were similar were grouped together to form a larger group. The result of this clustering can be observed in the dendrogram on the following pages. From

the dendrogram, two outstanding large clusters were classified from the pre-test data and two large clusters were also classified from the post-test data.

At both pre-test and post-test, the two clusters contained participants from both the intervention and comparison groups. Table 17 below shows the percentage of participants from each group distributed in the clusters. At pre-test, the participants from both conditions were distributed fairly equally across Pre-test cluster 1 and Pre-test cluster 2. At post-test the comparison group was again equally distributed across clusters. However, the distribution changed considerably for the intervention group, with substantially more participants grouped together in Cluster 1 than Cluster 2. These data indicate that following the intervention, participants were more likely to report similar strategy use.

Table 17 Number of participants from intervention and comparison groups in each cluster

	Percentage from the Intervention group	Percentage from the comparison group
Pre-test cluster 1	43.24%	53.45%
Pre-test cluster 2	56.76%	46.55%
Post-test cluster 1	65.79%	51.79%
Post-test cluster 2	34.21%	48.21%

Cluster characteristics from MALQ items

Outstanding characteristics of each participant cluster were identified using descriptive statistics. The means of MALQ items in each cluster were produced and then were classified according to the level, i.e. lower (1-2.99), moderate (3-4.99) and higher level (5-6), following the procedures reported by Yamamori et al. (2003). It is to be noted again that the responses from MALQ are self-reported use of strategies signifying awareness of strategy use, attitudes and beliefs and may not indicate actual use.

The pre-test Cluster 1 included high negative attitudes towards English speech, moderate negative attitudes towards listening comprehension difficulty and moderate levels of anxiety. Low general self-efficacy, low perseverance and low confidence were also key features, as were moderate effort and moderate dependence on luck.

The pre-test Cluster 2 included moderate negative attitudes towards English speech, high negative attitude towards listening comprehension difficulty and moderate level of anxiety. Unlike pre-test Cluster 1, this participant cluster reported moderate levels of general self-efficacy, high perseverance and high confidence, high effort and low dependence on luck.

The post-test Cluster 1, into which more of the intervention group participants were classified included moderate negative attitudes towards listening, compared to other skills, and high negative attitudes towards listening comprehension difficulty. However, they reported low anxiety, high level of perseverance, low dependence on luck, and moderate general self-efficacy. In addition, they reported high use of schemata activation or prediction strategies and low use of word-by-word translation strategies.

The post-test cluster 2 included high levels of negative attitudes towards listening, compared to other skills, and moderate negative attitudes towards listening comprehension difficulty. They also reported high anxiety, moderate levels of perseverance, low general self-efficacy but moderate perseverance.

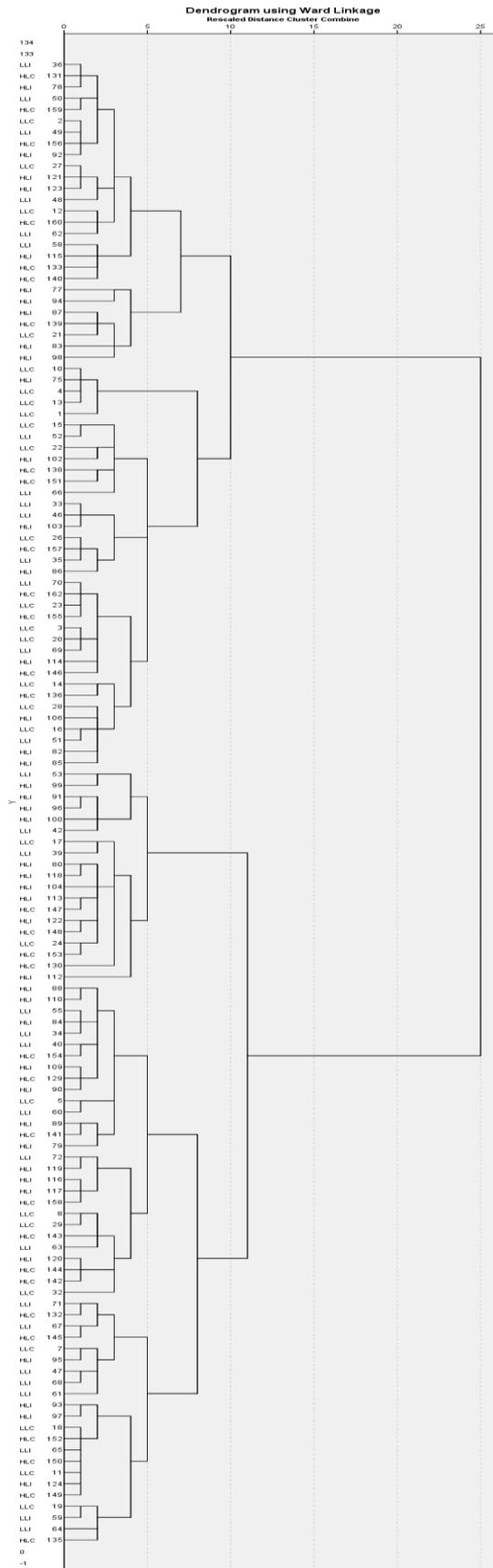


Figure 12 Pre-test adapted MALQ items hierarchical clustering dendrogram result

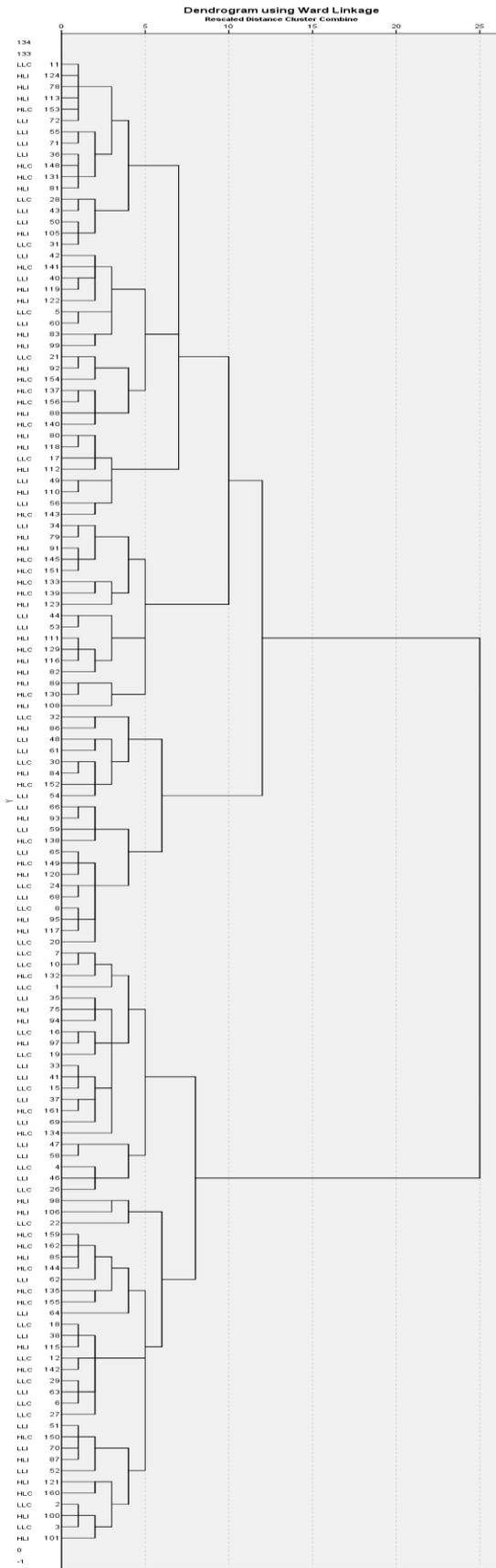


Figure 13 Post-test adapted MALQ items hierarchical clustering dendogram result

Listening test performance and self-efficacy score of each group

As the strategy use reported was in response to a specific listening task, we considered whether participants falling into the clusters showed different levels of listening comprehension and self-efficacy. For this purpose, the data were split according to the participant cluster and one-way ANOVA was utilised to explore differences in performance for each cluster. It should be noted that a one-way ANOVAs were used instead of 2×2 ANOVAs because the clusters were not the same at pre-test and post-test.

At pre-test, there was a statistically significant difference between pre-test Cluster 1 ($M = 40.95$ $SD = 1.827$) and Cluster 2 ($M = 50.86$ $SD = 1.376$) in level of self-efficacy, $F(1,126) = 19.228$, $p < .001$. For listening performance, the difference between the mean free recall score of cluster 1 ($M = 7.6$ $SD = 3.345$) and Cluster 2 ($M = 10.21$ $SD = 4.069$) was also statistically significant, $F(1,125) = 15.047$, $p < .001$, as was the difference in mean comprehension question task score, $F(1,125) = 27.160$, $p = .002$, for Cluster 1 ($M = 3.46$ $SD = 1.675$) and Cluster 2 ($M = 4.39$ $SD = 1.678$).

At post-test, there was a statistically significant difference between post-test Cluster 1 ($M = 56.35$ $SD = 9.964$) and 2 ($M = 45.34$ $SD = 13.410$) in the mean level of self-efficacy, $F(1,129) = 28.818$, $p < .001$. Likewise, the differences in mean free-recall (Cluster 1: $M = 11.22$ $SD = 4.382$; Cluster 2: $M = 9.13$ $SD = 4.010$) and listening comprehension question task scores (Cluster 1: $M = 5.74$ $SD = 1.178$; Cluster 2: $M = 4.74$ $SD = 1.711$) was also significant, $F(1,128) = 7.527$, $p = .007$; and $F_{(1,130)} = 15.951$, $p < .001$, respectively.

4.3.3 Does the strategy instruction benefit learners with different levels of proficiency in a similar manner?

The differences in the benefit of the strategy instruction to language learners with different levels of proficiency were examined through the use of the 2×2×2 ANOVA. The participants who had lower and higher levels of proficiency in both the intervention and the comparison groups were separated. The effect of the strategy instruction on the levels of self-efficacy and the levels of performance in free-recall and listening comprehension question tasks were examined. First, the descriptive statistics including the means and the standard deviation of each group at pre-test and post-test are presented.

4.3.3.1 Descriptive statistics

The means and the standard deviations of the variables, the self-efficacy scores, the free-recall listening task scores and the comprehension question task scores, were first reported. Table 18 reports the means of self-efficacy of participants from lower and higher proficiency of each condition group. The level of self-efficacy was rated from 0-100 percent.

Table 18 Means of level of self-efficacy of participants from lower and higher levels of proficiency

		Pre-test		Post-test	
		Mean	SD	Mean	SD
Intervention	Lower	45.41	12.102	52.86	11.202
	Higher	51.89	12.699	56.28	11.764
Comparison	Lower	37.24	10.832	43.13	10.568
	Higher	48.66	13.032	51.87	13.478

Table 19 in the next page reports the mean scores of free-recall task scores of participants from lower and higher proficiency of each condition group. The scores range from 0-24.

Table 19 Means of free-recall task scores of participants from lower and higher levels of proficiency

		Pre-test		Post-test	
		Mean	SD	Mean	SD
Intervention	Lower	7.97	4.079	9.49	4.523
	Higher	10.37	3.536	12.91	3.423
Comparison	Lower	7.00	2.762	7.70	3.268
	Higher	9.90	3.910	10.07	4.362

Table 20 reports the mean scores of listening comprehension question task scores of participants from lower and higher proficiency of each condition group. The scores range from 0-8.

Table 20 Means of listening comprehension question task scores of participants from lower and higher levels of proficiency

		Pre-test		Post-test	
		Mean	SD	Mean	SD
Intervention	Lower	3.64	1.674	5.21	1.359
	Higher	4.46	1.559	6.16	1.381
Comparison	Lower	2.80	1.562	4.00	1.414
	Higher	4.57	1.633	5.50	1.225

4.3.3.2 Difference in levels of self-efficacy

A 2×2×2 ANOVA with two independent sample variables (group: intervention vs. comparison, proficiency: higher vs. lower) and one related sample variable (time: pre-test vs. post-test) was conducted. This revealed main effect of time, such that the participants' level of self-efficacy was higher at post-test than at pre-test, $F(1,119) = 32.808$, $p < .001$, $\eta_p^2 = .216$, and a main

effect of group, with the intervention group showing more improvement in the level of self-efficacy than the comparison group, $F(1,119) = 9.258, p = .003, \eta_p^2 = .072$. There was also a main effect of proficiency, such that the higher proficiency participants had higher levels of self-efficacy than the lower proficiency participants, $F(1,119) = 15.831, p < .001, \eta_p^2 = .117$. Interaction terms were not significant for condition \times proficiency, $F(1,119) = 1.855, p = .176, \eta_p^2 = .015$, time \times condition, $F(1,119) = 1.833, p = .178, \eta_p^2 = .015$, or time \times condition \times proficiency, $F(1,119) = .016, p = .899, \eta_p^2 = .000$. There was a significant interaction between time and proficiency, $F(1,119) = 4.518, p = .036, \eta_p^2 = .037$, and post-hoc tests (with Bonferroni correction) were conducted to investigate this interaction further. These indicated that the lower and higher proficiency group participants' level of self-efficacy differed at pre-test, $p < .001$, and at post-test, $p = .007$. The post-hoc results also suggest that the lower proficiency group participants significantly improved their levels of self-efficacy at post-test, $p < .001$, as well as the higher proficiency group participants who significantly improved their levels of self-efficacy, $p = .008$.

4.3.3.3 *Difference in levels of free-recall listening task*

A $2 \times 2 \times 2$ ANOVA with two independent sample variables (group: intervention vs. comparison, proficiency: higher vs. lower) and one related sample variable (time: pre-test vs. post-test) was conducted. This revealed a main effect of time, such that performance improved from pre- to post-test, $F(1,124) = 27.429, p < .001, \eta_p^2 = .181$, and a main effect of group with the intervention group outperforming the comparison group, $F(1,124) = 6.514, p = .012, \eta_p^2 = .050$. There was also a main effect of proficiency, such that the higher proficiency group outperformed the lower proficiency group, $F(1,124) = 18.195, p < .001, \eta_p^2 = .128$. Interaction terms were not significant for condition \times proficiency, $F(1,124) = .002, p = .964, \eta_p^2 = .000$, time \times proficiency, $F(1,124) = .050, p = .824, \eta_p^2 = .000$, time \times condition \times proficiency, $F(1,124) = .004, p = .952, \eta_p^2 = .000$. There was a significant time \times group interaction, $F(1,124) = 9.560,$

$p = .002$, $\eta_p^2 = .072$. The post-hoc tests (with Bonferroni correction), which were conducted to investigate this interaction further, revealed that the intervention and the comparison groups' free-recall task scores were not significantly different at pre-test, $p = .275$, but differed at post-test, $p = .001$, such that the intervention group improved in free-recall task performance more at post-test. The post-hoc results also indicated that the intervention group participants' free-recall task scores increased at post-test at a significant level, $p < .001$, but those of the comparison did not, $p = .162$. This interactions and post-hoc result agree with the results in the 2×2 ANOVA analyses presented in Figure 3 section 4.3.2.2.

4.3.3.4 *Difference in levels of listening comprehension question task*

A $2 \times 2 \times 2$ ANOVA with two independent sample variables (group: intervention vs. comparison, proficiency: higher vs. lower) and one related sample variable (time: pre-test vs. post-test) was conducted. This revealed main effect of time, such that the performance improved at post-test, $F(1,121) = 91.744$, $p < .001$, $\eta_p^2 = .431$, and a main effect of group, with the intervention group outperforming the comparison group, $F(1,121) = 8.241$, $p = .005$, $\eta_p^2 = .064$. There was also a main effect of proficiency, such that the higher proficiency outperforming the lower proficiency, $F(1,121) = 33.657$, $p < .001$, $\eta_p^2 = .218$. Interaction terms were not significant for condition \times proficiency, $F(1,121) = 2.568$, $p = .112$, $\eta_p^2 = .021$, time \times proficiency, $F(1,121) = .174$, $p = .677$, $\eta_p^2 = .001$, and time \times condition \times proficiency, $F(1,121) = .127$, $p = .722$, $\eta_p^2 = .001$. There was a significant time \times group interaction, $F(1,121) = 4.339$, $p = .038$, $\eta_p^2 = .035$.

Post-hoc tests (with Bonferroni correction) were conducted to investigate this interaction further. These indicated that the intervention and comparison groups' listening comprehension task performance was not different at pre-test, $p = .282$, but differed at post-test, $p < .001$. The post-hoc results also suggested that both intervention group and comparison group significantly improved in listening comprehension question task pre-test to post-test, both at $p < .001$.

4.4 Summary

This chapter presents the results from quantitative analyses. First, the descriptive statistics were produced in order to see the overall trend of the data. Then various analyses according to research questions were performed. The first research question concerning the nature of self-efficacy revealed a low level of self-efficacy and moderate and low levels of adaptive attribution of success and failure, respectively. Section 4.3.2.1 indicated that there was not a significant difference in self-efficacy improvement between the intervention and comparison participants and this finding was replicated in section 4.3.3.2. On the contrary, section 4.3.2.2 showed that the intervention group improved their listening comprehension significantly more than the comparison group on both free recall and comprehension question tasks, findings that were replicated in sections 4.3.3.3 and 4.3.3.4. Section 4.3.2.3 on items in each strategy group did not show any significant difference between the conditions. However, the Hierarchical Cluster Analysis demonstrated that the intervention group participants were classified more into positive behaviour group at post-test. Analyses of proficiency level in sections 4.3.3.2 – 4.3.3.4 indicated that the strategy instruction did not disproportionately advantage either proficiency group in relation to comprehension measures, however, there was an interaction between proficiency and time for self-efficacy indicating a significant difference in self-efficacy between the lower and higher proficiency groups at both times and both proficiency groups significantly improved at post-test. Discussion of these results, together with the qualitative analyses results and previous literature, can be found in Chapter 6.

Chapter 5 Qualitative Results

5.1 Introduction

In this chapter, the analyses of the participants' use of listening strategies when completing listening task will be presented. Stimulated-recall protocols were utilised to elicit the manner in which 14 participants used strategies to complete listening comprehension tasks. The 14 participants consisted of seven from the intervention group (three lower proficiency and four higher proficiency) and seven from the comparison group (four lower proficiency and three higher proficiency). Their verbal accounts were coded and analysed. The analyses were performed from two different perspectives. First, the frequency of strategy use reported was investigated. Then, the manner of the reported strategy used was analysed and reported to examine the difference between the intervention and the comparison group.

5.2 Analyses based on strategies emerging from the data

As mentioned in Chapter 3, the transcriptions were coded for strategies (for coding taxonomy see Appendix H) and those strategies were then transferred to the strategy profile sheet and the strategy grid sheet in order to facilitate the comparison of strategies which the participants utilised in response to each part of the listening text (see Appendix I for example of individual strategy profile sheet and Appendix J for strategy grid sheet). The strategies were then examined in order to detect patterns, in three different ways. First, the emerging patterns of strategy use across the entire task were observed, at pre-test and post-test, also comparing strategy use across proficiency levels. Then, the strategy use which led to incorrect interpretations of the text was studied. In order to focus on the effect of strategy instruction, the strategies which were emphasised were those included the strategy instruction received by the intervention group.

5.2.1 Overall reported strategies at pre-test and post-test

First, the overall strategy use of participants from both groups at pre-test and post-test will be presented. Instances of strategy use were counted and compared (Table 21). In this table, the strategies are separated into metacognitive and cognitive strategies, which are also divided into sub-categories. All instances of strategy use at pre-test and post-test are reported; the main reported numbers refer to the instances of successful strategy use, with the number of instances of unsuccessful strategy use shown in brackets.

Table 21 Overall reported strategies at pre-test and post-test (instances of unsuccessful use shown in brackets)

Strategies	Comparison (<i>n</i> = 7)			Intervention (<i>n</i> = 7)		
	Pre	Post	Change	Pre	Post	Change
<i>Metacognitive strategies</i>						
Planning	8	5	-	3	13	+
Hypothesis monitoring	5	7 (1)	+	16	40 (1)	++
Hypothesis confirmation	4 (1)	3	-	7	31	+++
Monitoring for sense	0	1	+	3	0	-
Monitoring against the question	3	1	-	0	5	+
Monitoring against the passage	3	1	-	2	3	+
Comprehension monitoring	22	29	+	39	52	++
Double-check monitoring	3	2	-	8	9	+
Strategy evaluation	2	1	-	4	5	+
Self-evaluation	50	49	-	74 (1)	68	-
Task evaluation	16	19 (1)	+	27 (3)	36 (1)	+
Problem identification	27 (1)	44 (2)	++	40 (1)	65	+++
Substitution	0	0	N	0	0	N
Deduction evaluation	0	0	N	0	1	+
Gives up/ Avoidance	4	6	+	17	4	-
Self-questioning	13	7	-	11	22	++
Dismissal	16	16	N	18	21	+

Strategies	Comparison (n = 7)			Intervention (n = 7)		
	Pre	Post	Change	Pre	Post	Change
Self-protection	7	4	-	11	11	N
Grouping	1	0	-	0	0	N
<i>Cognitive strategies</i>						
<i>Attention related strategies</i>						
Selective attention	8	7 (1)	-	12 (5)	8 (1)	-
On-line selective attention	4 (2)	5	+	3	9 (2)	+
<i>Schema related strategies</i>						
Prediction	0	1	+	0 (1)	7	+
Prediction - Lexis	0	0	N	1	0	-
Prediction – Theme	0	0	N	0	2	+
Prediction – possible answers	0	0	N	0	0	N
On-line prediction	0	3	+	3	6	+
Visual/written prompts	1	0	-	0	3	+
Imagery	0	0	N	1	0	-
Summarisation	8	3	-	11 (2)	4	-
Inferencing	5	4 (3)	-	9	18 (3)	+
Questioning prior/ world knowledge	1	9	+	3 (1)	9	+
<i>Text related strategies</i>						
Lexical segmentation strategies	0	4	+	0	0	N
Identification of chunk	26 (5)	27 (4)	+	41 (3)	60 (1)	++
Identification of word	53 (6)	67 (3)	++	55 (4)	92 (7)	+++
Match lexis heard to lexis in the question	0	2	+	1	0	-
Vocalisation	12	8 (1)	-	24 (3)	58 (2)	+++
Transfer [L1-L2 transfer]	2 (1 person)	0	-	4 (1 person)	2 (1)	-
Phoneme-grapheme conversion	0	0	N	1	4	+
<i>Meaning related strategies</i>						
Hypothesis formation	134 (15)	178 (16)	+++	202 (13)	357 (17)	++++

Strategies	Comparison (<i>n</i> = 7)			Intervention (<i>n</i> = 7)		
	Pre	Post	Change	Pre	Post	Change
Elaboration	11	3	-	26 (6)	9	-
World knowledge elaboration	9 (3)	6	-	8	13	+
Text structure elaboration	4	2	-	5	6	+
Word/ Chunk elaboration	19 (11)	17 (9)	-	15 (4)	35 (1)	++
Integration	13 (1)	10	-	11 (1)	31 (2)	++
General deduction	9	25 (8)	++	10 (1)	37 (1)	++
Frequency deduction	0	(1)	N	0	2 (1)	+
Saliency deduction	4 (3)	5 (1)	+	5 (2)	9 (2)	+
Prior knowledge deduction	0	1	+	2 [1 person]	3	+
Elimination deduction	0	1	+	0	0	N
Deduction from tone of voice	0	1 (4)	+	1 (1)	5 (2)	+
Translation	9 (2)	10	+	13 (3)	23 (2)	++

Notes: + = Increase less than 10 in reported use at post-test; ++ = Increase less than 20 in reported use at post-test; +++ = Increase more than 20 increase at post-test; - Decrease less than 10 in use at post-test; N - no change of strategy use between pre-test and post-test. The highlighted strategies are ones discussed in subsequent sections.

From Table 21, it can be seen that there were changes in the number of instances of strategy use for both the comparison and intervention groups between pre and post-test. For most metacognitive strategies, changes for the comparison group were slight except for problem identification which increased by seventeen instances. The intervention group, although reporting slight changes across several metacognitive strategies, also reported greatly increased use for six metacognitive strategies: planning, hypothesis monitoring, hypothesis confirmation, comprehension monitoring self-questioning and problem identification. The rise in the amount

of hypothesis-related monitoring could correspond to the increase in hypothesis formation strategy use in the cognitive strategy section. The increase in comprehension monitoring and self-questioning may imply the participants' higher awareness of the need to constantly evaluate their level of understanding as well as to question the accuracy of their own answer. Increases in problem identification suggest that the participants did not just listen but also could identify the point in the text which they needed to understand in order to better comprehend the text.

For cognitive strategies, both the comparison and intervention group reported very little change in attention-related strategies. This was also true of schema-related strategies, except for prediction. Neither group reported any successful use of prediction at pre-test, but at post-test, the intervention group alone reported seven instances leading to successful comprehension of the passage. Finally, regarding inferencing, while the comparison group participants reported one less instance of successful use at post-test, the intervention group's successful use doubled.

The two groups reported different use of text-related strategies at post-test, especially in three out of seven strategies. The participants from both groups reported higher use of identification of chunks and words, but the increase was much higher for those from the intervention group. While the comparison group's reported identification of chunks increased by only one instance, for the intervention group 19 more instances were reported. It should be borne in mind however that the intervention group reported more use of chunk identification at pre-test and their existing frequent use of this strategy may have contributed to this increase at post-test. However, both groups reported very similar usage of identification of words at pre-test, yet at post-test, the increase in usage for the intervention group was nearly three times that of the comparison group. Similarly for another text related strategy, vocalisation: while the comparison group participants reported four fewer instances of successful use of vocalisation at post-test, the

intervention group reported 34 more instances of vocalisation. Again, the participants from the intervention group reported much greater use vocalisation at pre-test than the comparison group. The only bottom-up strategy cluster which was a part of the strategy instruction was the lexical segmentation strategies. As explained in the next section, there was little clear evidence of lexical segmentation strategies by the intervention group participants, only emerging evidence of greater evidence of their existence.

Further strategies showing large changes in reported use across time include meaning related hypothesis formation, which might be regarded as a key strategy for comprehension that requires a synthesis of bottom-up as well as top-down information in the formation of a possible interpretation of what is heard. Notably, although the intervention group already had higher reported usage, by post-test the intervention group reported 155 instances of successful hypothesis formation more than at pre-test, against 44 more instances increased at post-test from the comparison group. In addition, the previously mentioned increase in hypothesis monitoring and hypothesis confirmation strategies reported by the intervention group also seemed to contribute to their successful use of hypothesis formation. This may have contributed to the greater improvement in their listening comprehension scores reported in Chapter 4.

For word or chunk elaboration, while the comparison group reported fewer instances of strategy use at post-test, the intervention group reported twenty more. In addition, there were also interesting changes in the levels of unsuccessful use of the strategy. At pre-test the comparison group unsuccessfully used elaboration eleven times out of thirty while the intervention group misused it four times out of nineteen. At post-test, the comparison group participants still used this strategy unsuccessfully nine times out of twenty-six while the intervention group's use was unsuccessful only once out of thirty-six instances. In other words,

not only did the intervention group participants increase their use of word or chunk elaboration more than the comparison group participants, but they also used it more effectively.

A rather similar phenomenon occurred with the participants' use of general deduction. At pre-test, both comparison and intervention groups reported almost equal amounts of general deduction. At post-test, not only did the intervention group report a greater increase of strategy use, but they also made a wrong deduction only once out of thirty-eight instances, whereas the comparison group participants made eight mistakes out of thirty-three.

Integration also saw a fluctuation in its application that differed across the two groups. While the comparison group participants reported slightly less use at post-test, the intervention group participants used it twenty times more than at pre-test.

5.2.2 A qualitative analysis of strategies taught in the intervention across the task at pre-test and post-test

This section focuses on all strategies which were included in the strategy instruction for the intervention group and which were frequently reported by participants. It extends the above analysis by offering qualitative insights into how the strategies were actually applied and in what sort of combinations.

5.2.2.1 Identification of words or chunks

As all the participants in this study, across both proficiency groups, were of lower to intermediate level of proficiency in English listening, they tended to listen to English speech in words or small chunks, rather than as an entire stream of speech. Some participants even seemed to have the recognition of words or chunks as a listening goal. Setting such a goal might reflect their low levels of self-efficacy for listening.

At both pre-test and post-test, the participants were able to identify words or chunks mainly in parts of the listening text which were relatively easier, which consisted of short sentences or repetitions, contained salient words or chunks (such as university names, language names or numbers), contained high frequency vocabulary, and which had an easy or familiar structure such as self-introduction or short greetings. Identification of words or chunks was also reported to be used in more difficult parts of the text but mainly by higher proficiency participants.

Identification of chunks or words was not only used as an end itself but also, sometimes, in order to provide a base for further text interpretation by incorporating other strategies. There however were similarities and differences in the types of strategies which the intervention group and comparison group combined with identification of word or chunk at pre-test and post-test.

At pre-test, both groups, especially the intervention group, did not use a great variety of strategies in combination with identification of words or chunks. Translation and vocalisation were incorporated to facilitate word recognition and understanding of the meaning of each word or chunk identified. The identified words or chunks were mainly transformed into hypotheses and on several occasions elaborations were used to extend participants' understanding of the text. Comprehension monitoring was also reported as the participants evaluated the level of their comprehension, which was usually on the negative side.

Though the majority of reported strategies incorporated with identification of words and chunks were similar for both groups, there were also differences. The strategy which was reported most differently by the intervention group participants at pre-test was problem identification, which this group used more often than the comparison group. It seemed that they realised, possibly influenced by negative evaluation of their level of understanding or low self-efficacy, that the fragments of words or chunks they identified alone were not sufficient for

interpretation of the entire text. Therefore, they attempted to identify whether the main point of understanding was still missing from their interpretation. This can be seen in an excerpt from Gift, a lower proficiency level intervention group participant. The part of the passage that the learner heard is presented in italics and her response is in plain font. The highlighted parts present the strategy use.

Deaw: Could you explain a little bit what you did when you studied English literature?

Edward: Well...Erm..The course at Oxford is very wide ranging. It goes from Old English to Middle English to..you know..

Gift: 'Old English' and 'Middle English' What are they?

Gift identified 'Old English' and 'Middle English' and pondered further what they could mean. She realised that she did not know what they meant but did not dismiss them, believing they might be important information. Eventually she dismissed these two pieces of information because of insufficient knowledge to interpret them.

At post-test, both groups incorporated a larger variety of strategies with identification of words or chunks. This was especially true of the intervention group, whose participants used identification of words or chunks by itself much less than using it with other strategies. Out of 160 instances, identification of words or chunks appeared by itself in 35 instances and appeared with other strategies in 125 instances. The variety of incorporated strategies at post-test was also larger than at pre-test. Similar to pre-test, translation and vocalisation were used in order to facilitate word or chunk recognition, with the addition of visualisation. There was a high degree of hypothesis formation, just as at pre-test, but there were also a high degree of hypothesis confirmation and hypothesis monitoring at post-test. It could be inferred that these participants did not only form interpretations of the messages but also monitored and verified their interpretations of the texts. Verification of prediction or hypotheses was a strategy

included in the strategy instruction and participants were encouraged to use it during listening practice throughout the intervention period. In terms of monitoring strategies, comprehension monitoring and self-questioning were also reported at post-test. When the participants identified words or chunks, they did not stop at the recognition process but also questioned the accuracy of the recognition.

Elaborations, especially elaboration of words and chunk, were frequently utilised by the participants in the intervention group at post-test, even more than at pre-test. Elaborations were used in order to extend their comprehension of the message. During the strategy lessons, the intervention group were taught not to only think about the bottom-up information, which they received, but also to incorporate their top-down information or world knowledge into the interpretations. The excerpt below shows the manner in which the participants used elaboration to extend their listening text comprehension.

Deaw: Welcome back to the third break of "Spotlight", joining us today is Mr. Edward Whittington, a best-seller author of "The Mad King" who generously shared his experience when he was an English literature student at Oxford University.

Snow: Well, the first part that they said 'Welcome to Spotlight', it made me think this must have be some kind of programme. And then she invited Mr. Whittington out for an interview.....

'Snow', a participant from higher proficiency level intervention group, identified the chunk 'Welcome to Spotlight' and she went on to use this chunk as a base to elaborate on by recalling the kind of situation in which this chunk might begin a conversation. The result of this elaboration provided her with the setting of the dialogue, which she could also use for further comprehension of the text.

Incorporation of top-down information was also present when intervention group participants made deductions about the word or chunks they heard. It is to be noted that most of the

saliency deduction reported was used when answering listening comprehension questions. The excerpt below is from Green, a higher proficiency level intervention participant, describing how she used an identified chunk to make a deduction about the passage.

Deaw: Now, ...Let's...let's talk about what you studied in your bachelor degree. What did you do for your bachelor?

Green: Oh! She must be an interviewer because the situation seems like it is an interview. She said 'talk about master degree'.

Researcher: Did you guess it was an interview from 'talk about master degree'?

Green: I guessed from the chunk 'let's talk' so she must be in an interview.

From the manner in which the intervention participants incorporated other strategies to further interpret identified words or chunks, it seemed that they were starting to be aware of what further processing of bottom-up information is needed in order to comprehend the entire message.

By contrast, the comparison group participants' combinations of strategies changed little from pre-test to post-test. Overall, at post-test, they combined more or less the same strategies with identification of words and chunk as they had at pre-test. This latter strategy tended to continue to be used mainly on its own, although sometimes with translation and vocalisation as before. Hypothesis formation, though appearing relatively less than at pre-test, was still reported. Elaborations were found a few times, as well as integration. There were some emerging signs of problem identification usage at post-test. Surprisingly, however, the comparison group participants reported comprehension monitoring after identification of word or chunk on numerous occasions at post-test, even though they had used it infrequently at pre-test, and even though they had not been taught its use explicitly. Table 22 on the next page presents an overview of the key differences outlined above between the two groups over time.

Table 22 Summary of qualitative analysis of identification of words or chunks strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Identification of words or chunks + Translation + Vocalisation + Hypothesis formation + Elaboration + Comprehension monitoring + Problem identification	Identification of words or chunks + Translation + Vocalisation + Visualisation + Hypothesis formation + Hypothesis monitoring + Hypothesis confirmation + Comprehension monitoring + Self-questioning + Elaboration + Saliency deduction	Identification of words or chunks + Translation + Vocalisation + Hypothesis formation + Elaboration + Comprehension monitoring	Identification of words or chunks + Translation + Vocalisation + Hypothesis formation + Elaboration + Integration + Comprehension monitoring + Problem identification

Note: + = The strategy is incorporated with the strategy above.

5.2.2.2 Lexical segmentation strategies

Lexical segmentation is a strategy cluster which facilitates word recognition. It was incorporated into the strategy instruction for the intervention group because of the large difference in prosody between Thai and English. The lexical segmentation strategies which were taught to the intervention group consisted of recognising syllables in a word, identifying strong syllables, or lexical stress, in words and identifying English consonants, as well as multiple practice in how to apply that information to identify words in a stream of speech. A stressed syllable is characterised by properties such as increase in volume, full articulation of the vowel and changes in pitch. Lexical stress refers to the strongest stressed syllable in a word. English is a language with fixed lexical stress and, according to Cutler (2012), approximately 73 percent of polysyllabic words in English contains initial stress. As the strongest stressed

syllables usually fall on the first half of the word, identifying stressed syllables could assist learners in finding the beginning of a word in connected speech. However, distinguishing weak and strong syllables does not come naturally to a Thai learner as it is not a linguistic feature of their native language. The Thai language is a tonal language with fixed length of vowels and features of stress are interpreted very differently from those of English. Increase in volume expresses emotions. Vowel articulations are fixed and, if varied, could be mistaken for another word. Finally, a shift in pitch or the tone changes the word, as the tone is a semantic determiner. Emphasis on stronger and weaker syllables is used only in poetry and is still determined by the fixed vowel and tones. In addition, some tone shifting sometimes may also mean changing of emotions expressed.

Recognising features of English, such as stressed syllables, would not have been a part of Thailand's English language curriculum in the participants' previous education (see Table 1 in 1.1.1 for the description of English curriculum in basic education in Thailand). The participants may not have been able to identify stressed syllables in a word or to notice the differences between each syllable. This is borne out by the fact that at pre-test neither group displayed any use of lexical segmentation strategies.

At post-test, there was no clear evidence that the intervention group had acquired such strategies. However, there was some indication of increased awareness of lexical segmentation strategies. The participants from the intervention group seemed to have a greater awareness of words that consisted of a stressed syllable and some may have developed a more positive attitude towards listening to a connected stream of speech, knowing how to deal with it.

A participant who may have shown evidence of changes between pre-test and post-test concerning segmenting words from a stream of speech is Joy, also a lower proficiency level intervention participant. At pre-test, Joy had very little confidence that she would be able to

comprehend long sentences in the dialogues. For that reason, she chose not to listen to any answers in the dialogue, and missed a lot of information.

Deaw: That must be quite a stressful time!

Mary: It was! Ermm..Well...outside of my research studies, though, I spent quite a lot of time reading. I love reading fiction and doing dance classes. Those I really enjoyed. I've always liked going to dance classes and also hanging out with my friends, going to the pubs and such.

Deaw: Good for you!

Researcher: Quite a large chunk before you pause.

Joy: This part I mostly pay attention to the questions because the answers were too long and I can't catch it. So I chose to focus on what the questions were about, free time or how to study, for example.

Researcher: Why did you decide to focus on the questions?

Joy: Because the questions were short and easy to understand. They... they are the main idea of each part. Answers were too long and I can't catch it. So, I chose to listen to only the questions.

However, at post-test, she expressed a contrasting opinion about a listening passage which consisted of relatively long of sentences, and was also spoken by a British English speaker.

Edward: How did I manage my time? Well, we had to write an essay a week.

Deaw: One essay a week? Wow.

Joy: This one seems easy because he spoke slowly and he emphasised his sentence more than the third one [*American accent dialogue*].

Researcher: Emphasised? How?

Joy: Well, he spoke with a lot of stress. He emphasised the stressed syllable of the words and he spoke slowly, not in a hurry.

This part of the stimulated-recall interview suggested that she was aware of emphasis on stressed syllables utilised by British English speakers (Jackie and Edward), whose stressed syllables might be more prominent than in the American English speaker (Jake). This awareness also enhanced her attitude towards the difficulty of listening texts as seen in the next excerpt.

Edward: No!! God! No! God! No. You were encouraged to be completely independent and responsible for your own learning but you had to come once a week with an essay. If you miss that, then you were in trouble. I don't think anyone missed many.

Deaw: That's a lot of work for one week.

Edward: You could say that... I mean.... it was too ambitious.

Researcher: How did you find this part?

Joy: I feel that it's easy to listen to. His words didn't seem to be melted together. It felt like he spoke word by word. It was easy.

This part of the interview shows that Joy thought that the dialogue was rather easy for her and she based that opinion on the fact that she could identify words from the stream of speech.

The participants from the comparison group had a very different opinion about the same passage in the listening task. Not having received explicit training in identifying stress patterns nor practice in using them to identify word boundaries, they seemed to misinterpret variation in syllable pitch and stress. Two comparison group participants, from two different classes, interpreted the variations in tone as signs of emotions.

Peter, a participant from the higher proficiency level comparison group, expressed his difficulty in comprehending the same passage at post-test spoken by Edward, which Joy believed to be rather easy for her. He attributed the difficulty to the fact that the speakers used variations of tone in the sentence.

Deaw: So, no roll call? (teasing)

Edward: No!! God! No! God! No. You were encouraged to be completely independent and responsible for your own learning but you had to come once a week with an essay. If you miss that, then you were in trouble. I don't think anyone missed many.

Deaw: That's a lot of work for one week.

Edward: You could say that... I mean.... it was too ambitious.

Peter: This part, I cannot catch the words as well because he seems emotional so he speaks with so many tones. I normally can't catch emotional speech. It seems like he was speaking about his behaviour, that there was

a reason he skipped classes or something. It could be the reason he skipped a lot of class. That's what I understood.

Researcher: So,... I'm quite curious about the part that you said you cannot catch emotional speech. What do you mean by that?

Peter: Well, like Mary's dialogue, she would speak with a normal tone, a narrative tone. But in Jackie dialogue and this (Edward's) dialogue, their voices went up and down, as if they were very emotional. So, it was difficult to understand. Normally when we listen in the classroom, you would try to speak slowly and clearly but when the dialogues incorporate emotions, I need to listen to it quite frequently so that I can understand their emotions.

Another participant, Suda, was in the lower proficiency level comparison group. She also attributed difficulty in listening to Edward's passage at post-test to the fact that he was 'emotional'.

Edward: (Continue)... I don't think anyone missed many.

Deaw: That's a lot of work for one week.

Edward: You could say that... I mean.... it was too ambitious.

Suda: There was also the chunk 'for one week' as well but I don't know what it was about. I noted it down but cannot make a connection.

Researcher: So, how do you feel about this passage?

Suda: It is difficult, Miss.

Researcher: Why do you think so?

Suda: Well, the vocabulary. Also, he was emotional when he spoke and that made me unable to catch his words.

Researcher: Does this emotional speech have an effect on your listening?

Suda: Yes, it does. His accent. Sometimes, when he spoke with emotions like this made me unable to catch his words. Unlike when we listen to narrative text, where they use a rather similar tone throughout the text. If I have to listen to someone who speaks loud like this, I cannot understand.

A plausible explanation for the participants' opinion about speakers' emotions might be found in their native language, Thai. As mentioned, changing a tone in Thai might mean changing of emotions. In addition, since the comparison group participants were not trained to distinguish stressed syllables within the text, they also may not have been able to distinguished stressed sounds, which may contain a slightly higher pitch, from tone rising because of emotional changes.

From this comparison, it might be concluded that after strategy instruction, the participants in the intervention group were more aware of or had acquired some skills concerning lexical segmentation strategies at post-test comparing to pre-test. Vice versa, the lack of lexical segmentation strategy knowledge among the comparison group may have led to misinterpretation of English linguistic features like stressed sounds for something else. The differences between the two groups over time can be summarised as shown in Table 23.

Table 23 Summary of qualitative analysis of lexical segmentation strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
<ul style="list-style-type: none"> • None reported • Low confidence in segmenting words from long stream of speech 	<ul style="list-style-type: none"> • Awareness of stressed syllables which could assist segmentation 	<ul style="list-style-type: none"> • None reported 	<ul style="list-style-type: none"> • Misinterpretations of pitch and lexical stress variations for expressions of emotions

5.2.2.3 Planning, monitoring and evaluation

This cluster of strategies is a combination of metacognitive strategies which was designed to train learners to be able to plan their course of action, to monitor their situation and select appropriate strategies to cope with the listening comprehension requirement, and to evaluate their performance and strategy use, providing them with a higher level of control over their listening comprehension. The participants in the intervention group practised using these strategies in class chronologically. They practised using planning before the start of a listening text. Then, while listening, they were taught to monitor their attention and their comprehension level. After the text was finished, they would evaluate their comprehension level as well as their course of action during listening in order to use it as a basis for planning for next time.

Planning

Reported use of planning found in the stimulated-recall protocol data indicated the influence of strategy instruction on the intervention participants. The participants from both groups reported using the planning strategy at both pre- and post-test, but the manner in which the participants from each group planned was different.

For the comparison group, five participants out of seven reported using planning at pre-test. Only two participants reported planning at post-test and they were the same ones who reported it at pre-test. Skylab is a lower proficiency level comparison participant and is one of the two who reported it both times.

- Researcher: So, when you wrote here, did you listen to the entire passage then write or you listened and wrote at the same time?
- Skylab: Well, we got to listen twice, right?
- Researcher: Yes, for the first task you got to listen twice and you got to listen one more time before answering the questions.
- Skylab: It seems like I just wrote down whatever I could hear in the first round and I would focus on the part that I don't understand in the second round. If it was wrong, I would correct it.

Her manner of planning depended on the number of times she got to listen to the passages and was consistent at both pre-test and post-test as can be seen from the excerpt from her post-test stimulated recall interview data below.

- Skylab: I could recognise some words so I noted them down. I just listen for what he studied after that and why... why did he choose to study history. Something like that.
- Researcher: You said you 'just listen for'. How did you do that?
- Skylab: Well, I listened. Hmm... Like... Actually, I would look at the second page first to see the questions. Then, I'll remember the questions and wait for the answers of the question.
- Researcher: I see. And you used what you got for free-recall task as well?

Skylab: Yes, I did.

Moreover, Skylab used the comprehension questions as a goal and planned the entire task around it. Though she claimed that she understood most of the text, her listening task score and her explanation proved otherwise. The underlined part of the excerpt is an example of what she claimed to have recognised as the content of the passage whereas in actual fact the reason Jake chose to study history was not mentioned neither in the passage, nor in the comprehension question of this passage. Skylab caught a single word ‘independent’ and unsuccessfully elaborated that it described the reason while this word actually came from the word ‘independent study’. In addition, the question asking about why the speaker liked their area of study is in Mary’s passage. Skylab might have quickly read the questions before the free-recall task started and mixed up the passages, leading to incorrect interpretation.

For the intervention group, three participants out of seven reported planning at pre-test and five out of seven reported it at post-test. Out of the three who used planning at pre-test, two of them also reported it at post-test, one of whom was, Joy, a lower proficiency group participant. At pre-test, she reported online planning, which is making a plan while listening to the task, leading to the use of selective attention:

And so then, you know, like a week before the exam, I just start reading.

Deaw: I see.

Jake: That’s pretty much my university life.

Joy: This one I chose to focus only on the man’s answers. Like, he woke up and what he did etc.

Researcher: Why did you decide to focus on that part?

Joy: Comparing between these two passage (Jake’s and Mary’s), this one (Jake’s) is more attractive for me.

Researcher: How is that?

Joy: This one (Mary’s), the answer was too long. This one he spoke very attractively.

Researcher: Attractive in the sense that it’s

Joy: It was in chunks and I understand. This one (Mary’s) was too long....

Joy chose to use selective attention as a plan to focus on the man's answer because his speech was more appealing for her in terms of length. This suggests that the underlying reason for her course of action depended on the evaluation of her ability to comprehend connected speech, which did not lead to success. At post-test, the planning strategy led her to improvement, which may have arisen from the change in the source of her plan.

Joy: The first part (free-recall part), I would just listen because we can listen twice, right? So, if I can't catch some point, I would just leave it for the next round and fill in the gap.

Researcher: What about before listening? Did you do anything?

Joy: I did. I gathered my concentration and trying to think about what I would listen to.

Instead of using negative evaluation about her ability to set the course of listening processes, she used evaluation of task structure to choose appropriate steps to maximize her comprehension.

Another difference is the time at which the strategy was used. It is to be noted that at pre-test none of the participants reported using planning before the listening task began. At post-test, only the participants from the intervention group reported planning their course of action before listening. Four out of five participants who reported planning at post-test used it before the listening text started and three out of five did not report planning at pre-test.

Snow, a participant from the higher proficiency level intervention group, did not report using planning strategy at pre-test but did so at post-test. Not only did this strategy emerge at post-test, it also seemed to be employed at a particular point in the listening task:

Snow: Once I got the listening test, I immediately looked at this page first.

Researcher: The comprehension questions on the second page?

Snow: Yes, I looked at the second page first. I wanted to see what the questions were so that I could make a prediction of what they would talk about. This question is ‘What did Jake study before he studied history?’ so the text must be something about Jake’s study. The other one asked about the subject Jake took in the history department. So, they must talk about Jake’s study. Something like this. (Snow 11HLI)

From the excerpt, Snow read the questions on the second page before the listening text started to make a prediction about the theme of the passage. She repeated this process before each passage started, suggesting a pre-determined course of action which she had laid before encountering the task. Planning a course of action before the listening text starts was a part of the strategy instruction and, as this pattern was not a part of her routine at pre-test, it may be inferred that the intervention had influenced this change.

Overall, it can be said that the Intervention group showed a change in its planning behaviour, while the Comparison group did not (Table 24).

Table 24 Summary of qualitative analysis of planning strategy

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Online-planning + Selective attention	Online-planning	On-line planning	On-line planning
None	Planning before the listening text started + Task evaluation	None	None

Monitoring

During the strategy instruction, the participants were also trained to monitor their comprehension, identifying the problem at hand and incorporating strategies to cope with the listening text demands. There were two strategies involved in monitoring processes; comprehension monitoring and problem identification.

Comprehension monitoring is the process through which learners monitor their level of understanding. The participants from both groups reported using this strategy even at pre-test and the intervention group participants practised monitoring their attention and level of comprehension in strategy lessons. In terms of number of comprehension monitoring instances, both the comparison group and the intervention group participants reported an increase in this strategy usage, with a slightly higher number from the intervention group. The purpose of teaching monitoring strategies is to enable learners to address issues occurring during listening situations as well as to adopt appropriate strategies to cope with the situation. Therefore, the level of precision in identifying the point which they still did not understand as well as whether the participant could immediately find a remedial strategy to address the issue is of interest.

At pre-test, the comparison group participants varied in the extent to which they were able to identify any specific points which they had not understood. None of them had reported using remedial strategies to address their lack of understanding. Both these points remained true at post-test. For example, Peter, a higher level proficiency comparison participant, reported monitoring specific parts of the passage that he did not understand, suggesting that he was able to identify issues encountered and he also made an attempt to explain the source of the issue.

Deaw: ...and what does studying those literatures require you to do?

Edward: Errr..... Well... We read mostly. It's a mixture of ...ermm...theory, critical theory and close reading, analysis of poem by poem, you know, line by line. Even, you know, you focus on one particular stance of a poem. Yeah, close reading, theory. Another part of the course was linguistics as well.

Deaw: Oooow! Linguistics? Why do you need to study linguistics?

Edward: Well.....It's all bound together with the English language.

Peter: I got a little more of the gist that he went to study English in Oxford. Then, he explained how studying here was different from other places. After that, I didn't understand because I was not very familiar with the vocabulary. About the questions, because we got to listen again, I read the answer of the first part before listening to the text again.

At post-test, the manner which he used comprehension monitoring did not change.

Kim: What about after you chose history?

Jake: Umm... for history,you don't really have to specialize. You can choose anything you want. But I tended to take courses in either Asian history or Asian-Europeans.

Kim: Asian History? Asian-Europeans history?

Peter: He explained that the history subjects that he chose were Asia and Europe.

Researcher: What about before that?

Peter: I couldn't catch that one. I only understood as far as that he studied economics first and nothing after that.

Researcher: So, how did you solve this issue?

Peter: Well, the first time I only got that he studied history. I started to understand the second time that what he wanted to study was economics. I wasted the third time checking this so I missed that.

Peter was able to identify the point that he could not understand but was not able to find a remedial strategy to fill the comprehension gap. When the researcher asked him a question probing into the issue, he answered by explaining the reason he missed the part, which may suggest that he was not aware of the steps he could have taken to solve the problem.

The intervention group participants, on the other hand, showed some differences between the two tests. At pre-test, some were able to identify specific points of understanding. Three of them could identify specific points they understood and did not understand, with two of them incorporating remedial strategies to cope with the point they did not understand. Four reported an overall level of understanding at pre-test. However, at post-test, all intervention participants were able to precisely identify where their point of understanding was and where they needed more information to understand. Some participants were able to follow up with remedial strategies but some participants incorporated inappropriate strategies or negatively used the result of comprehension monitoring as a source of self-evaluation.

Chocolat is a lower proficiency level intervention participant who reported being able to identify the point which she did not understand as well as able to find remedial strategies at post-test. At pre-test, despite being able to identify a few points of comprehension, she mostly reported her overall level of comprehension.

- Researcher: OK. That was the end of passage 1. How did you find it?
Chocolat: I don't really understand. There was one who was the teacher. I didn't really understand her.
Researcher: Why do you think you didn't understand?
Chocolat: Because I don't know how to explain. The way that she pronounced is not.... It was rather monotone. Something like that. I didn't really understand.
Researcher: What did you do then? You gave me a summary in the answer sheet. [Note: Her summary was incorrect.]
Chocolat: I didn't understand a lot so I just caught the main idea and elaborated what the content supposed to be and I guessed as well.

From this excerpt, Chocolat reported her overall level of comprehension of the passage resulting from the manner in which the speaker spoke. She attempted to compensate with unsuccessful use of other strategies, which led to inaccurate interpretation of the text. At post-test, by contrast, Chocolat was able to identify more specific points she had understood.

- Chocolat: Here is the part that I don't understand. The woman asked something like what did you find interesting about this, which I don't understand. A-le-verve or something like that (Note: she thought the word 'find' here meant to discover something and she cannot recognise the word 'A-level').
Researcher: Why do you think you didn't understand?
Chocolat: Because I didn't know the words.
Researcher: So, did you note anything down?
Chocolat: No, I did not.
Researcher: So, what did you do?
Chocolat: I tried to ponder what it was. I got to listen twice, right? I tried again the second time but I still did not understand, especially the part that say it wassomething?
Chocolat: GCE?
Researcher: Yes. I didn't understand that one too.

Not only could Chocolat identify point she did not understand, she was also able to successfully incorporate remedial strategies:

Kim: What about after you chose history?

Jake: Umm... for history,you don't really have to specialize. You can choose anything you want. But I tended to take courses in either Asian history or Asian-Europeans.

Kim: Asian History? Asian-Europeans history?

Chocolat: Well, I didn't understand the beginning of this part. After the woman asked what happened after he chose history, he said he chose to study Asian history and Asian-European. That's all I know.

Researcher: I see. You didn't understand the first half. Why do you think you understood the latter half?

Chocolat: Because I heard the words that I know and I could guess. The words and sentences were easy enough for me to understand.

Researcher: Alright.

Chocolat did not understand the first half of Jake's speech. Instead of dismissing the entire message, she chose to continue and focus her attention to find words she knew, using those words as starting point to continue listening to the message.

As mentioned earlier, only when the learners were able to identify the specific point that they did not comprehend were they able to change the strategies appropriate for comprehension requirements. However, if the strategy incorporated in response to the situation was ineffective, or if the learner could only identify the point not understood but could not find an appropriate strategy to solve the issue, comprehension monitoring may have had a negative effect on their performance and /or their self-efficacy.

Joy, a lower proficiency level intervention participant, reported overall comprehension monitoring once during the pre-test. At post-test, she was able to report the point she did not understand twice.

Kim: Can you tell me a little bit about it?

Jake: OK... Well, we had to take all the required courses and that was for anyone getting a bachelor's. I can't remember the...the requirement but, you know, basically the way it works in the States is they gave you a list. They have a list for you to choose from. You have to take one about woman's study or something....., two science courses....., two math courses. So, I took all of those.

Researcher: How about this part?

Joy: I couldn't quite catch this part. I don't understand it so I didn't write this part into my answer sheet.

Researcher: Why did you choose to not to write it down?

Joy: I thought this part didn't seem to be important because if it is important he would have emphasised it, right? But this part is long.

The highlighted part shows that Joy paused the listening text she was listening to report that she did not understand that part. She did not attempt to use any meaning related strategy to help with her understanding but, instead, discarded the information believing that it was not important based on the emphasis of the speaker's voice and the length of the speech. On that misleading basis, she chose to select what she believed was the gist and discarded irrelevant information, just as she had practised during the strategy instruction lessons. In other words, she applied a strategy she had been taught but in an inappropriate way. This suggests that comprehension monitoring, if not followed by appropriate remedial strategies, would still not improve comprehension.

Green, a higher proficiency level intervention participant, reported comprehension monitoring only a few times at pre-test but she reported it eleven times at post-test. All of her reports concerned the point she did not understand.

Deaw: Welcome back to the third break of "Spotlight", joining us today is Mr. Edward Whittington, a best-seller author of "The Mad King"

Green: This is some kind of a programme. Mr. Edward was the guest of this show. She said he was the best-seller or-ter. I don't know what it is.

Later, she negatively monitored her comprehension as she was not certain of the accuracy of her answers even when she was accurate.

Deaw: One essay a week? Wow.

Edward: You would have one week that you would read it to the tutor and another week where you would hand in your essay to the tutor and your partner for them to read.

Green: I don't know what he was saying. It's like he had to write. I'm not sure. He had to write one essay a week and read another week? I don't know. (embarrassed laugh)

As Green's level of self-efficacy did not improve much at post-test, repeatedly acknowledging her perceived failure to understand may have created a negative attitude towards herself, preventing improvement in self-belief.

The evidence from these participants seems to suggest that if they are taught to properly monitor their understanding in a precise way and to incorporate remedial strategies, their listening comprehension can improve. On the other hand, if they only learn how to identify the points they do not understand, without being able to find remedial strategies to cope with the situation, it means that they only become proficient in acknowledging their own shortcomings and become less aware of any accompanying success. These factors may negatively influence their self-efficacy beliefs. Hence teaching comprehension monitoring needs to be practised as part of a full cycle, with accompanying remedial strategies, with evaluation of their effectiveness, and with caution.

Comprehension monitoring is closely related to problem identification, namely the identification of the point in the listening passage which hinders comprehension. Again, listeners need to be able not only to precisely identify the source of the problem at hand but also to incorporate other strategies to solve the problems. From a quantitative perspective

(Table 21) reported usage was similar across the intervention and comparison group with both groups increasing their use at post-test. Nevertheless, when exploring how the participants solve the issues they identified, both groups showed some changes in their report.

At pre-test, five comparison group participants reported that they attempted to identify problems, but gave up after failing to find a solution to the problem. Moreover, some comparison participants used identified problems as a source of their negative self-evaluation.

Deaw: Almost completely?

Edward: Have you read Beowulf?

Deaw: Ah...yes and I couldn't understand a thing! hahaha

Edward: I know.

(After a long part of the text without pausing)

Researcher: Alright. This is the end of the first passage. How was it?

Skylab: I got quite confused with this one because the way that he spoke..

he didn't really ... something. I didn't quite understand when he

said. I could catch that he studied.. something..something like that.

Is that right?

Skylab, a lower proficiency level comparison participant, had trouble with the manner that the speaker spoke but was not able to precisely identify the problem. This excerpt suggests that she associate her level of understanding closely to the problem, which was the characteristics of the task.

This was also true at post-test. The comparison participants still associated problem identification with their self-evaluation. At post-test, an emerging combination of strategy use among comparison participants was problem identification and task evaluation. The two participants considered characteristics of the speech and structure of the tasks as the source of their problem.

Jackie: (Continue)... we probably had more than, say..., people doing an English degree, because we had the kind of... kind of language input as well.

Deaw: That is a lot. I admit. That's why you said you never had time for activities. You were practically studying all the time!

Jackie: Ermmm... that's more or less it, really.

Researcher: How is the latter part?

Suda: When he blended the sounds of the words together, it made me unable to understand him.

Researcher: So, what did you do?

Suda: I just skipped the part. Hahahaha (embarrassing laugh)

From this excerpt, it can be seen that Suda could identify that her problem was that she could not recognise words from connected speech and she considered the connected speech as the source of her level of comprehension, attributing her failure to an external factor. Not being trained to identify words from connected speech, she could not find another solution and eventually gave up.

For the intervention group, at pre-test, problem identification instances were combined with self-evaluation as many as nine times. Similar to the comparison participants at pre-test, some intervention group participants used problem identification as a basis of self-evaluation.

It is also interesting that six out of seven intervention participants reported combinations of problem identification and task evaluation and most of them regarded the combination as a reflection of their performance. Kat, an intervention participant from the higher level proficiency group, identified the manner in which the speaker spoke as the source of her listening problem.

Researcher: How did you do for this passage? (Jackie's passage)

Kat: I didn't really understand.

Researcher: Why do you think so?

Kat: Well, I'm not sure. I could only catch some words. Also, the accent that this speaker spoke. There were too much of 's' sound.

Researcher: Hmm?

Kat: It was the one that answered the question (Jackie). I could understand the other person more.

Researcher: You felt that the other one used a lot of 's'. Are you familiar with this accent?

Kat: No, I'm not. If I practice speaking with my friend it wouldn't have too much native speakers' accent. It was quite unfamiliar for me.

The participants' recognition of the listening text features and characteristics as the source of their listening problems suggests that they attributed their failure in listening to external factors which they were not able to control or change.

At post-test, the intervention participants used problem identification rather differently from at pre-test. Attribution of failure to features and characteristics of the text, depicted by the combination of problem identification and task evaluation, decreased from seven times, at pre-test, to only once at post-test. The combination of problem identification and self-evaluation was found three times at post-test, compared to nine times at pre-test. Some intervention participants reported comprehension monitoring following by problem identification, indicating that they first monitored their level of comprehension and then identified the problem that prevented them from understanding.

There was also emerging incorporation of a variety of strategies with problem identification to solve the problems. The variety includes identification of words and chunk, hypothesis formation, elaboration, selective attention, integration, translation, questioning prior knowledge and inferencing. The excerpt below shows that Choc, a higher proficiency level intervention participant, identified the word that she did not understand and used inferencing to make sense of the text.

Deaw: (Continue)... since you had to do a lot of assignments and attending lectures.

Choc: Here, he said 'a lot of assignment'. I didn't know what 'assignment' mean but I guess it must be related to 'an essay a week' he said earlier. You have to write an essay a week and you also have to go to lecture once a week.

The manner which the intervention participants incorporated other strategies to solve the problem at post-test indicated that they were not only be able to identify the problems but also able to find a solution. Their attribution of failure to external factors, the task features and

characteristics, also dramatically decreased at post-test, suggesting an improvement in adaptive attribution to their failure.

In summary, as shown in Table 25, while the Comparison group did not change in their use of monitoring strategies, the Intervention group did, showing an increased ability to precisely identify where their point of understanding was and where they needed more information to understand. A few participants were able to follow up with remedial strategies, and there was an emerging incorporation of a variety of strategies with problem identification to solve the problems identified.

Table 25 Summary of qualitative analysis of monitoring strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Comprehension monitoring + Remedial strategies (only 2 instance)	Comprehension monitoring + Remedial strategies (some ineffective) + Negative self-evaluation	Comprehension monitoring (No remedial strategy)	Comprehension monitoring (No remedial strategy)
Problem identification (No remedial strategy) + Self-evaluation (9 instances) + Task evaluation (9 instances)	Problem identification (With remedial strategy) + Identification of words or chunks + Hypothesis formation + Elaboration + Selective attention + Integration + Translation + Questioning prior knowledge + Inferencing + Comprehension monitoring + Self-evaluation (1 instance) + Task evaluation (3 instances)	Problem identification (No remedial strategy) + Negative self-evaluation	Problem identification (No remedial strategy) + Negative self-evaluation + Task evaluation

Note: + = The strategy is incorporated with the strategy above.

Evaluation

The final strategy in this cluster is strategy evaluation. Strategy evaluation was included in the intervention to provide learners with opportunities to reflect on their own strategy use and use the reflection as the source of planning for listening activity in the future. This strategy was intended to promote their levels of self-efficacy. However, there was very little change in this strategy use between pre-test and post-test.

For the comparison group, only one participant, Skylab from the lower proficiency level group, reported instances of strategy evaluation at both pre-test and post-test. At pre-test, she claimed that she was able to understand and she did not incorporate many strategies into listening.

Edward: Have you read Beowulf?

Deaw: Ah...yes and I couldn't understand a thing! hahaha

Edward: I know.

Researcher: This is the end of passage 1. How was it?

Skylab: I was a bit confused with this one because she said.. not very... I couldn't really follow the speed. But I could catch that when she studied Or something like that?

Researcher: What did you do after you caught the words?

Skylab: Well, it was like.. I could catch some words. I tried to separate the words. What are they called? How he explained or something I like. I just tried to listen and didn't use many techniques.

In an attempt to convince the researcher that she understood the text, Skylab confidently said that she did not use many techniques, possibly believing that using strategies meant she failed at comprehension. At post-test, the strategy evaluation also occurred while she was trying to convince the researcher that she understood the text.

Jake: Umm...Welll..... the US system is quite different. It's not like some countries, or Thailand, where you have to declare what you are going to choose before.

Skylab: I did not get stuck anywhere with this one because I still could

understand that she asked about studying something. Hmm.. I made some notes at the beginning.

At both pre-test and post-test, Skylab made attempts to convince the researcher that she was able to understand the listening text and she was an autonomous listener by claiming that she did not need the assistance of strategies. However, her actual level of understanding was lower than she believed it to be and the fact that she avoided using strategies may have cost her a lot of missing information.

For the intervention group, three participants reported evaluating their strategy use at pre-test. One participant only evaluated how little she took notes with no further explanation. Gift, a lower proficiency level participant, constantly monitored her performance as well as evaluating how appropriate her strategies were.

Gift: First I thought it was half German, half French. But when I heard 50-50, in my head, it became half of 25.

Researcher: So you listen and think through inside your head.

Gift: I listen and think inside my head, separating things in my head. What the last point was, what the point is now, then the next point and whether the next point is related to the previous point. If not, why is that? How come they are not related? Why can't I find their relationships?

It is to be noted that it is rather exceptional for a lower proficiency level learner who had not previously been given any strategy instruction such as Gift to naturally use strategies and constantly monitor her own performance in such ways. On the other hand, another lower proficiency level participant, Chocolat, also reported instances of strategy evaluation but with a very different point of view.

Researcher: Did you know what he explained?

Chocolat: He explained something like... his lifestyle, what time he woke up and what he usually did, his study, and that he revised before exams. I caught something like these. I think, for this passage, I can catch the words alright. The only thing left is translation. I could recognise the words.

Researcher: Only translation left?

Chocolat: Yes, only translation left. For some words, I could recognise the words but I didn't know what it means. So, I had to summarise again.

In this excerpt, Chocolat reported using summarisation to compensate for her lack of vocabulary knowledge. However, she evaluated the strategy use as the last solution:

Researcher: What if I ask you to do a similar task, how do you think you will do?

Chocolat: I could probably do as much as this time, but if I get to listen many times, I could do better. When you listen, if you are really good, you must be able to translate immediately, right? But if you don't really know much, you have to listen and guess what the story should be. Then you listen again to check if it's correct and processes them together.

This excerpt confirms that Chocolat believed that a good listener was someone who could immediately understand the message and incorporating strategies was a sign of failure. Therefore, when she did not immediately understand and had to use strategies, she evaluated it negatively.

At post-test, four intervention group participants out of the total seven reported evaluating their own strategy use. Two of them reported that they did not make notes. Choc, a higher level participant, reported that she could not use her usual strategies because of the structure of the listening text.

Deaw: One essay a week? Wow.

Edward: You would have one week that you would read it to the tutor and another week where you would hand in your essay to the tutor and your partner for them to read.

Researcher: How's this part?

Choc: I could understand it but when he spoke, he didn't speak very fast but he didn't finish his sentences. Normally, I would just listen to the text in one go. I was going to understand the sentence and then, he ... veeeeed (dragged the sound, expressing long length) I was like, easy! Easy! He would just add more to the sentence. At first, I understood that we have to read in the first week. In the second week, we have to write two essays to submit to the teacher and for partner to read. I heard partner.

She expressed that she was not able to efficiently use her usual listening strategy due to the manner in which the speaker uttered the words.

Chocolat, who perceived using strategies as a sign of failure at pre-test, did not express the same view at post-test. While she remained unable to find an appropriate strategy to solve her listening problem, she was able to evaluate that strategies were required.

Kim: Can you tell me a little bit about it?

Jake: OK... Well, we had to take all the required courses and that was for anyone getting a bachelor. I can't remember the...the requirement but, you know, basically the way it works in the States is they gave you a list.

Chocolat: I didn't understand this part. I tried to listen but I didn't understand.

Researcher: So, which part that made you feel you didn't understand?

Chocolat: The part which he spoke fast and connected. It also depended on the words as well. I listened and didn't know how to match with the words I know.

To summarise, and with an overview in Table 26, there were similarities and differences in the manner which the participants planned their course of action, monitored and evaluated them. The intervention participants used different sources for planning for different reasons, as well as planning at different times at post-test. For monitoring strategies, the intervention group participants' instances suggested that, at post-test, all of them were able to identify specific points which they did not understand and some were also able to find remedial strategies to compensate for the lack of comprehension, going beyond what they were able to do at pre-test.

Also, there was a difference between how the intervention participants perceived identified problems at pre-test and post-test. Finally, there was limited evidence of changes in strategy evaluation from one intervention participant only, alongside evidence of stability in a comparison group participant.

Table 26 Summary of the qualitative analysis of evaluation strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Strategy evaluation <ul style="list-style-type: none"> • One for effectiveness • One with negative attitude towards using strategies 	Strategy evaluation <ul style="list-style-type: none"> • More for effectiveness of strategies • No negative attitude towards using strategies + Task evaluation	Self-evaluation	Self-evaluation

Note: + = The strategy is incorporated with the strategy above.

5.2.2.4 Prediction and verification

Prediction and verification is a strategy cluster through which the participants activated schemata, or top-down information they already possessed, and verified it with received bottom-up information as well as reflecting on what would make sense. Making predictions about themes, the vocabulary which may appear in the text, and the content can help activate schemata and thus possibly reducing working memory load during listening. Once a prediction is made, it is formed into a hypothesis which needs to be verified, monitored and confirmed. Hypothesis monitoring and confirmation are also important for hypotheses that do not arise from predictions but that are formed while listening. Self-questioning is another strategy for

verifying hypotheses, meaning that when the participants questioned the accuracy of their own answers, they were monitoring the accuracy of the hypotheses formed.

Prediction

At pre-test, only two participants reported using prediction strategies. Chocolat, a lower proficiency intervention participant, reported that she made a prediction about the possible meaning of the passage after she had heard it once, which she then used to help her understand it better when she listened a second time.

Chocolat: Well, when I listened to the passage the first time, I don't really know how to guess. The second time that I listened to it, I started to know what they were talking about and I could guess. This one was from the third time that I listened so I felt like I understood a lot more but, as I said, I only got rough ideas about it.

Researcher: So, you listened to the entire passage first?

Chocolat: I usually listened to the entire passage first. If I can choose, I will listen to the entire passage and have a think or guess how the content would be. If I really don't know what it means, I will try to listen again.

At post-test, instances of prediction strategies were found in seven participants' recall. Three of them reported predicting the themes and content of the passages before they started, some with the assistance of the comprehension questions. The most consistent use was found among the higher proficiency learners, with much less consistency in the lower proficiency group.

Snow, a higher level intervention participant, consistently predicted the themes and contents of the passages before each passage started with the assistance of the comprehension questions in the task paper.

Snow: Once I got the task paper, I turned to this page first.

Researcher: You turned to the question page at the back first.

Snow: I turned to the last page first. I wanted to see the questions first so that I could make some guess what they were going to talk about. The question asked about what Jake studied before history. So, the passage must talk about Jake's study. The other one asks about the subjects he took in his history major. They must talk about Jake's study. Something like this.

Snow did not only make a prediction, but also verified it with the information she got from the passage.

Snow: First, I opened this page as usual and found that they would talk about what Mary studied during her bachelor degree, about her study. Then, when I listened, there were two women's voices. From the sentences, I thought this should be an interview because I heard the word company. So, it should be related to a company.

Kat, a higher proficiency level intervention participant, reported using prediction to help with answering comprehension questions at post-test.

Kat: Then, before they started to speak, I got to see the questions first. I would make a draft of what they would talk about or what question they might ask. Then, when I listened, I would hear the sounds that were different from other sentences, the ones that they put emphasis on. I would note those sentences down because I thought, since they emphasized those, they must be important.

The only comparison participant who reported predicting while completing the listening task is Skylab, but there was no clear pattern to her use.

Skylab: I would catch the part about what he studied more. I listened and translated into Thai. I understood and continued listening.

Researcher: Do you normally translate when you listen?

Skylab: Well, sometimes. If I am familiar with or know the definition of the word, I would guess that if this word means this, what the next thing should be about.

To summarise, as seen in Table 27, while the comparison group did not demonstrate any clear pattern of prediction, at either pre- or post-test, there was evidence of some intervention

participants modifying their prediction behaviour as a result of the strategy lessons they had received, by making predictions before the text started, as well as verifying these predictions later on.

Table 27 Summary of qualitative analysis of prediction strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
<ul style="list-style-type: none"> • On-line prediction 	<ul style="list-style-type: none"> • On-line prediction • Prediction before listening text started + Task evaluation + Hypothesis monitoring (verification) 	<ul style="list-style-type: none"> • Report from 1 participant with no pattern of use 	<ul style="list-style-type: none"> Report from 1 participant with no pattern of use

Note: + = The strategy is incorporated with the strategy above.

Verification

As mentioned earlier, in order for the prediction to assist comprehension, verifying the predicted hypotheses is important. Participants in the intervention group were taught to do so using hypothesis monitoring and hypothesis confirmation, with self-questioning appearing as a manifestation of hypothesis monitoring. From the numbers in Table 21, , it can be seen that the intervention group participants reported instances of hypothesis monitoring and hypothesis confirmation more than the comparison group participants at pre-test.

For the comparison group, at pre-test, there were five instances of hypothesis monitoring reported by three participants. Three times the strategy were used by itself and two times it was preceded by hypothesis formation. The highlighted chunk in the following excerpt shows Angel, the higher proficiency level comparison participant monitoring her hypothesis by questioning its accuracy.

Deaw: Aha. Okay. Is that why you have such a strong research base?
Mary: That's probably it. My degree's a lot about research training. It was a life full of research.
Deaw: That must be quite a stressful time!

Angel: She was talking about the reason she had a lot of work to do, was she? I guess. I guess there could be a lot of reports to write. So, she said yes it was because of her study.

At post-test, seven instances of hypothesis monitoring were reported by two higher proficiency level comparison participants. In most of those instances, the participants used hypothesis monitoring after hypothesis formation.

Jake: You are going to Atlanta?
Kim: Yes, I'm going to study at Georgia State University.
Jake: You're gonna love it there. (assuring sound)
Kim: Did you go there?
Jake: Nope I wish I did, though.
Kim: Where did you study?
Jake: Ahh... University of Wisconsin Madison.
Kim: Medicine? You were in medical school?

Peter: This part, Kim told him that she was going to Atlanta to study at the Georgia University, if I'm not mistaken. Jake told her that he went to a university with a name that sounds like medicine. So, Kim thought that Jake studied medicine.

In this excerpt, Peter expressed uncertainty towards the accuracy of his hypothesis, which suggests that he was monitoring it.

For the intervention group, at pre-test, sixteen instances of hypothesis monitoring were reported by five intervention participants. However, ten instances out of sixteen were from Gift, a lower proficiency participant who showed a very high degree of monitoring even before strategy instruction. She used hypothesis monitoring by itself, as well as following hypothesis formation, integration and identification of words and chunks.

Researcher: Aha. OK. Just how you thought then is enough.
Gift: Here. So I wrote spending time on 'literature' like...75%. That was my understanding.

Researcher: OK so French is 25% like this.

Gift: First I thought it was half German, half French. But when I heard 50-50, in my head, it became half of 25.

Researcher: So you listen and think through inside your head.

Gift: I listen and think inside my head, separating things in my head. What the last point was, what the point is now, then the next point and whether the next point is related to the previous point. If not, why is that? How come they are not related? Why can't I find their relationships? ...

This excerpt shows that Gift had adopted an approach which constantly incorporated various types of monitoring and evaluation. This approach was not common to other intervention participants.

At post-test, six intervention participants from both lower and higher proficiency levels reported forty-one instances of hypothesis monitoring. The instances were dominantly reported by two participants, Choc and Gift, at fourteen and twelve instances respectively. The rest of the instances were reported by the other four participants, ranging from one to five instances per participant.

Mary: It's a really nice progression from the A-level that I've done at school.

Deaw: A-level? You mean the GCE Advanced level from high school? How is your A-level related to your bachelor?

Mary: Ermm....My A-level was a bit unusual in the sense that I did both science and arts.

Deaw: Oh!

Kat: Huhuhu I didn't really understand this part but I heard they said it was interesting. I also heard that she got A-level and some kind of GCSE from high school.

Researcher: Hmm? What do you think they were? I saw you wrote about them in your listening task paper. [Note: She is the only participant who understood this part.]

Kat: I thought they might be... are they some processes you need to go through when you want to enter university? I am not very sure about this one.

Researcher: What did you guess this one from?

Kat: From my own study processes. I had to pass some tests before I could enter the university.

The excerpt above is from Kat, a higher proficiency level intervention participant. She expressed her uncertainty about the accuracy of her formed hypothesis, suggesting that she was monitoring it.

Hypothesis monitoring was also employed with hypothesis confirmation, task evaluation, and comprehension monitoring.

Deaw: Miss. Mary Ellsworth.?

Mary: Yes, I'm Mary Ellsworth. How are you today?

Deaw: Very good. Thank you. I heard some good things about you!

Mary: Thank you very much, madam. I'd like to have an opportunity to work in your company.

Deaw: If things go well, you will! Your master degree profile is quite impressive for our company.

Mary: I hope

Green: Hhhmmm... (sigh and silence for a while). It seems like she has got some kind of good thing happening. Then, I heard that this is 'master degree' and I'm not sure if this one is the interviewer or the interviewee.

Researcher: So, what did you do?

Green: I just kept listening.

This excerpt presents the manner in which Green monitored her hypotheses generated from task evaluation. From the structure of the passage, she hypothesised the passage was an interview and she made an attempt to identify the interviewer and interviewee while monitoring the accuracy of her hypothesised speaker identification.

For hypothesis confirmation, the number of hypothesis confirmation instances reported by the comparison and intervention participants was almost at the same level at pre-test. At post-test, while the number of the comparison group's instances decreased, the number of the intervention group increased by 24 instances.

At pre-test, instances of hypothesis confirmation from the comparison group were reported by three participants, but mainly by Angel, whose score in the listening tasks were the highest

among comparison participants. The excerpt below shows that she confirmed her hypothesis about Old English and Modern English by repeating the words in English.

Deaw: Could you explain a little bit what you did when you studied English literature?

Edward: Well...Erm..The course at Oxford is very wide ranging. It goes from Old English to Middle English to...you know... the Modernist and current living authors.

Deaw: ...and what does studying those literatures require you to do?

Edward: Errr.... Well... We read mostly. It's a mixture of ...ermm...theory, critical theory and close reading,

Angel: There was a question about it was when she was a student. Then, she explained that it was about English literature. There was English writing and modern English and Old English. She used the word 'old' and 'modern'. And also about learning about reading more than writing.

At post-test, only three instances of hypothesis confirmation were found from the comparison group participants' recall and they were reported by two participants, Peter and Nick. Peter is a higher proficiency level participant. He reported answering the comprehension questions with the note he made during the free-recall task. He confirmed the accuracy of the answers by verifying them through the listening text again.

Peter: This one I got the answer from when I finished listening. I knew that the answer to this question was psychology.

Researcher: So, you got the answer from your note.

Peter: Yes, I did.

Researcher: What about the second question?

Peter: I got it from the note as well. It was about why she chose to study psychology. It's because she liked science and this major is related to science.

Researcher: Did you get it from the first time you listened?

Peter: I hadn't read the question then. So, I only took notes the first time I listened. I used the second time to check if my answers really answered the questions.

For the intervention group, at pre-test, there were seven instances of hypothesis confirmation reported by four participants from both lower and higher proficiency levels. In the excerpt

below is an example of how Snow, a higher proficiency level participant, used repetition of the word she heard to verify the hypothesis she just formed.

Deaw: Oh! You must have great teachers! What did you study in your bachelor degree, Jackie?
Jackie: I did

Snow: Well, Jackie seemed to ... seemed like she just got a 'bachelor degree' bachelor degree or something. Then, Emily asked about what she studied.

At post-test, the participants reported many more instances of hypothesis monitoring. Nevertheless, most of the instances were predominantly reported by Snow and Choc, from the higher proficiency group. Choc also confirmed her hypothesis by repeating the same chunks in both English and Thai as if she held the sounds in her mind for verification.

Mary: Ermm....and....experimental psychology was all about understanding ... human minds and ...errr.... how humans process information..... as well as

Choc: This should be from the same sentence as before. It may be about 'understanding human minds' which mean understanding human's thought. That's what I heard then the other one I heard them talking about information.

The other intervention participants who reported hypothesis confirmation were Joy from the lower proficiency group and Green from the higher proficiency group. The fact that Snow, Choc and Green reported hypothesis confirmation may not be a coincidence since, during the fourteen weeks of intervention, Snow, Choc and Green were accidentally sat next to each other and were in the same group discussion when they were asked to reflect on their strategy use and performance. They chose the seats without the knowledge that the other had been invited to the stimulated recall as they were. Since the students were free to choose their own seats, the researcher were not able to control this environment.

Self-questioning is another form of monitoring the accuracy of one's hypothesis. It denotes learners' interrogation of their own possible answer or the best way to proceed, which occurs while monitoring the accuracy of learners' answers, hypothesis or interpretation. At pre-test, the comparison and intervention group reported rather similar numbers of self-questioning instances. At post-test, while the comparison group participants reported fewer instances of this strategy, the intervention group participants reported more instances.

At pre-test, though the comparison participants reported as many as thirteen instances of self-questioning, it was reported once each by two participants and another participant, Angel, reported the remaining eleven instances. The excerpt below shows that Angel constantly questioned her own answers. She questioned herself after forming a hypothesis (underlined) as seen in the first highlighted part and even interrogated herself during the formation of hypothesis as seen in the second highlighted part.

Deaw: (Continue).... Would you care to share with us?

Edward: It must have started when I was a bachelor student.

Edward: I studied English Literature at St.Peter's college in Oxford.

Angel: This person explained about his ... bachelor degree? Is it bachelor degree? I'm not sure. Bachelor degree in ... the word I heard before was 'literature'. It should be about literature or something related to writing. Is it about English?

At post-test, only seven instances of self-questioning were reported by comparison participants but they were reported by five different participants. Angel only reported self-questioning once at post-test, interrogating her hypothesis, which actually was incorrect. Others also reported self-questioning after using strategies, such as hypothesis formation, identification of words, integration and comprehension monitoring. In the excerpt below, Ally, a lower proficiency level comparison participant, explained that she was uncertain about her answer in the second comprehension question of a passage because she made a guess to get the answer.

Researcher: Alright. Let's see the answers here.

Ally: It seems like she studied a lot so I thought she was a hard-working student. I am not so sure about the other one so I answered that she spent less time studying than science students.

Researcher: Why did you think so? Could you tell me? How did you come up with this answer?

Ally: I guessed. Huhuhuhuhu (sound of extreme embarrassment)

For the intervention group, at pre-test, eleven instances of self-questioning were reported by four participants. Similar to the comparison group, Gift, a lower proficiency level participant, reported five of those eleven instances.

Deaw: Your presentation was wonderful.

Jackie: Thank you very much. Umm.... Sorry to ask but are you a new student? I've never met you before at any PhD seminar.

Deaw: Yes, I've just started my PhD study two weeks ago. I'm Emily Wong.

Jackie: Jacqueline Smith. You can call me, Jackie.

Deaw: Pleasure to meet you, Jackie.

Jackie: You too, Emily.

Gift: OK At first, it's like Jackie has just finished presenting. Is that right? And then...who? What was her name? Lil... something.

At post-test, six out of seven intervention participants reported at least one instance of self-questioning during their recall sessions, making a total of twenty-two instances. The instances demonstrate a variety of monitoring levels among intervention participants. In the excerpt below, Kat expressed her uncertainty of her hypothesised translation of the chunk 'miss lots of lectures'. Her added comment, in the underlined sentence, suggested that she was looking for some evidence to verify her hypothesis but failed to do so.

Deaw: Hahaha Can you explain a bit about being 'terrible'?

Edward: Well... I.. I missed them. I missed lots of lectures. I ... I ... They were all voluntary. Nothing was compulsory. Nothing was mandatory. You could attend them if you wanted to. If you didn't want to, well you could stay in bed.

Deaw: So, no roll call? (teasing)

Edward: No!! God! No! God! No. You were encouraged to be completely independent.

Kat: Then, he talked about what he did when he got a lot of 'assignment' or a lot of 'attending lecture'. He said he 'miss a lot of lecture' which translates into erm...

Researcher: What do you think it means?

Kat: Not attending lectures? Hahaha. Is it? I'm not sure.

Researcher: Aha.

Kat: I didn't catch the sentence after 'miss lecture'. Well, he spoke like...

Researcher: With stressed sound?

Kat: So, I couldn't catch it both times that I listened.

Kat did not just question herself, but also was able to identify the problem that generated her uncertainty.

In conclusion, as also seen in Table 21, while the number of reported instances of hypothesis monitoring strategy and hypothesis confirmation strategy from the comparison group at post-test remained similar to that at pre-test, the intervention participants reported many more instances of these two strategies. Table 28 also suggests that the intervention participants not only used these strategies more frequently, but they also incorporate other strategies to assist verification and confirmation of the hypothesised prediction that they had formed. This may also contribute to the intervention participants' higher success rate of hypothesis formation at post-test. For self-questioning, both groups incorporated other strategies after questioning their own interpretations at post-test but the types of strategy varied between groups.

Table 28 Summary of qualitative analysis of verification strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Hypothesis monitoring + Integration + Identification of words or chunk	Hypothesis monitoring + Hypothesis confirmation + Task evaluation + Comprehension monitoring	Hypothesis monitoring	Hypothesis monitoring
Hypothesis confirmation	Hypothesis confirmation	Hypothesis confirmation	Hypothesis confirmation
Self-questioning	Self-questioning + Hypothesis formation + Problem identification	Self-questioning + Hypothesis formation	Self-questioning + Hypothesis formation + Identification of words or chunks + Comprehension monitoring

Note: + = The strategy is incorporated with this strategy

5.2.2.5 *Listening for gist*

Gist is the overall meaning or the sense of the text. Gist can be comprehended without understanding every word. Identifying key words and evaluating the task at hand could help learners to understand the text, even with their limited input. Making sense from identified keywords can provide the sense of overall meaning. As learners in the present study were lower to intermediate listeners, relying solely on bottom-up information may limit their comprehension and incorporation of top-down information may compensate for their breakdown in comprehension. Evaluating the structure of the task including the listening text provide information about the aim of the task and the situation which the dialogue took place.

This information may also allow the learners to recall the similar listening task they had completed before.

There was an increase in instances of task evaluation strategy reported by both comparison and intervention groups at post-test as seen in Table 21. The reported instances of task evaluation can be categorised into two main categories. One is evaluation of prosodic features relating to task difficulty, such as intelligibility, speed, intonation, length and accent. Participants mostly perceived that these features increased the difficulty of the listening text. The other category is evaluation of task characteristics, such as task structure, number of speakers, situation or context of the conversation and vocabulary, which may lead to understanding the gist of the passage. When the instances were categorised, it was found that the pattern of task evaluation among intervention participants had shifted while that of the comparison group had not.

The comparison group, at pre-test, rather equally evaluated the prosodic features as well as the task characteristics; higher proficiency participants reported most of the task characteristics evaluation. At post-test, the comparison participants reported only three more instances than at pre-test and they still equally reported both categories of evaluation (evaluation of prosodic features relating to task difficulty and evaluation of task characteristics). Their perception of task difficulty concerning the prosodic features remained unchanged. The excerpt below from Ally, a lower proficiency level comparison participant, suggests that, at post-test, she found the task difficult because of connected speech and the speakers' accent.

Ally: I don't quite understand this speaker [Jackie]. Her words were blended together. She spoke with a foreign accent.

Researcher: What do you mean by 'foreign accent'?

Ally: Their words just blended together, not like when a Thai person speaks English. We speak word by word so I can understand. Here, it's like they pronounced -ed or -s so clearly that I thought it was another word.

For the intervention group, despite reporting twenty-seven task evaluation instances at pre-test, only two instances reported by one higher proficiency participant were task characteristic evaluation. Twenty-five instances described their difficulty in listening due to intelligibility and prosodic features of the passages, ranging from accent, intonation and length of the connected speech. For example, Chocolat, a lower proficiency participant, commented that the reason she did not understand the passage is the speaker's British accent.

Researcher: Could you explain where you said 'I don't understand people who speak like this'?

Chocolat: She [Mary] spoke almost like American or British teachers. She spoke like a British in the way that erm... I don't know how to explain. She spoke as if she didn't really want the listener to understand the words and only the native speakers of that language can understand.

Chocolat's evaluation of the speaker's accent did not persist at post-test. In fact, the intervention participants reported, at post-test, difficulty in listening arising from only intelligibility. Most of the task evaluation instances concerned task characteristics, such as the types of conversation, frequency of some words, the function of speaker in the dialogue (interviewer-interviewee), and situation of the dialogue. In the excerpt below, Green demonstrated that she used grammatical structure of the text to evaluate the situation of the conversation and the function of each speaker in the conversation.

Deaw: Now,...Let's...let's talk about what you studied in your bachelor degree. What did you do for your bachelor?

Green: Oh! That person must be an interviewer. I think it must be this situation, an interview, because she just asked another person to 'talk about master degree'.

Researcher: So, did you make a guess from 'talk about master degree'?

Green: I made a guess from 'let's talk'. She must be in an interview.

The shift in types of evaluation may be the result of the strategy instruction. The intervention participants were taught to look for task structure while listening, starting from predicting the

structure of the text from a given topic, verifying their task structure prediction and looking for task structure. In addition, their prosodic feature evaluation may also have shifted because lexical segmentation strategy lessons gave them a better understanding of English prosody.

Listening for key words is a strategy which most participants mentioned at pre-test. However, for most of them, their 'key' words were only words they could identify and/or know the definition. The issue was that, though they were able to identify words/chunks, they were not able to select or extract important message from those words. Furthermore, they were not able to make a connection between the words they identified to extract the gist. Thus, for the strategy instruction, an integration strategy was introduced through concept mapping as mentioned in Chapter 3. The intervention participants practised grouping identified words and extracted the themes or the overall sense of the passages using the grouping. The increase of integration instances from the intervention group at post-test contrasting with the comparison group's decrease seems to be evidence of the effectiveness of the integration strategy lesson. However, when exploring the nature of the intervention participants' use of integration, it can be seen that the intervention participants tended to use integration to form a hypothesis.

Deaw: How did you find it? Did you like it?

Mary: I found it really interesting.

Deaw: Why did you find it really interesting?

Mary: It's a really nice progression from the A-level that I've done at school.

Choc: [Sigh] I heard the chunk that it's 'nice progression in school'. This is what I heard. So I combined everything. I remember this one. So, I guessed that there was a 'progression' from her school. It might be that she found it interesting because she studied it up to a level at school. When she went to university, 'bachelor degree', there was more to learn than in 'school' so she thought it was interesting.

The excerpt from Choc, a higher proficiency intervention participant, suggested that she integrated the bottom-up information, which she identified, and combined everything into one hypothesis about Mary's interest in Psychology.

In strategy lessons, the intervention participants were also taught to extend their comprehension from the gist that they got by using elaboration and deduction strategies, which may contribute to the increase of words/chunks elaboration and general deduction instances reported by the intervention participants. These strategies may have contributed to the increase of over one hundred and fifty more hypotheses formed by the intervention participants at post-test, compared with the pre-test as seen in Table 21.

Overall, the intervention brought about changes in how learners in the Intervention group used evaluation while listening for gist (Table 28). They also used the strategy of integration more effectively to form hypotheses, a shift in behaviour that was not observed in the Comparison group.

Table 29 Summary of the qualitative analysis of listening for gist strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Task evaluation • Evaluation of prosodic features (more) • Evaluation of task characteristics (less)	Task evaluation • Evaluation of prosodic features (less) • Evaluation of task characteristics (more)	Task evaluation • Evaluation of prosodic features (equally) • Evaluation of task characteristics (equally)	Task evaluation • Evaluation of prosodic features (equally) • Evaluation of task characteristics (equally)
Integration	Integration + Hypothesis formation	Integration	Integration

Note: + = The strategy is incorporated with this strategy

5.2.2.6 *Listening for detailed information*

Listening for detailed information is also another common task used in many listening activities. The participants had experience with listening for detailed information activities and they would take a final listening test with this type of questions at the end of the semester. The strategy which was included to enhance their skill was selective attention, which denotes the participants' decision to listen out for certain parts of the text. Selective attention is a strategy which is responsive to the learners' goal of listening. When selective attention is used during a task, the strategy is then naturally shaped according to the structure of the task. The present study employed two listening tasks; the free-recall and listening comprehension questions. The listening comprehension question task was more familiar to the participants and the participants from both groups tended to focus on looking for the answer to those questions at pre-test. Peter, a higher proficiency comparison group participant, explained that he focused on the parts of the passage which could help him in answering the question.

Researcher: So, all this came from a summary?

Peter: Yes. I listen again when I had to answer the questions. When I read the questions, I realised that she had a psychology degree and the answer I got was close. So, I had to pay more attention. It seems like when you study psychology, you need to do research all the time and you also meet a lot of patients. So, when I read the question asking for Mary's free time activity, I had to listen carefully the second time to try and find what she did in her free time. She read 'fiction' and went to the pub.

Chocolat, a lower proficiency level intervention participant, explained rather similar steps.

Researcher: What about these answers? Where did you get them from?

Chocolat: I looked at the questions first and listen for those words. Like this question ask about the two language, so I listen for languages. If I hear the name of any language, I knew that would be the answer.

These similar steps might result from listening lessons they had prior to entering university. At post-test, the comparison group participants reported a similar number of selective attention

instances, as well as rather similar usage of the strategy. The next excerpt from Skylab, a lower proficiency level comparison participant, showed that the comprehension questions were the core of her attention, which she thought was the gist of the passage.

Deaw: Really? But you can't have more classes than I do. I have lectures, seminars and also lab classes!

Jackie: Well... We didn't have as much contact time as science students but, since I was doing a literature degree in French and German, we probably had more than, say, people doing an English degree, because we had the kind of... kind of language input as well.

Deaw: That is a lot. I admit. That's why you said you never had time for activities. You were practically studying all the time!

Jackie: Erm... that's more or less it, really.

Researcher: How's this part?

Skylab: I didn't really translate this part. I just got the gist, not every word.

I got that she I looked at the questions too. I caught how she worked. Her niece said it looked like she worked hard and she still worked hard now. So, I thought that she must be a hard-working person with good time management skill. For the last question

Researcher: The question, 'did she study as much as the science students?'

Skylab: I thought she did because she said that she had to learn some languages; French and German. So, she must not study less than them.

Selective attention strategy instances from intervention participants at post-test suggest that they incorporated selective attention in combination with other strategies, extending their levels of comprehension. The excerpt below from Kat, a higher proficiency level intervention participant, showed that she focused on important messages, rather than the questions.

Passage 2

Deaw: Miss. Mary Ellsworth.?

Mary: Yes, I'm Mary Ellsworth. How are you today?

Deaw: Very good. Thank you. I heard some good things about you!

Mary: Thank you very much, madam. I'd like to have an opportunity to work in your company.

Deaw: If things go well, you will! Your master degree profile is quite impressive for our company.

Mary: I hope that my degree will help me to understand more about people.

Deaw: Now, ...Let's...let's talk about what you studied in your bachelor degree. What did you do for your bachelor?

Kat: At the beginning, she asked another woman how she had been and now she is about to reach the important part of the passage.

Researcher: Hmm?

Kat: The part that she asked about the bachelor degree.

Researcher: Before this, you said she was about to reach the important part of the passage, what do you think the beginning part is?

Kat: It seems like a small talk so I didn't think it was important.

Task evaluation helped Kat decide to which part of the passage she should pay attention. This helped her to have a better understanding of both the gist and detailed message of the task.

The manner in which the participants in each group used selective attention may determine their success in listening comprehension. The comparison participants set their goals as being able to answer the comprehension questions. However, since they focused only on the answer of two questions, they dismissed the rest of the information required for constructing answers for the free-recall task. Incorporating strategies into their listening processes provided the intervention participants with new goals to listen for and, hence, acquiring a higher level of comprehension. This phenomenon might explain why the improvement in the free-recall task scores of the intervention participants was significantly greater than that of the comparison group and the difference in the comprehension question task was less significant.

To conclude, the main changes observed for the Intervention group which were not found in the Comparison group (in Table 30 on the next page) were that at post-test the former incorporated selective attention in combination with task evaluation, making more use of text evaluation and hence extending their levels of comprehension.

Table 30 Summary of the qualitative analysis of listening for detailed information strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
Selective attention +Task evaluation from comprehension questions	Selective attention +Task evaluation from comprehension questions +Task evaluation from listening texts	Selective attention +Task evaluation from comprehension questions	Selective attention +Task evaluation from comprehension questions

Note: + = The strategy is incorporated with this strategy

5.2.2.7 Inferencing

Inferencing denotes the use of information within the text or context to guess the meaning of unfamiliar words or chunks, to predict the outcome or fill in missing information. Some of the participants recognised inferencing as a technique to solve vocabulary problems which they encountered in reading and were able to transfer the strategy to the listening skill. Thus, instances of inferencing were found at pre-test. Two comparison participants reported using an inferencing strategy at pre-test but only the higher proficiency participant, Angel, successfully made inferences.

Deaw: Literature with language input? How much time did you spend on literature and language?

Jackie: Ermm.....let me think.....

Deaw: Language must have taken up quite a lot of your time since you learnt both French and German.

Jackie: Ermm..it was quite a while ago

Deaw: 50-50?

Jackie: 50-50? Err...well...., no, properly more like 75 literature 25 percent language.

Angel: That word 'les-tra-ter', I don't know if it was the word literature. It should be something related to literature or some writing pieces. I made a vocabulary guess from all that I listened to. Then, she said she studied German and French. First, Emily asked if she studied

half and half, fifty and fifty percent? Jackie said 75 percent was this writing, 25 percent was language.

For the intervention group at pre-test, one participant from the lower proficiency group and one from the higher proficiency group reported instances of inferencing and most of them were used to help them address difficulties when identifying words. Choc was able to use the preceding words to predict the following words with reference to the bottom-up information she got.

Edward: Well...Ermm...The course at Oxford is very wide ranging. It goes from Old English to Middle English to.....

Choc: It has a wide range, starting from old English to middle English.

Edward: (Continue) ..you know.. the Modernist and current living authors.

Choc: I remember this word. I had trouble listening to this word the first time as well.

Researcher: Which word was that?

Choc: That one 'mog-saw English' something. So, I made a guess. I thought that there was a word 'old' so the next word must be modern. I guess that there were old English, middle English and, for modern, I made it modern English literature.

Despite the participants' familiarity with the strategy, inferencing requires incorporation of a lot of information and, without practice, only higher proficiency learners were able to successfully apply the strategy. At post-test, there were more comparison participants reporting inferencing instances, but only two higher proficiency participants succeeded in applying it as shown in this example from Peter, a higher proficiency comparison participant.

Deaw: Experimental psychology? Can you tell me about it?

Mary: Ermm....and....experimental psychology was all about understanding.. human minds and ...errr.... how humans process information..... as well as understanding relationships between humans.... and how they operate within society.

Deaw: How did you find it?

Peter: Now she started to explain that she studied 'psychology', which I could catch but didn't know what it means. Then, she explained

that it was about understanding human minds and relationships between people. So, I realised that word means psychology.

In the inferencing lesson within the intervention, the intervention participants were taught to make inferences using surrounding information, grammatical structure and opinions of the speakers to fill in the missing information, and were given opportunities to practise using the strategy. Moreover, they were taught to use information gained from other strategies such as task evaluation and elaboration, to verify or extend their inferences.

At post-test, there was an increase in instances of inferencing reported by four intervention participants. Two more intervention participants, one from the lower and one from higher proficiency groups, reported successfully using inferencing. One of them was Chocolat, a lower proficiency level participant, who reported three instances of inferencing.

Deaw: Experimental psychology? Can you tell me about it?

Mary: Ermm....and....experimental psychology was all about understanding.. human minds and ...errr.... how humans process information..... as well as understanding relationships between humans.... and how they operate within society.

Deaw: How did you find it?

Chocolat: Now I know what the woman studied in her bachelor degree. She studied 'psychology – experiment psychology' which I don't know what it means but I knew that it is related to understanding human minds and human relationship, or something like this.

In this excerpt, Chocolat realised that the meaning of the word that she did not know lies in the surrounding information, making her understand the gist of this message without knowing the definition of the word.

Hence the main change in inferencing brought about by the intervention was an increase in the number of Intervention students using the strategy and also more effective use of it (Table 31).

Table 31 Summary of qualitative analysis of inferencing strategies

Intervention		Comparison	
Pre-test	Post-test	Pre-test	Post-test
2 participants reported, only 1 used effectively	4 participants reported effective use	2 participants reported effective use	More participants reported, only 2 used effectively

Note: + = The strategy is incorporated with this strategy

5.3 Summary

This chapter demonstrates the differences in strategy use between participants from the comparison and the intervention groups. The differences not only lie in the number of instances which the participants reported, but also in the combination of strategies to reach comprehension, the effectiveness of each strategy use and the time when strategies were applied. These differences in strategy use contributed to the difference in listening comprehension task performance between the comparison and intervention group. The relationship between strategy use and the listening task scores, as well as the self-efficacy levels, will be discussed in the next chapter.

Chapter 6 Discussion

6.1 Introduction

This chapter discusses the results presented in Chapter 4 and Chapter 5 as well as relating them to the existing literature on second language listening. The discussion is structured according to the research questions, starting with the nature of listening self-efficacy among Thai learners, the effect of strategy instruction on their levels of self-efficacy, listening comprehension and reported strategy use. It also considers whether the participants from different proficiency group benefited from the strategy instruction in the same manner. Finally, the limitations of the present study and its contribution to the field of study are presented at the end of the chapter.

6.2 The nature of self-efficacy in listening comprehension among Thai EFL learners

Self-efficacy in listening comprehension among Thai EFL learners was explored from three perspectives: the level of their self-efficacy, the relationship between their self-efficacy and listening comprehension performance and the nature of their attributions for their success or failure in listening.

The participants in the present study were first year students of a university in Thailand and the data collection was conducted in the first semester that they entered the university. The participants' pre-test level of self-efficacy, as elicited through the questionnaire, therefore indicated the level their self-efficacy had reached through the experience of twelve years in compulsory education in Thailand.

As reported in Chapter 4 section 4.2 Table 10, levels of pre-test self-efficacy spanned a wide range from ten to ninety percent confidence that participants had the ability to complete similar listening tasks in the future. The mean score however was relatively low, below 50 percent.

The large standard deviations suggested that there was a high degree of variability among the participants. Thus, many learners did not have a strong belief in their ability to accomplish listening comprehension tasks. Levels of self-efficacy were also found to be significantly related to levels of listening comprehension in both listening tasks, although at low to moderate levels. This result is consistent with previous research. Graham (2007) also found that the levels of self-efficacy of the French learners in England were generally low at pre-test. The consistency of these results may imply that listening is widely perceived to be a difficult skill across a range of second and foreign language learning contexts.

The open-ended items in the questionnaire investigated the extent to which participants' attribution for their success and failure was 'adaptive'. 'Adaptive' denotes attribution of performance outcomes to factors which are internal, unstable and controllable. 'Maladaptive', by contrast, refers to attribution of performance outcomes to factors which are external, stable and uncontrollable. An adaptive attributional profile is therefore important for self-regulated motivation as it indicates a belief that improvement is possible. Participants were found to have moderately high levels of adaptive attributions for success (mean score 3.47 out of a possible 6), which means that they believed the source of their success depended on factors which allowed improvement. However, they showed lower levels of adaptive attribution for failure (mean 2.30), suggesting that they believed overcoming failure was something not really within their personal control. This low mean may confirm the conclusion drawn by Carpenter (2000) who argues that in collective cultures, such as is found in Thailand, attributions for failure tend to be more external rather than internal.

It should be noted, however, that many participants chose to answer questions either about attribution for success or about attribution to failure rather than both. It is possible that learners saw their language performance, not as a mixture of success and failure, but as either a success

or a failure on a continuum. In other words, some were unable to conceive of being ‘successful’ or ‘unsuccessful’ in listening. In the present study, the participants who chose to answer only one question mostly chose to answer the question about attribution of failure, which could mean that they considered themselves unsuccessful listeners. It might also suggest that learners had not really ever thought about why they were achieving as they were, suggesting lack of insight on their part as to why their performance was as it was.

Information about pre-test self-efficacy was also gathered through the stimulated recall interview. First, many participants set just word/chunk identification as goal, reflecting low levels of self-efficacy in listening – in other words, learners did not expect to be able to understand very much. They also chose to focus on easier parts of the passage. Some stimulated-recall participants were aware that being able to identify words or chunks, which was all they thought they could do, was not enough to comprehend the passage in any meaningful way. This awareness may be derived from low-levels of self-efficacy, convincing them that whatever they accomplished was not enough, as they had not reached full comprehension. This might reflect their inability to set proximal or reachable goals which in turn may have deprived them of the opportunity to experience small successes. Experiencing such small successes could build mastery experiences which are the most crucial source of self-efficacy (Bandura, 1997). The participants also chose to avoid listening to some parts of the listening texts due to low self-efficacy in lexical segmentation strategies or word recognition strategies.

Self-efficacy levels may also have influenced metacognitive strategy use, such as planning and comprehension monitoring. Believing that they would not be able to comprehend the entire passage, several participants accordingly planned their course of action by focusing on only some parts of the text. However, many focused on what they did not understand instead of what

they could understand. At pre-test the strategy of problem identification was reported but involved many participants pointing out their problems without any attempt to solve them. Identifying problems without resolution made their failure apparent, again reflecting, and perhaps contributing to, low levels of self-efficacy.

The low levels of self-efficacy as well as low levels of listening comprehension suggest that the participants in this study were unskilled at listening and aware of it. This contradicts some studies which found that learners were unskilled and unaware of it (e.g. Dunning, Johnson, Ehrlinger, & Kruger, 2003). There is also the possibility that learners set an expectation of their level of performance and were not able to change it according to their actual performance. Being unskilled is common in all novice learners and evaluation of their level of ability might be influenced by previous experience or cultural convention of self-evaluation. Learners in some cultures, especially ones which foster individualism, may evaluate their individual performance higher than their actual levels. Learners from collective cultures, on the other hand, may evaluate their individual performance to be lower than the actual level as they lack of confidence when performing an individual task or are influenced by the culture's expectation of competencies (Bandura, 2001; Oettingen, 1995). Most Thai people anticipate their ability to learn a language to be low and attribute their learning to external factor such as luck (Kirkpatrick & Young, 2014). These beliefs could affect the learners' evaluation of their levels of ability.

6.3 The effect of strategy instruction on self-efficacy, English listening comprehension and reported use of English language listening strategies

This section discusses the effect of strategy instruction on three variables; the level of self-efficacy, the level of listening comprehension and the reported use of English language listening strategies. The discussion incorporates the results from both quantitative and

qualitative data in order to provide a more comprehensive explanation to the effect, as well as the lack of it.

6.3.1 Effect of strategy instruction on self-efficacy

The results from the descriptive statistics and the 2×2 ANOVA (as reported in 4.3.2.1) indicated that both the intervention and the comparison group improved at post-test and the improvement of self-efficacy of the intervention group was greater than that of the comparison group, but not at a statistically significant level. The results of the Mann-Whitney U test indicated that the level of adaptive attribution for success and failure at both times did not differ between groups at either pre or post-test. The means suggested that both groups had increased levels of adaptive attribution at post-test. The Wilcoxon Signed Ranked test suggested that between pre and post-test the intervention group significantly increased their level of adaptive attribution for success but not their adaptive attribution for failure.

From the quantitative data, it could be inferred that the strategy instruction did not have much impact on intervention group participants' level of self-efficacy. The fact that both groups showed higher levels by post-test could be due partly to gaining more experience in listening comprehension and the experience of having a different teacher (the researcher taught both groups). Though the participants in the comparison group did not receive the explicit strategy instruction, they received listening lessons which incorporated pre-listening activities and various types of listening activities, which may have differed from those that they had received before. They may have never experienced a listening lesson with whole-class activities before and the new experience may have built their confidence in listening. The participants were only informed that they were participating in a research study without knowing whether they were in the experimental or comparison group. Therefore, a Hawthorne effect among the comparison and intervention participants was possible. In addition, in all classes that the researcher taught,

there were common class rules. First, mistakes were tolerated in the classroom whereas, in common classrooms in Thailand which they may have experienced, the students were taught with correct-incorrect principles and the consequence of making mistakes could be punishment. Another rule was that laughing or making fun of other students' mistakes was strongly discouraged in the class. The knowledge that they would not be ridiculed by their peers created a secure and supportive environment for learning across both the comparison and intervention group.

Despite not having significantly higher levels of self-efficacy than the comparison group at post-test, the intervention group participants did show greater improvement. The improvement also coincided with a significantly higher level of adaptive attribution for success, meaning that they attributed their success more to internal, non-static and controllable factors, which is held to contribute to a positive sense of self-efficacy (Hsieh & Schallert, 2008). It is possible that self-efficacy takes time to develop and that these positive signs from the intervention may have developed further had it lasted longer.

The intervention in Graham and Macaro (2008) lasted six months. In that study, despite the success of strategy instruction in improving French language learners' levels of self-efficacy in comparison to learners who did not receive the instruction, there was not clear distinction between the high-scaffolding group, who received awareness-raising procedures and feedback aiming to emphasise a connection between strategy use and the performance outcome, and the low-scaffolding group who received only strategy instruction. Nonetheless, the high-scaffolding group showed greater improvement in self-efficacy which might have reached a statistically significant level had the intervention been still longer. Thus, both the present study and earlier research suggests that strategy training that focuses on self-efficacy development requires ample time to take real effect.

Another plausible explanation for the non-significant improvement of self-efficacy in the intervention group may also lie in the participants' strategy use. The stimulated recall data indicated that their manner of using monitoring strategies, namely problem identification and self-evaluation, taught in the class, may actually have had some negative effects. The participants were trained to monitor their comprehension as well as identify problems so that they could find a solution. However, some participants were only able to identify the problems; for them the problem identification strategy, without being able to find a resolution, became the source of negative self-evaluation, which might have had a negative impact on their level of self-efficacy.

Negative self-evaluation may also have influenced their belief about their actual performance. As argued earlier, the ability to set goals is crucial for the development of self-efficacy and it is because it can lead to mastery experience, or the experience of success, which is the most important source of self-efficacious information (Bandura, 1997). Therefore, recognition of one's own success in comprehending listening passages is important for building self-efficacy. From stimulated-recall data, there was an interesting trend of participants being able to form many hypotheses leading to correct interpretation of the listening text but they questioned the accuracy of the hypothesis, believing that they could not in fact comprehend the passages. Their evaluation of performance, or self-appraisal, could have been influenced by their low self-efficacy and, in turn, not recognising that they had actually succeeded when they did deprived them of the opportunity to improve their self-efficacy.

This phenomenon highlights three points. First, strategies should be taught in a manner which ensures positive effect. Second, a strategy taught in isolation may have a negative effect and gaining the ability to orchestrate groups of strategies is important for language learners. Third, it provides further evidence that investigating the frequency of reported strategies gives an

incomplete picture. Studies into strategy instruction should also probe the manner of strategy use, whether it leads to positive or negative language performance and self-regulated motivation.

6.3.2 Effect of strategy instruction on English listening comprehension

The results of the 2×2 ANOVA from the free-recall and comprehension question tasks suggested that the intervention and comparison groups' levels of listening comprehension did not differ at pre-test but differed at post-test. The improvement in listening comprehension of the intervention group was significantly greater than that of the comparison group. The qualitative data confirm the intervention group's greater improvement at post-test as they reported hypothesis formation more than 150 times more than at pre-test and 95 percent of the hypotheses were accurate. On the other hand, the comparison group reported hypothesis formation only 44 times more and 90 percent of the hypothesis were accurate. This indicates that the greater application of the strategies taught in the intervention contributed to the higher levels of comprehension recorded for the intervention group.

Just as in previous studies (Graham & Macaro, 2008; O'Malley et al., 1985b; Thompson & Rubin, 1996; Vandergrift & Tafaghodtari, 2010), the findings of the present study provide empirical evidence that strategy instruction can have a positive impact on second language learners' listening comprehension.

Nevertheless, it is to be noted that the effect sizes for the ANOVA were rather small in both free-recall and comprehension question tasks, .072 and .035 respectively. A small effect size was also found in Graham and Macaro's study (2008) when the intervention and comparison groups were compared, namely .19. These small effect sizes may again be the consequence of the length of intervention. The participants in Graham and Macaro's study improved within six

months and the participants in the present study made a significant improvement within three months.

Moreover, the small effect size is possibly caused by the lack of scaffolding, which is an important process to make the connection between strategies and outcome more apparent, from the study due to the number of students. The researcher taught all four classes which consisted of approximately 150 students by herself. Each class had approximately 35 – 45 students and the intervention group consisted of approximately 90 students. The number of students also influenced the strategy instruction. Due to the large number of students in each classroom, the feedback given to the learners was delivered to groups rather than to individuals. The classroom size may have limited the use of scaffolding in the present study but it reflects the possibility of using strategy instruction in real classrooms in many countries where there are a large number of students in one class.

With the small effect size in mind, it is to be highlighted that the greater improvement of the intervention group in the present study corresponds with the qualitative results reported in Section 6.3.3, that the intervention participants were the only group who at post-test displayed knowledge of a variety of strategies and were able to select and discard strategies as required. In addition, the intervention group also incorporated a wider range of top-down strategies with bottom-up strategies at post-test. These skills, formed after strategy instruction, are likely to be the source of the significant change in success in listening comprehension among the intervention participants.

6.3.3 Effect of strategy instruction on reported use of listening strategies

The results concerning the effect of strategy instruction on the reported use of listening strategies, drawing on the questionnaire and stimulated recall data manifested slightly different

pictures of the changes in strategy use. The questionnaire data did not clearly indicate signs of changes in learners' strategy use while the analysis of the qualitative data from the stimulated recall interviews did.

Two forms of analysis were applied to the data from the adapted Metacognitive Awareness Listening Questionnaire (MALQ): ANOVA and Hierarchical Cluster analysis. The results of the 2×2 ANOVA on all seven adapted MALQ item strategy groups (as discussed in 4.3.2.3) did not show any significant difference in the change in strategy use over time between the intervention and the comparison groups.

There could be two underlying reasons which might explain these results. First, the Metacognitive Awareness Listening Questionnaire (MALQ) may not be able to capture every aspect of listening strategies. Although the MALQ is a standardised questionnaire which was validated with almost one thousand language learners from many different countries (Vandergrift et al. 2006) and had been processed through substantial statistical procedures, it cannot capture some strategies in the present study, such as lexical segmentation strategies. Many more varied strategies were reported during the stimulated-recall than are listed in the MALQ items. This difference may arise from the definition of language learner strategies used in the present study, which draws on the model of Macaro (2006), which treats strategies as the smallest unit of processing and therefore presents strategies in a very fine-grained manner. The MALQ, by contrast, lists strategies that are not particularly fine-grained. In addition, the MALQ presents self-efficacy and other affective factors such as anxiety and attitudes included as a "personal knowledge strategy". In the present study, it was believed that self-efficacy is not a strategy as such and hence was presented differently in the adapted form of the MALQ that was used. With hindsight, greater adaptation of the MALQ might have been preferable. Another reason is that a questionnaire may not be the most suitable instrument to measure

strategy use. Questionnaires have been criticised for their limitations in providing a comprehensive picture of strategy use, especially when the change in strategy use is the focus of the study, as a questionnaire cannot easily elicit the manner in which learners are applying strategies, nor in what sort of combinations (Graham et al., 2011; Vandergrift & Cross, 2016).

Mindful of this issue, the researcher attempted to examine the change in strategy use by using Hierarchical Cluster analysis, which is not widely used in L2 research but has the potential to yield more meaningful insights into quantitative data (Yamamori et al., 2003). Despite the limitations of the questionnaire, the result of Hierarchical Cluster analysis suggested some changes in how the intervention participants were starting to use strategies. At the pre-test, participants from the intervention and the comparison group were distributed rather evenly among the positive cluster (characterised by perseverance and success) and the negative cluster (characterised by stagnation and lack of success – see Section 4.3.2.3 in Chapter 4). At post-test, the Hierarchical Cluster analysis suggested that approximately 65 percent of the intervention participants were classified into the positive cluster. While this analysis still cannot give a comprehensive picture of listening strategy use in the study, it does appear as a useful alternative approach to analysing questionnaire data on strategy use. Perhaps with a more developed questionnaire, this statistical procedure could provide more helpful insights still.

As mentioned earlier, the qualitative data from the stimulated-recall session provided a slightly different picture of the effect of strategy instruction on strategy use. In summary, there was a change in the amount of strategy use of both intervention and comparison groups between pre- and post-test. The intervention group participants however showed the greater change in strategy use. Increases were found in nine out of 19 reported metacognitive strategies and 15 out of 31 cognitive strategies. The most outstanding changes in metacognitive strategies were found in hypothesis confirmation and problem identification. The most noticeable changes in

cognitive strategies was in hypothesis formation followed by identification of word and vocalisation. The participants also showed evidence of changes in incorporating bottom-up and top-down strategies at post-test.

The intervention group alone incorporated the identification of words or chunks, a bottom-up strategy, with top-down strategies such as hypothesis formation, hypothesis confirmation, hypothesis monitoring and elaboration at post-test. This suggests that the strategy instruction may have influenced learners' pattern of strategy use. Rather than using the strategies separately, as they had done at pre-test, they shifted to orchestrating the strategies required by the learning situation in order to achieve the listening goal. The variety of incorporated strategies suggested an increased ability to select and discard strategies to match the listening situation. The ability to combine bottom-up and top-down strategies as well as monitoring the appropriateness of the interpretation was found to be an important discriminator between successful and unsuccessful listeners (Tsui & Fullilove, 1998).

The target strategy clusters which were included in the strategy instruction were lexical segmentation strategies, planning, monitoring and evaluation, prediction and verification, listening for gist, listening for detailed information and inferencing. The verbal account from the intervention group participants displayed changes in the strategy use in these clusters. The most important changes in these clusters are summarised below.

Across the strategies of identification of word or chunk, comprehension monitoring, problem identification, prediction and verification, and hypothesis formation, intervention group participants showed greater and more effective use at post-test compared with pre-test use. This was not the case for the comparison group.

At post-test, the intervention participants not only were able to identify more words and chunks from the bottom-up input, but they were also able to incorporate various top-down strategies

with the bottom-up information to gain better understanding of the listening text. The incorporation of bottom-up and top-down information was also found in Tsui and Fullilove's study (1998) and it supports Field's (2008) view on the use of top-down strategies to compensate for the incomplete bottom-up information. The use of strategies for both types of information may provide the participants with more information for comprehension and may contribute to the improvement in listening comprehension.

At post-test, all participants in the intervention group were able to monitor their comprehension but only some were able to incorporate remedial strategies for the comprehension breakdown. Monitoring was less successful for learners if they did not get beyond the identification of where the problems lay.

For problem identification, both the intervention and the comparison groups reported using identified problems as a base for negative self-evaluation at pre-test and this was also true for the comparison group at post-test. At post-test, instead of identifying the task as their problem, the intervention group participants attempted to use a variety of strategies to solve the identified problems, including identification of words and chunk, hypothesis formation, elaboration, selective attention, integration, translation, questioning prior knowledge and inferencing. Incorporation of cognitive strategies with metacognitive strategies was found in Graham and Macaro's study (2008). The participants in that study combined clusters of cognitive strategies; prediction, directed attention, phonemic segmentation, inferencing and verification, with metacognitive strategies, monitoring and evaluation.

The next strategy cluster is prediction and verification. At post-test, the intervention group demonstrated greater use of prediction strategy in terms of frequency and the use of hypothesis monitoring and hypothesis confirmation to verify the prediction. Finally, the combination of hypothesis formation and hypothesis monitoring was also reported by more intervention

participants at post-test, as well as more reports of combination of hypothesis monitoring with hypothesis confirmation, task evaluation and comprehension monitoring from the intervention group.

The intervention group's reported strategy use indicated slight changes in lexical segmentation strategies, planning, evaluation and inferencing strategies. The intervention participants reported awareness of English lexical segmentation strategies after the strategy instruction whereas the comparison group did not. Lexical segmentation strategy instruction may also have improved a learner's attitude towards segmenting words from a connected stream of speech; from avoiding listening to such speech, the learner actively engaged in the activity.

While the comparison group reported online planning according to the text structure only at both times, the intervention group started to actively engage in the listening task and plan their course of action before the listening text started, taking control over the situation. In a previous study, planning, or asking self-questions about one's ability and the task before listening, was found to facilitate learners' listening performance (Imhof, 2001).

At the beginning of the study, both the intervention and comparison group participants developed negative self-evaluation when they used a strategy as they believed it signified failure in comprehension. While the comparison group participants continued with the belief until post-test, the intervention group participants did not and started to demonstrate signs of strategy evaluation instead.

Inferencing requires incorporation of a lot of information to achieve comprehension and only two higher proficiency participants, one from each group, successfully used this strategy at pre-test. After the strategy instruction, three intervention group participants, from both higher and lower proficiency levels, were able to successfully use inferencing to guess the meaning of unknown words.

There are a number of interesting points in the learners' manner of strategy use arising from the stimulated-recall data, which cannot be observed without the qualitative data. First, changes in strategy use explored through qualitative methods such as the stimulated-recall protocol in the present study can give a much more comprehensive picture of how learners incorporate language learner strategies than quantitative method such as questionnaires. For example, task evaluation which helps the listeners to extract the gist of the listening text was reported by both groups in similar frequency at both pre-test and post-test. The stimulated-recall data indicated that, at post-test, the intervention group alone shifted from only focusing on the difficulty of the text due to prosodic features of the passage to focusing on the text characteristics which could assist their comprehension. The questionnaires are limited to giving an overview of frequency of reported strategy use from a large number of participants but are insensitive to the manner of strategy use, which arguably is much more important (Macaro, 2006).

O'Malley et al. (1985b) explained the mixed success of their listening strategy instruction that it was partly due to the nature of the selective attention strategy, which did not allow learners "to reflect on learning, analyze the relevance of strategy application, and foresee the potential for future use of strategies with similar activities" (p. 576). That was because selective attention in that study focused on listening to linguistic markers found in lectures, such as "Today I want to tell you about" (p.572) or the sequence markers such as first, second and third, but they were not the message content and they vary in different listening situations. In a study like that of Graham and Macaro (2008) or the present study, the selective attention strategy was incorporated with other strategies. Graham and Macaro (2008) introduced a directed attention strategy cluster in combination with monitoring and evaluation while the present study introduced selective attention in combination with task evaluation. The addition of task evaluation made it possible for selective attention to adjust to the dynamic of the listening tasks and this result highlights the effectiveness of teaching strategies in clusters.

Another important point to note is that the changes in how the intervention group participants used strategies was more prominent in the strategies which were taught earlier. A plausible explanation would be that the participants had opportunities to practise using these strategies in the class more than those that were taught later and, thus, they had consolidated the strategy use into their listening routine which they used when they completed the listening tasks at post-test. In addition, the intervention group participants, at post-test, demonstrated the ability to orchestrate strategies by selecting and discarding strategies according to the situation.

An interesting point found at post-test was that three intervention group participants who reported hypothesis confirmation sat next to each other and they were always in the same group during class discussion and feedback from the teacher. Therefore, the fact that these three participants used the same strategy may not be a coincidence and learners may acquire strategies by observing or participating in the task together. This might suggest the possibility of building a strategic classroom where the community of learning is created and both the teacher and other students are models for strategy use (Coyle, 2007).

6.4 Does the strategy instruction benefit learners of in different levels of proficiency in a similar manner?

The benefit of strategy instruction was investigated from the aspects of self-efficacy and listening comprehension. The results from the $2 \times 2 \times 2$ ANOVA did not indicate a significant difference in the self-efficacy improvement levels between the higher proficiency level and lower proficiency level intervention participants. This means that both proficiency levels gained a higher sense of self-efficacy at the same rate after the strategy instruction.

The lack of significant time \times condition \times proficiency interactions in the $2 \times 2 \times 2$ ANOVA on both the free-recall and listening comprehension question tasks indicated that proficiency was

not a factor influencing the effect of the intervention. Both proficiency groups improved their performance in listening comprehension tasks at the same rate.

The qualitative data on strategy use also support the quantitative data as the analyses did not suggest a large difference between the pattern of strategy use between learners in higher and lower proficiency level intervention groups. The intervention participants showed improvement in strategy use regardless of their level of proficiency, and the improvement was of a similar nature across the proficiency groups. This differs from what was found by Vandergrift and Tafaghodtari (2010), in whose study only lower proficiency listeners benefited from the intervention.

The reason which led to different findings in the present study and that of Vandergrift and Tafaghodtari could be the form of strategy instruction. In the 2010 study, the strategy instruction focused on raising learners' metacognitive awareness of strategy use. Studies have found that the higher proficiency language learners usually demonstrate higher use of metacognitive strategies than the lower proficiency learners do (Goh, 1998; O'Malley et al., 1985a; Vandergrift, 1997, 2003). Therefore, while the awareness of metacognitive strategies was new to the lower proficiency learners, the higher proficiency learners may already have been aware of them and the awareness raising could not make much more impact on their listening at post-test. On the other hand, the present study encouraged learners to select and discard strategies in regards of the task requirements and their individual requirements. Therefore, learners of all proficiency levels could improve their ability.

6.5 Summary

This chapter presents the discussion of the results from the present study according to the research question in relation to previous literature. The results from quantitative and qualitative

analyses were compared. Thai language learners in the present study reported low levels of self-efficacy in English listening. Their attributions for success suggested a high-moderate level of adaptive attribution and their attributions for failure suggested more maladaptive attribution. The results from the quantitative data suggested a non-significant difference in the self-efficacy improvement between the intervention and comparison groups. The effect of the intervention, on the other hand, resulted in the intervention group improving in their listening comprehension significantly more than the comparison group. This finding coincides with the increase in hypothesis formation reported by the intervention participants in stimulated-recall sessions at post-test. Though the quantitative analyses could not provide evidence of changes in strategy use, the stimulated-recall data manifested the changes in manner of strategy usage reported by the intervention participants at post-test. The conclusion of the thesis including the summary, limitations and contribution of the present research study will be presented in the next chapter.

Chapter 7 Conclusion

7.1 Introduction

This chapter presents the conclusion to the present study. First, the summary of the study are presented followed by the limitations of the study. The contributions of the research methodology and findings are outlined. Finally, directions for future research are also suggested.

7.2 Summary of the study

This study aimed to investigate the effect of listening strategy instruction on self-efficacy, listening comprehension and language learner strategy use of Thai language learners of English. The participants in the present study ($N = 161$) were first year students in English compulsory courses in a university in Thailand. The rationale behind the study was derived from the learners' low levels of listening comprehension proficiency and lack of perseverance in completing listening tasks which were at suitable levels for them. It was anticipated that the learners' low level of self-efficacy was the underlying cause of the low perseverance which prevented them from learning. Their low levels of self-efficacy as well as low level of ability in listening comprehension could be the results of their previous education. The twelve-year compulsory education in Thailand included English as a compulsory subject. However, the curriculum has recently been changed from a grammar-orientated approach to a communicative language teaching approach and there are still issues concerning the implementation of the approach (Mackenzie, 2011; Office of the Basic Education Commission of Thailand, 2009). The learners' previous English language education did not emphasise listening skills and may not even have included listening lessons in their regular English classes.

Listening comprehension has been explained through various models. Anderson's cognitive model of comprehension includes utilization, perception and parsing, incorporating both bottom-up and top-down processes in language processing (Anderson, 2015). Rost described listening through four types of processing: neurological processing, linguistic processing, semantic processing and pragmatic processing (Rost, 2011). Field (2014) proposed a five-process listening model, with the processes resembling reading processes. The model consists of decoding, lexical search, parsing processes, meaning construction and discourse construction. Listening comprehension could also be explained in terms of the direction of information. Bottom-up processing concerns decoding of linguistic input and mapping it on to syntactic features of the language while top-down processing involves the use of pre-existing knowledge, world knowledge or context to make sense of the spoken text (J. Field, 2004; Tsui & Fullilove, 1998). Earlier studies favoured the use and teaching of bottom-up processing while recently researchers have tended to focus on top-down processing. In fact, the ability to orchestrate the two types of information is crucial for successful comprehension (Graham & Santos, 2015; Vanderplank, 2014).

Self-efficacy is a social cognitive theory denoting the personal belief of one's own capability to perform a task to a certain level of achievement in order to achieve a goal (Bandura, 1989, 1997). The level of self-efficacy influences people's choice whether to engage in a challenging activity or to avoid it because they believe that they do not have the ability to obtain positive outcome (Bandura, 1999; Schunk et al., 2014). The sources of self-efficacy information are enactive mastery experience, vicarious experience, verbal persuasion and physiological and affective states (for more detailed explanation, see 2.3.1.2) (Bandura, 1997). The manner in which past success and failure are interpreted, whether it is adaptive or maladaptive, influences the level of self-efficacy (Hsieh & Schallert, 2008).

Language learner strategies have been defined in various ways. This study adopted the view from Macaro (2006) which characterised language learner strategies as conscious mental activity applied in pursuit of a learning goal and which are transferrable to other situations. According to this model, language learner strategies were classified into two types: cognitive and metacognitive strategies. The number of strategies which lead to effectiveness depends on the situation and the goal of strategy use (Cohen, 2007; Macaro, 2006). The ability to appropriately select and discard strategies in the clusters in response to the learning situation and goal is crucial for the effectiveness of strategy use.

Language learner strategies provide learners with control over the situation, which is crucial for positive attribution of their performance outcomes (Graham, 2011). When learners attribute their performance to a controllable factor, they are able to predict their cognitive behaviour and strategies becomes predictions of their cognitive behaviour in the future, leading to the sense of self-efficacy (Macaro, 2006). Language learner strategies can also promote self-regulation through instrumentality - the association of strategies and outcome of their performance (Paris & Winograd, 1990). Listening strategies have been mainly explored for the strategies which good or poor learners use (Vanderplank, 2014). Studies into language learner strategy instruction have yielded mixed results of effectiveness (Plonsky, 2011). The effectiveness of listening strategy instruction is a topic of debate among scholars (e.g. Cross, 2012; J. Field, 2000; Renandya, 2012; Ridgway, 2000b) but all are agreed that more empirical evidence on the use and effectiveness of listening strategies is needed.

The research questions are:

1. What is the nature of self-efficacy in listening comprehension among Thai EFL learners?
2. What is the effect of strategy instruction on self-efficacy, English listening comprehension and the reported use of English language listening strategy?

3. Does the strategy instruction benefit learners of different levels of proficiency in a similar manner?

The design of the present study is of a quasi-experimental design with an intervention group, who received listening strategy instruction, and a comparison group, who received regular listening instruction which was not explicit. The levels of listening comprehension were measured through listening tasks consisting of a free-recall task and a listening comprehension question task. The level of self-efficacy, attribution for success and failure, and listening strategy use were elicited through the use of questionnaires. Listening strategy use was elicited through the use of adapted version of Metacognitive Awareness Listening Questionnaire (MALQ – Vandergrift et al., 2006). These instruments were implemented at both pre-test and post-test. The strategy clusters which were taught in the intervention were lexical segmentation strategies, prediction and verification, planning – monitoring – evaluation, listening for gist, listening for detailed information and inferencing. The data collection and the intervention were implemented over the course of fourteen weeks.

The quantitative data analyses indicated that the participants had moderate to low levels of self-efficacy at pre-test. There were positive moderate relationships between the levels of self-efficacy and the performance in the two listening tasks. The strategy instruction did not lead to a significantly different improvement in the levels of self-efficacy between the intervention group and the comparison group. The adaptive attribution of both groups improved at post-test but the differences between groups were not significant. By contrast, the intervention group significantly outperformed the comparison group in both listening comprehension tasks. There was not any significant change in strategy use of both groups at post-test but there was some evidence that more participants from the intervention group used strategies leading to more positive behaviour at post-test. All of the improvements in the levels of self-efficacy and

listening comprehension between the lower and higher proficiency groups were at the same rate.

The analyses of the stimulated recall protocol confirmed that the manner of strategy use as well as attitudes among the intervention group changed after receiving strategy instruction while the comparison group's remained the same as at pre-test. The frequency counts of the strategy occurrence suggested that the increase in reported use of strategies was greater among the intervention group participants than the comparison group participants. The intervention group participants began to use strategies in clusters and were able to evaluate the task requirements as well as their own requirements in order to apply appropriate strategies. Moreover, the intervention participants were able to incorporate various top-down strategies to compensate when the bottom-up information was not sufficient for interpretations.

Interesting points were raised on the benefit of using stimulated recall protocols to elicit the manner of strategy use, the greater number of strategy occurrences reported by the intervention group participants, and the evidence which suggested a possibility of creating a strategic classroom where both the teacher and the students were models of strategy use (Coyle, 2007).

7.3 Limitations

The present study has a few limitations. First, the participants in the present study were not randomly assigned to groups in order to control for experimental condition. The university in which the data collection took place would only allow the researcher to collect data and teach the classes on the condition that the groups remained intact. Therefore, the study adopted a quasi-experimental design and interpretation of any results in this study should be made with this consideration in mind. Random sampling would give the study a more robust design.

Then, the study collected the data at only two time points, before the strategy instruction and after the strategy instruction. Quantitative data collection occurred in the classroom using regular class time, meaning that more than two test points would have taken up too much curriculum time. A delayed post-test was not possible because some students had finished the English compulsory courses at the end of the data collection period and did not continue. In addition, the remaining students were distributed to many different classrooms in the following semester. A delayed post-test would have been useful to see whether the significant improvement in listening comprehension and the improved level of self-efficacy had persisted as was found in Graham and Macaro (2008). In addition, as discussed earlier, the MALQ may not be the most suitable instrument to measure reported strategy use. Had the MALQ been adapted more, it might have yielded more useful and reliable data complementing other sources of data in this study.

7.4 Contribution

The present study adds more empirical evidence to support the claims made that strategy instruction can improve listening comprehension. This makes a contribution to the field of language learner strategies as a whole, which has been criticised for being based on insufficient evidence (Renandya, 2012; Ridgway, 2000b). Though the quantitative evidence cannot provide definite proof that the strategy instruction led to changes in strategy usage, the qualitative data showed that the participants used the strategies taught in clusters, strengthening the evidence that the improvements in listening comprehension were the result of the intervention. The exploration of strategy use through stimulated-recall protocol data not only provides insight into the manner of strategy which is needed in the field (Graham et al., 2011), but also provides further evidence that incorporating both bottom-up and top-down strategies leads to improved listening.

The findings from the present study also confirm the close relationship between self-efficacy and strategy use as proposed by Macaro (2006). The qualitative data suggested that while appropriate strategy use had led learners to a higher sense of self-efficacy and adaptive attribution for success and failure, the inappropriate use of strategies could also undermine the perceived self-efficacy belief. Moreover, the findings of the study also provide more evidence to support a view proposed by researchers, such as Macaro (2006) Cohen (2007) and recently Grenfell and Harris (2014), that language learner strategies operate most effectively when used in clusters and the learners' ability to orchestrate strategies into cluster is significant for effectiveness of strategy use.

The present study also contributes to the field of listening and language learner strategies on a methodological level. Most of the studies conducted in this field have been conducted using quantitative analysis and explore the concept of language learner strategies through the frequency of reported strategies. Even a robust study, such as Graham & Macaro (2008), did not report whether the participants actually used the strategies taught. The combination of quantitative data and qualitative data in the present study provides evidence of the value of using mixed methods to explore the impact of strategy interventions. Besides, stimulated-recall protocol, which is a qualitative data collection method used in the present study, is not often used in listening or language learner strategy field. The use of stimulated-recall in the present study provides evidence of its benefit in eliciting strategies without interrupting the thinking process while the participants are completing the task.

The present study could provide an alternative pedagogical model for second language listening. Strategy instruction does not only provide a step for language learners to follow, but also provides steps for teachers to incorporate in their listening classrooms. Instead of teaching listening following a familiar routine without a rationale (Vanderplank, 2014), teachers can

adopt a strategy based approach which can improve their learners' level of listening comprehension and self-regulated motivation such as self-efficacy.

7.5 Suggestions for future research

There are many directions which future research can use the methodology and the result of this study to explore the effect of strategy instruction on learners' self-efficacy and listening comprehension.

First, as discussed that the MALQ may not be the most suitable questionnaire for the present study, it is interesting to see the result which a replicating study using a different questionnaire would yield. The questionnaire may be developed for learners to report their actual use of the cognitive and metacognitive strategies, rather than the awareness of the strategy use. Then, it might be possible for the quantitative data to demonstrate the effect of strategy instruction on the strategy use.

In the present study, the data were collected at only two time points, pre- and post-tests, as it was not possible to arrange a delayed post-test, which can examine the retention of the effect of strategy instruction on self-efficacy and listening comprehension. Next, scaffolding, which is an important procedure to assist learners in associating language learner strategies with the outcome of their performance, was not varied in the present study. It might be worthwhile to study the effect of varying levels of scaffolding on the learners' improvement, especially in the levels of self-efficacy.

Finally, all the strategy instructions in the present study were delivered by the researcher who has extensive knowledge about listening and language learner strategies. It is intriguing to explore the feasibility of having another Thai university lecturer to teach such listening strategy instruction in the same context as in the present study.

7.6 Summary

The Conclusion Chapter summarises the rationale of the study, context of the study, the design of the study, instruments for data collection and intervention, the results of quantitative data analyses and the results of qualitative data analysis. The chapter also discusses the limitations of the present study and its contribution to empirical evidence and methodological advancement in researching listening strategies. In addition, suggestions were given for future research study into the effect of strategy instruction on learners' listening comprehension and self-efficacy.

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Appendices

Appendix A: Listening tasks

Listening activity 1 (Pre-test listening task)

You will hear FOUR short passages about life in universities. Please write down IN THAI everything that you understand from the passage. There will be two-minute pauses between passages to give you time to write. You will get to listen to the passages TWICE. You will hear an example passage first.

Passage 1

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Passage 2

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Passage 3

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Passage 4

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Now you have two minutes to check all the answers before the next section begins.

Listening comprehension questions

You will hear all four passages again. This time, there will be no pause between passages. Please listen to the passages and write down short answers for questions 1-8 in Thai. You will hear the passages only ONCE. You have 2 minutes to look at the questions before the passage is played. After the passage is finished, you will have 3 minutes to check your answers.

Passage 1

What did Mr. Whittington study when he was at Oxford University?

.....

The programme which Mr. Whittington studied in at Oxford was different from other universities in England. What is the difference?

.....

Passage 2

During her bachelor degree, Jackie learnt two languages. What are they?

.....

How many percent did Jackie study literature and how many percent did she study languages?

.....

Passage 3

From the way that Jake spent time on a regular basis, what type of student was he?

.....

What are Jake's techniques for studying and preparing for examination? (In Thai translation, there is no indication of singular or plural.)

.....

Passage 4

Mary said bachelor in Psychology was an intensive degree. Why did she think so?

.....

What did Mary do outside of the classroom?

.....

☺ This is the end of Listening activity 1. Thank you very much for your cooperation ☺

Listening activity 2 (Post-test listening task)

You will hear FOUR short passages about life in universities. Please write down IN THAI everything that you understand from the passage. There will be two-minute pauses between passages to give you time to write. You will get to listen to the passages TWICE. You will hear example passage first.

Passage 1

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Passage 2

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Passage 3

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Passage 4

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Now you have two minutes to check all the answers before the next section begins.

Listening comprehension questions

You will hear all four passages again. This time, there will be no pause between passages. Please listen to the passages and write down short answers for questions 1-8 in Thai. You will hear the passages only ONCE. You have 2 minutes to look at the questions before the passage is played. After the passage is finished, you will have 3 minutes to check your answers.

Passage 1

What did Mary study for her bachelor degree?

.....

Why did Mary like what she did in her bachelor degree?

.....

Passage 2

Before Jake studied history in university, what did he study?

.....

When he studied history, which subject did he choose to study?

.....

Passage 3

From the way that Jackie studied, what kind of student was she?

.....

Can we say that Jackie had to study a lot less than science students?

.....

Passage 4

At the end of the conversation, Mr. Whittington said the Oxford system was too ambitious. Why did he think so?

.....

During his bachelor degree, did Mr. Whittington regularly attend lectures?

.....

☺ This is the end of Listening activity 1. Thank you very much for your cooperation ☺

Free-recall task scoring rubric

Band	Band description	General impression
0	Has no recognisable responses Does not show any sign of comprehension	The summary of these 3 levels will look like incoherent bits and pieces put together. The participants may write in Q&A format.
1	Is able to recognise a few isolated words Shows very little understanding in any part of the text Does not show ability to identify details in the dialogue Does not show ability to follow the change in the direction of the dialogue and speakers' opinion or information	
2	Is able to recognise isolated words and some basic sentences Shows very little understanding of the gist Shows very little ability to identify details Does not show ability to follow the change in the direction of the dialogue and speakers' opinion or information	
3	Is able to recognise some sentences and some words Shows some understanding of the gist Shows some ability to identify details Shows slight ability to follow the change in the direction of the dialogue and speakers' opinion or information	
4	Is able to recognise half of the sentences and some words Shows fair understanding of the gist but some gist is still missing Shows fair ability to identify details but some important details are still missing Shows fair ability to follow the change in the direction of the dialogue and speakers' opinion or information	The summary of these 3 levels will sound very coherent. The participants may still write in Q&A format but there is more connection in the content of the dialogue.
5	Is able to recognise most sentences but still missing some sentences Shows rather high understanding of the gist with little information missing Shows rather high ability to identify details but some minor details are still missing Shows high ability to follow the change in the direction of the dialogue and speakers' opinion or information	
6	Is able to recognise almost every, if not all, sentences. Some words could be missing but does not affect understanding of gist or details Shows fully understanding of the gist Shows full ability to identify details (some very minor details missing accepted) Shows high ability to follow the change in the direction of the dialogue and speakers' opinion or information	

Appendix B : Listening Comprehension Questionnaire

Part1: General information

1. Gender: Male Female
2. How many years you have had English instruction? _____ years
3. How many years you have had English listening instruction? _____ years
4. How many hours per week have you been exposed to English spoken texts? _____ hours
5. What is your English scores ? O-NET _____ A-NET _____

Part2: The statements below describe some strategies for listening comprehension and how you feel about listening in the language you are learning. Do you agree with them? This is not a test, so there are no “right” or “wrong” answers. By responding to these statements, you can help yourself and your teacher understand your progress in learning to listen. Please indicate your opinion after each statement. Circle the number which best shows your level of agreement with the statement.

	Strongly disagree	Disagree	Slightly disagree	Partly agree	Agree	Strongly agree
For example:						
I like learning another language	1	2	3	④	5	6

1. Before I start to listen, I have a plan in my head for how I am going to listen.	1 2 3 4 5 6
2. I focus harder on the text when I have trouble understanding.	1 2 3 4 5 6
3. I find that listening is more difficult than reading, speaking, or writing in English.	1 2 3 4 5 6
4. I translate in my head as I listen.	1 2 3 4 5 6
5. I use the words I understand to guess the meaning of the words I don't understand.	1 2 3 4 5 6
6. When my mind wanders, I recover my concentration right away.	1 2 3 4 5 6
7. As I listen, I compare what I understand with what I know about the topic.	1 2 3 4 5 6
8. I feel that listening comprehension in English is a challenge for me.	1 2 3 4 5 6
9. I use my experience and knowledge to help me understand.	1 2 3 4 5 6
10. Before listening, I think of similar texts that I may have listened to.	1 2 3 4 5 6
11. I translate key words as I listen.	1 2 3 4 5 6
12. I try to get back on track when I lose concentration.	1 2 3 4 5 6
13. As I listen, I quickly adjust my interpretation if I realize that it is not correct.	1 2 3 4 5 6
14. After listening, I think back to how I listened, and about what I might do differently next time.	1 2 3 4 5 6
15. I don't feel nervous when I listen to English.	1 2 3 4 5 6
16. When I have difficulty understanding what I hear, I give up and stop listening.	1 2 3 4 5 6

17. I use the general idea of the text to help me guess the meaning of the words that I don't understand.	1 2 3 4 5 6
18. I translate word by word, as I listen.	1 2 3 4 5 6
19. When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense.	1 2 3 4 5 6
20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension.	1 2 3 4 5 6
21. I have a goal in mind as I listen.	1 2 3 4 5 6
22. I find listening to English is hard because the sounds are not like Thai.	1 2 3 4 5 6
23. I feel that English sounds like a weird language.	1 2 3 4 5 6
24. Thai people are good at learning another language.	1 2 3 4 5 6
25. When I hear English, it's all down to luck if I recognise the words.	1 2 3 4 5 6
26. It's just chance if I can understand spoken English.	1 2 3 4 5 6
27. If I can't understand spoken English, then I think it's the teacher's fault.	1 2 3 4 5 6
28. I can understand English spoken words if I try really hard.	1 2 3 4 5 6
29. I can understand English spoken words if I pay close attention to them.	1 2 3 4 5 6
30. I would be better at English listening if I tried harder.	1 2 3 4 5 6
31. If I do badly at listening comprehension task in English, it's the teacher's fault.	1 2 3 4 5 6
32. I can understand spoken English when I listen to it in English class.	1 2 3 4 5 6
33. I feel confident when I listen to spoken English by myself.	1 2 3 4 5 6

Part3: The statement below describes a language learner's feeling about listening comprehension task. Please circle the words which correctly describe your feeling the most.

Example: I like/do not like learning another language.

I usually do **well/badly** in listening comprehension test. In this case, I usually **discuss/do not** discuss it with my friends.

Why do you do well or not well? Please explain what you think contributes to your English listening comprehension achievement.

When I do well, it is usually because _____.

When I don't do well, it is usually because _____.

Part 4: You have just heard a listening passage. You will have to listen to many passages like this in fundamental English course(s).

Circle the number on the line below that shows how sure you are that you could listen to a text like the one you have just heard and do the following:

1. Identify words in a stream of speech.

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

2. Make prediction about the text you are about to hear.

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

3. Can verify your prediction.

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

4. Understand the gist of what you hear.

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

5. Find general information.

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

6. Work out the meaning of unknown or incomprehensible words.

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

7. Recognise opinions expressed in the text

0	10	20	30	40	50	60	70	80	90	100	
Not sure sure			Somewhat unsure			Fairly sure			Very sure		Completely

☺**This is the end of the questionnaire. Thank you very much for your cooperation.** ☺

Appendix C: Listening strategy checklist

What I learnt last week	What I learn this week	What I will do or try to do next time.

Before listening

- ก่อนที่จะเริ่มฟัง
ฉันจะคิดวางแผนไว้ล่วงหน้าก่อนว่าฉันจะฟังอย่างไร
- ก่อนฟัง ฉันจะตั้งใจเป้าหมายในใจ
- ก่อนที่จะฟัง
ฉันจะคิดถึงข้อความที่มีลักษณะเหมือนกันที่ฉันอาจจะเคยได้ฟังมาก่อน

During listening

Attention and focus

- เวลาที่ฉันมีปัญหาในการทำความเข้าใจฉันจะฟังความสนใจไปที่ข้อความให้มากขึ้น
- เวลาที่ฉันใจลอย
ฉันจะทำให้รู้ตัวและรีบเรียกสมาธิกลับมาได้ทันที
- เวลาที่ฉันเสียสมาธิฉันจะพยายามดึงตัวเองกลับมา
- เวลาที่ฉันฟัง ฉันจะรีบปรับเปลี่ยนการตีความของตัวเองถ้ารู้ว่ามันไม่ถูกต้อง

Translation

- เวลาที่ฉันฟังนั้นฉันไม่ต้องแปลอยู่ในหัว
- ฉันแปลคำที่สำคัญในขณะที่ฉันฟัง
- เวลาฟังฉันจะไม่แปลคำต่อคำ

Use of prior knowledge

- ฉันใช้คำที่ฉันรู้อยู่แล้วช่วยในการเดาความหมายของคำที่ฉันไม่เข้าใจ
- เวลาที่ฉันฟังเรื่องใด
ฉันจะเปรียบเทียบความเข้าใจของฉันกับความรู้ในเรื่องนั้นที่ฉันมีอยู่แล้ว
- ฉันใช้ประสบการณ์และความรู้ที่มีอยู่แล้วช่วยในการทำความเข้าใจ

Use of context to adjust interpretation

- ฉันใช้แนวคิดโดยรวมของข้อความช่วยในการเดาความหมายของคำที่ฉันไม่เข้าใจ
- เวลาที่ฉันเดาความหมายของคำใดคำหนึ่ง
ฉันจะนึกย้อนกลับไปถึงทุกอย่างที่ได้ยินมาแล้วเพื่อที่จะดูว่าสิ่งที่เดานั้นสมเหตุสมผลหรือไม่

General understanding level

- เวลาที่ฉันพบความลำบากในการทำความเข้าใจในสิ่งที่ฉันได้ยิน ฉันจะไม่ยอมแพ้และฟังต่อไป
- ในขณะที่ฉันฟัง
ฉันจะถามตัวเองเป็นช่วงๆว่าฉันพอใจกับระดับความเข้าใจของตัวเองหรือไม่

After listening

- หลังจากฟังเสร็จแล้ว ฉันมักจะนึกย้อนกลับไปที่ฉันใช้วิธีการฟังอย่างไร และฉันอาจจะทำอะไรที่ต่างออกไปในคราวหน้า

Control over the situation

- เวลาที่ฉันฟังภาษาอังกฤษ มันไม่ได้ขึ้นอยู่กับใจคิดว่าฉันจะฟังคำต่างๆออกหรือไม่และถ้าฉันฟังภาษาอังกฤษออก นั่นเป็นเพราะความพยายาม
- ฉันจะสามารถเข้าใจคำในภาษาอังกฤษที่คนพูดออกมาได้ถ้าฉันพยายามตั้งใจฟัง
- เวลาที่อยู่ในห้องเรียน ฉันสามารถฟังภาษาอังกฤษได้
- ฉันรู้สึกมั่นใจเวลาที่ฉันต้องฟังภาษาอังกฤษด้วยตนเอง
- ฉันจะฟังภาษาอังกฤษเก่งขึ้นถ้าฉันพยายามมากกว่านี้

Appendix D: Main points of the listening text

Pre-test Version A

Edward

1. Introduction into the radio programme
2. Mr. Edward Whittington is the author of a best seller book called “The Mad King”.
3. His journey of success started when he studied English literature at St. Peter’s college in Oxford.
4. The course at Oxford ranges from Old English, Middle English to modernist.
5. The students need to study critical theory, do close reading, analysing poems line by line and studying a particular stance of a poem.
6. English literature students at Oxford also need to study linguistics, as it is bound together with the language.
7. Oxford English literature is different from other places in combining English language and English literature.

Jackie

1. Complimenting about the presentation and self-introduction
2. Emily was interested in how Jacky incorporated literature into language lessons and that Jackie’s knowledge in literature was deep but she could simplify it for audience.
3. Jackie did bachelor degree in modern and medieval languages and literature in French and German.
4. Jackie did French and German literature, heavily biased towards literature with language input.
5. The percentages of time spent between two parts were 75% literature and 25% language.
6. The language input was separated 50-50 between French and German.
7. Jackie had to submitting an essay every week and also went to classes.

Jake

1. Situation: two friends haven’t met for a long time.
2. Jake had a fun life but still can keep good grades. So, his friend asked for advice.
3. Jake thought the teacher added some nonsense stuff in the lesson.
4. Jake could figure out what would be in the test and what he could skip. He believe it’s his innate ability.
5. Jake’s routine: wake up at 11, play video games, hang out with his roommate until 4-5 then dinner and drinking
6. Jake only went to classes he found interesting, but that was rare.
7. Jake said he used basic knowledge and his previous reading in order to get good grades.
8. He started to read just a week before the exam

Mary

1. Congratulating on graduating with merit
2. Mary spent a lot of time working.
3. Mary said that psychology was an intensive degree in the sense that it has a lot of contact hours. She spent a lot of time learning, especially compared to art courses, but not as much as science ones.
4. Types of classes that she went to were lectures and weekly lab classes, on which she spent a lot of time.
5. In the lab, they did many different things, including learning about statistics and conducting research.
6. They did one experiment which they test memory for words and made-up words.
7. Mary’s degree was a research based one.
8. Mary studied hard but also read fiction, went to dance classes and hung out or went to pubs with friends.

Pre-test Version B

Jackie

1. Complimenting about the presentation and self-introduction
2. Emily was interested in how Jacky incorporated literature into language lesson and that Jackie's knowledge in literature was deep but she could simplify it for audience.
3. Jackie did bachelor degree in modern and medieval languages and literature in French and German.
4. Jackie did French and German literature, heavily biased towards literature with language input.
5. The percentages of time spent between two parts were 75% literature and 25% language.
6. The language input was separated 50-50 between French and German.
7. Jackie had to submitting an essay every week and also went to classes.

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7. Jake said he used basic knowledge and his previous reading in order to get good grades.
8. He started to read just a week before the exam

Post-test Version A

Mary

1. Situation: job interview
2. Mary studied experimental psychology in bachelor degree. (*Note: Just 'psychology' is accepted*)
3. Psychology is a subject about understanding human minds and how humans process information as well as understanding relationships between human and how they operate within society. (*Note: Student gets the point if any of these is mentioned.*)
4. Mary finds experimental psychology very interesting.
5. She liked it because it's a good progression from her A-Level.
6. Her A-level was unusual because it included both art and science subjects.
7. She also liked psychology because it's science with analytical component.
8. She did it at the University of Bristol. (Additional point)

Jake

1. Situation: on the plane, Jake couldn't find his gum so Kim offered hers. Then, they introduced themselves.
2. Jake went to University of Wisconsin Madison. (but NOT in medical school)
3. He studied history.
4. In the US, you don't have to declare before what you're going to choose, unlike Thailand and some other countries.
5. First he chose economics and was planning to do an independent study but he didn't really like it so he changed to history.
6. When you study history, you don't have to specialise and you can choose your subject from a list.
7. Jake liked subjects about Asian history (China, Thailand) or ancient European history (Rome, Greece) (*Note: Asian European history is also accepted – my fault*)
8. Kim was going to study food science. (Additional point)

Jackie

1. Situation: An aunt and a niece met at a Christmas party.
2. The niece is study at Oxford and she loves the town and the study.
3. Jackie's study tip for her niece was to work/study very hard, something she has done since college until now.
4. Jackie likes to finish her work before the deadline, unlike her friends who had to stay up all night to finish it the night before deadline.
5. Jackie likes to finish her work first then relax.
6. Jackie spent a lot of time studying since she attended a lot of classes, though not compulsory.
7. She may not have as much study hours as the science student but she had French and German classes as well so she had more class than English literature students.

Edward

1. Welcoming back to radio programme 'Spotlight' and the guest is Mr. Edward Whittington, the author of best selling book 'The Mad King'.
2. Mr. Whittington studied English literature at Oxford University and he could manage to study hard and also enjoy life.
3. Only Oxford and Cambridge use tutor system.
4. Students have to write an essay a week and then two students will go and talk to one teacher about it.
5. Lectures are not compulsory so you can choose to attend or not.
6. Mr. Whittington missed a lot of classes.
7. You need to be responsible for your own learning and you need to submit an essay a week or you're in trouble.
8. The topic of the essay makes it difficult to finish in one week (Additional point)

Post-test Version B

Jake

1. Situation: on the plane, Jake couldn't find his gum so Kim offered hers. Then, they introduced themselves.
2. Jake went to University of Wisconsin Madison. (but NOT in medical school)
3. He studied history.
4. In the US, you don't have to declare before what you're going to choose, unlike Thailand and some other countries.
5. First he chose economics and was planning to do an independent study but he didn't really like it so he changed to history.
6. When you study history, you don't have to specialise and you can choose your subject from a list.
7. Jake liked subjects about Asian history (China, Thailand) or ancient European history (Rome, Greece) (*Note: Asian European history is also accepted – my fault*)
8. Kim was going to study food science. (Additional point)

Mary

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4. Mary finds experimental psychology very interesting.
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6. Her A-level was unusual because it included both art and science subjects.
7. She also liked psychology because it's science with analytical component.
8. She did it at the University of Bristol. (Additional point)

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4. Jackie likes to finish her work before the deadline, unlike her friends who had to stay up all night to finish it the night before deadline.
5. Jackie likes to finish her work first then relax.
6. Jackie spent a lot of time studying since she attended a lot of classes, though not compulsory.
7. She may not have as much study hours as the science student but she had French and German classes as well so she had more class than English literature students.

Appendix E: Codes to categorise factors reported to contribute to success or failure in listening comprehension

Internal factor

1	Vocabulary knowledge	Attributing success or failure to the lack of one's own vocabulary knowledge
2	Grammatical knowledge	Attributing success or failure to the lack of one's own grammatical knowledge
3	Preparation	Attributing success or failure to lack of preparation
4	Previous experience	Attributing success or failure to previous experience with similar text
5	Effort	Attributing success or failure to one's own effort
6	Practice	Attributing success or failure to previous practice
7	Low proficiency	Attributing success or failure to one's own low proficiency
8	High proficiency	Attributing success or failure to one's own high English proficiency
9	Strategy use	Attributing success or failure to one's own use of strategies
10	Word recognition ability	Attributing success or failure to one's ability to recognise words in connected speech
11	Prediction	Attributing success or failure to activated knowledge prior to listening
12	Attention	Attributing success or failure to level of attention
13	Attention retrieval	Attributing success or failure to how fast one can retrieve attention after losing it
14	Level of perseverance	Attributing success or failure to the level of perseverance (whether to give up when facing difficulties)
15	Other affective factors	Attributing success or failure to other factors affecting listening performance such as tiredness.

External factor

16	Vocabulary - Difficulty	Attributing success or failure to the difficulty level of vocabulary found in the text
17	Speed	Attributing success or failure to the speed of the listening text
18	Accent	Attributing success or failure to the speaker's accent
19	Clarity	Attributing success or failure to the speaker's clarity of pronunciation
20	Structure	Attributing success or failure to passage structure
21	Types of text	Attributing success or failure to types of text

Appendix F: Attributional factors

MALADAPTIVE ←-----→ ADAPTIVE

1	2	3	4	5	6
Low proficiency		Attention retrieval			Effort
Word recognition ability		Vocabulary knowledge			Preparation
Level of vocabulary		Grammar knowledge			Practice
Speed		Previous experience			Strategy use
Accent					High proficiency
Clarity					Level of attention
Structure					Level of Perseverance
Types of text					Prediction

Appendix G: Transcription example

Appendix G: Transcription example

Passage 1

Deaw: Hi.

Jackie: Hello.

Deaw: Your presentation was wonderful.

Jackie: Thank you very much. Umm..... Sorry to ask but are you a new student? I've never met you before at any PhD seminar.

Deaw: Yes, I've just started my PhD study two weeks ago. I'm Emily Wong.

Jackie: Jacqueline Smith. You can call me, Jackie.

Deaw: Pleasure to meet you, Jackie.

Jackie: You too, Emily.

Gift: OK At first, it's like Jackie has just finished presenting./ Is that right? /And then... who? What was her name?/ Lil... something/

Nui: Emily?

Gift: That's it. She.. she said something..like.. your presentation was ..like.. very good..like 'wonderful'./ Something like that. Then, she said, like, she thought she must have seen this person somewhere. It sounded like 'met you before' or something./ When they finished, I thought I heard that they were doing Doctoral degree. Then, two weeks ago./

Nui: So, you caught...

Gift: I got tiny bits. Tiny pieces at a time.

Nui: In parts. OK

Deaw: How you incorporate literature into language lesson is very interesting. Your knowledge about language and literature is so sophisticated.

Jackie: Thanks. I have to give the credit to my lecturers from my bachelor degree, then.

Commented [N6]: Hypothesis formation

Commented [N7]: self-questioning

Commented [SJG8]: vocalisation

Commented [SG9R8]:

Commented [SJG10]: hypothesis confirmation

Commented [N11]: Identification of word chunk
wonderful'

Identification of chunk

Commented [N12]: prior knowledge deduction
(PhD=Doctoral degree)

Commented [N14]: Identification of words
elaboration

Deaw: *Oh! You must have great teachers! What did you study in your bachelor degree, Jackie?*

Jackie: *I did my bachelor degree in modern and medieval languages and literature.*

Gift: *Erm..it could be that during her master degree she studied, I don't know, teaching?!*

Commented [N15]: NR - Hypothesis formation

Then, ...[Gift looked at me as if she was waiting for me to confirm whether her answer is correct or incorrect.]... you're not going to talk? You're not telling me now? OK. /

Commented [N16]: Hypothesis monitoring

Like, she did master in teaching so she asked something like, you studied teaching so what did you teach./

Commented [N17]: NR - Elaboration (from hearing the word 'teacher')
General deduction – master degree

So she answered something like I was teaching language and/ studied

'literature' or something like that. [She might have mispronounced the word a bit (illiterate) but I assumed that she knew the word since she got the definition right]/ I don't know the meaning or what it is about./ I wrote literature [in Thai]. But I think it should be related to.... I forgot the definition of the word./ It's either literature or something that has to do with alphabets./

Commented [N18]: Vocalisation

Commented [N19]: NR - Hypothesis formation

Commented [N20]: Comprehension monitoring

Commented [N21]: Inference

Deaw: *Was it English literature?*

Jackie: *Oh no, ... French and German, modern and medieval languages and literature in French and German.*

It was..err...it was quite a traditional degree...um... quite a lot of literature, sort of heavily biased towards literature with language input.

Deaw: *Literature with language input? How much time did you spend on literature and language?*

Jackie: *Erm.....let me think....*

Deaw: *Language must have taken up quite a lot of your time since you learnt both French and German.*

Jackie: Erm...it was quite a while ago

Deaw: 50-50?

Jackie: 50-50? Err...well....,

Gift: /Was I right? Like, between French and German, it's like, /which one did you spend more time on?/ How much time did you spend on studying each? And was it 50-50? Something like this.

Commented [N22]: Hypothesis formation
Hypothesis monitoring

Commented [N23]: Summary

Commented [N24]: Hypothesis formation

Jackie: (Continue)...no, properly more like 75 literature 25 percent language.

Gift: HUH?

REPEAT Jackie: (Continue)...no, properly more like 75 literature 25 percent language.

Commented [N25]: Reprise

Gift: /Is it 75 [she said seventy five in English]?/ 'seventy five literature' and then 'twenty five language' portions.

Commented [N26]: Vocalisation
Deduction

Commented [N27]: Vocalisation
Identification of chunk

Nui: UHh. You caught this one. What are you comparing now?

Gift: Comparing... Like what she was going to teach when she studied teaching in master. / She was studying teaching and then there was a comparison between what she would teach more

Commented [N28]: Elaboration
Transfer

Commented [N29]: NR-General deduction

Nui: What about your answer in the answer sheet?

Gift: What did I answer?

Nui: Yep. Just as you caught then.

Gift: Hahahaha. It's not this answer. I listened to this one!!!! (She raised the tone at the end of the sentence showing embarrassment.)

Nui: That's alright. Just tell me what were you thinking then.

Gift: Then, I heard 50-50 so I thought she studied half German, half French./ But first I thought when she talked about literature. I thought that she studied that 75% and the language is 25%./

Commented [N30]: Elaboration

Commented [N31]: Hypothesis formation
Hypothesis monitoring

Nui: There is a word 'first' so what about later?

Gift: Well, I forgot. It's something like this. This is how I thought then.

Nui: Aha. OK. Just how you thought then is enough.

Gift: Here. So I wrote spending time on 'literature' like..75%. That was my understanding.

Commented [N32]: Monitoring for sense

Nui: OK so French is 25% like this.

Gift: First I thought it was half German, half French./ But when I heard 50-50, in my head, it became half of 25./

Commented [N33]: Hypothesis formation
saliency deduction

Commented [N34]: Hypothesis monitoring
Visualisation

Nui: So you listen and think through inside your head.

Gift: I listen and think inside my head, separating things in my head.

Commented [N35]: Visualisation
Integration

/ What the last point was, what the point is now, then next point and whether the next point is related to the previous point.

Commented [N36]: Integration
Hypothesis monitoring
Double-check monitoring

/If not, why is that? How come they are not related? Why can't I find their relationships? ... /

Commented [N37]: Problem identification
Strategy evaluation
Self-evaluation
Self-questioning

self-evaluation
problem identification

Appendix H: Taxonomy for coding stimulated-recall interviews

Abbreviations

Source: S = Santos, Graham & Vanderplank (2008)
 C = Clarissa Young
 N = Nanikarn Simasnagyaporn

Metacognitive strategies

Source	Strategies		Definition	Example
S	Planning		Decides a course of action to complete the task	
C	Planning		Develops awareness of what needs to be done to accomplish a listening task, develops an appropriate action plan and/or appropriate contingency plans to overcome difficulties that may interfere with successful completion of the task	
S	Monitoring	Hypothesis monitoring	Check whether hypothesis is verified or contradicted by text or subsequent information	What did he say? Is that right?
S		Hypothesis confirmation	Confirms that interpretation or hypothesis is correct	But this one he said sometimes he studied this and sometimes he studied that.
S		Monitoring for sense	Check whether the interpretation make sense	
S		Monitoring against the question	Checks to see if one's interpretation makes sense in the light of the comprehension question posed	

S		Monitoring against the passage	Checks whether interpretation fits the rest of the passage	
S		Comprehension monitoring	Establishes whether one has or has not understood	But I didn't know what it was. I don't know
S		Double-check monitoring	Tracks, across the task, previously undertaken acts or possibilities considered	This one I wrote study.... but here I wrote that he studied reading and something relating to language. But in other places (university) separate the studies into one particular orientation. Not combination
S	Strategy evaluation		Judges how appropriate chosen strategy is, whether it needs changing or adapting	
Source	Strategies		Definition	Example
S	Self-evaluation		Assesses one's own listening ability or knowledge	
C	Self-evaluation		Checking the outcomes of one's listening comprehension against an internal measure of completeness and accuracy	
S	Task evaluation		Assesses how the task works	
S	Problem identification		Locates point, while listening, in text that contains essential info for question; identify words/phrase that holds key to answer	If not, why is that? How come they are not related? Why can't I find their relationships? ...
C	Problem identification		Explicitly identifying the central point needing resolution in a task or identifying an aspect of the	

		task that hinders its successful completion	
C	Substitution	Selecting alternative approaches, revised plans, or different words or phrase to accomplish a listening task	
S	Deduction evaluation	Assesses how appropriate deduction is	
S	Gives up/ Avoidance	Gives up	
S	Self-questioning	Interrogates oneself about possible answers or the best way to proceed	Wait./ What did they do???
C	Reprise	Listener ask for repetition, rephrasing or simplification of preceding utterance. This may be a statement that nothing was understood	Just repetition Not so sure about this one
N	Dismissal	Dismiss information or interpretation due to uncertainty of the accuracy	It's mixture. I don't know. <i>(It was the right interpretation but she immediately dismissed it)</i>
N	Self-protection	States or think something negative about one's ability in order to lower expectation of the outcome	Hahaha I barely remember anything, I have a really short memory!
C	Grouping	Classifying information such as words or concepts according to their meaning or according to the listener's organisation	Not found yet

Cognitive strategies

Schema related strategies

Source	Strategies		Definition	Example
S	Prediction	Prediction - Lexis	Activates L2 lexical knowledge prior to listening	
S		Prediction – Theme	Activates general knowledge of topic prior to listening	
S		Prediction – possible answers	Prior to listening, predict what might be possible answers	
N NEW		On-line prediction	Activates L2 lexical knowledge relating to upcoming texts while listening	
S	Visualisation		‘Holds’ words or phrase in mind	I recalled which word it should be
S	Visual/written prompts		Writes down ‘key’ words next to question	
C	Imagery		Using mental or actual image to represent information	I was listening and then I imagined it would be like this
C	Summarisation		Making a mental, oral or written summary of the information presented in a listening task	Then she asked what kind of lab, what she did in the lab. She answered that she did many things
C	Translation		Expressing target language words, terminology, or concepts in listener’s first language through listening SG: means word for word translation	

Text related strategies

Source	Strategies	Definition	Example
S	Questioning prior/ world knowledge	Probes particular background knowledge	I just guessed that you shouldn't just revise before exam. You should have prepared a long time before the exam, not rearing only a week before the exam
S	Identification of chunk	Identifies a chunk	'seventy five literature' and then 'twenty five language' portions.
S	Identification of word	Identifies a word	I heard 'mixture' and like he studied.....
Source	Strategies	Definition	Example
S	Match lexis heard to lexis in the question	Hears item in text then choose option containing that item	
S	Vocalisation	Reproduce English heard on tape, orally	
C	Transfer [L1-L2 transfer]	Using knowledge of one language to facilitate listening in another	SG: So, if an English listener heard a word in French that sounded like an English one, and worked out the meaning from that
N NEW	Phoneme-grapheme conversion	Converting heard sounds into written forms	

Attention related strategies

Source	Strategies	Definition	Example
S	Selective attention	Decides in advance of listening to listen out for certain parts of the text	
N NEW	On-line selective attention	Decides while listening to listen out for certain parts of the text	

Meaning related strategies

Source	Strategies	Definition	Example
S	Elaboration	Builds up meaning from one or two items heard, using prior/world knowledge to fill in gaps	Like, she did master in teaching so she asked something like, you studied teaching so what did you teach
C	Elaboration	Using prior knowledge from outside the text or conversational context and relating it to knowledge gained from the text in order to predict outcomes or fill in missing information SG: I think the two versions are similar – CY's may be better!	
N NEW	World knowledge elaboration	Using world knowledge to predict outcomes or fill in missing information	
N NEW	Text structure elaboration	Using analysis of text or dialogue structure to predict outcomes or fill in missing information	
N NEW	Word/Chunk elaboration	Using heard word or chunk to predict outcomes or fill in missing information	
Source	Strategies	Definition	Example
S	Hypothesis formation	Suggests a possible answer/interpretation	First I thought it was half German, half French; Like Oxford is the only place that study.... what I wrote and thought was that

			it integrates everything.	
S	Integration		Draws together two or more pieces of information to reach a conclusion	I think it could be related to psychology?
S	Deduction	General deduction	Deduction based on general information	She was studying teaching and then there was a comparison between what she would teach more
S		Frequency deduction	Deduction based on frequency of item heard	Not found yet
S		Negative deduction	Deduction based on what is not heard	Not found yet
S		Saliency deduction	Deduction based on what is most perceptually salient item	From the word ‘ And they also studied... studied and practiced everything together. Like study a varieties of things together
S		Prior knowledge deduction	Deduction based on prior knowledge	
S		Elimination deduction	Deduction based on process of elimination	Not found yet
N		Deduction from tone of voice	Deduction based on the speaker’s tone of voice	But here voice sounds bored so I thought she was bored with that hahaha. Perhaps she didn’t like it. Possibly something like that
S	Transfer		Hears an item in one section of the passage but then applies it to interpretation of another part of passage	

C	Inferencing	Using information within the text or context to guess the meanings of unfamiliar language items associated with a listening task, to predict outcomes, or to fill in missing information	I wrote literature [in Thai]. But I think it should be related to.... I forgot the definition of the word. It's either literature or something that has to do with alphabets.
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Appendix I: Example of individual strategy profile sheet

No.	Passage essence	Strategy used	Success Or Failure	Note
	Before listening			
	<p><u>Passage 1</u></p> <p>Deaw: Good evening, everyone and welcome back to “Spotlight in Bangkok”. Tonight we have a very special guest here with us, Mr. Edward Whittington.</p> <p>Edward: Good evening.</p> <p>Deaw: Thank you very much for being in our show.</p> <p>Edward: Oh! You are very welcomed.</p>	<p>Give up</p> <p>Sign of anxiety</p>		
	<p>Deaw: As you all may know, Mr. Whittington have just sold almost a million copies of his book “The Mad King” worldwide. Congratulations on such an accomplishment!</p>	<p>Hypothesis formation</p> <p>World knowledge elaboration</p>		

	Edward: Thank you very much, indeed.	Self-questioning		
	<p>Deaw: Our audience would want to know the journey of your success. Would you care to share with us?</p> <p>Edward: It must have started when I was a bachelor student.</p> <p>Edward: I studied English Literature at St.Peter's college in Oxford.</p>	<p>NR – Identification of word (journey)</p> <p>NR – Word elaboration</p> <p>NR – Hypothesis formation</p> <p>Self-questioning</p> <p>Self-evaluation</p>		
	<p>Deaw: Could you explain a little bit what you did when you studied English literature?</p> <p>Edward: Well...Erm..The course at Oxford is very wide ranging. It goes from Old English to Middle English to..you know.. the Modernist and current living authors.</p>	<p>Identification of word</p> <p>Word elaboration</p> <p>Hypothesis formation</p>		

	<p>Deaw: ...and what does studying those literatures require you to do?</p> <p>Edward: Errr..... Well... We read mostly. It's a mixture of ...ermm...theory, critical theory and cloze reading, analysis of poem by poem, you know, line by line. Even, you know, you focus on one particular stance of a poem. Yeah, cloze reading, theory.</p>	<p>Hypothesis formation</p> <p>Identification of word</p> <p>Self-questioning (Her voice was pitched due to embarrassment.)</p>		
	<p>Edward: (Continue) Another part of the course was linguistics as well.</p> <p>Deaw: Oooow! Linguistics? Why do you need to study linguistics?</p> <p>Edward: Well.....It's all bound together with the English language.</p>	<p>Identification of word</p> <p>Word Elaboration</p> <p>Hypothesis formation</p>		
	<p>Deaw: Right.. for our audience out there who's thinking of studying English literature in England, be prepare to work hard! You need to study both literature and linguistics.</p> <p>Edward: Well... Some degrees in England are just in English language, some in English literature. The course at Oxford is one of the rare ones that tries to do everything. So, it had to cover everything.</p>	<p>Dismissal</p> <p>Identification of word</p> <p>Word Elaboration</p>		

	<p>Deaw: Ahh... English literature programme at Oxford is different!!! You need to study literature, linguistic, English languagepractically everything!</p> <p>Edward: Yeah, sure.</p> <p>Deaw: And would you say that English in the olden days and now are different?</p> <p>Edward: Almost completely different languages.</p> <p>Deaw: Almost completely?</p> <p>Edward: Have you read Beowulf?</p> <p>Deaw: Ah...yes and I couldn't understand a thing! hahaha</p> <p>Edward: I know.</p>	<p>Hypothesis formation</p> <p>Self-evaluation</p> <p>NR - Hypothesis formation</p> <p>Identification of word (every) Problem identification Dismissal</p>		
	<p>Passage 1 after and questions</p>	<p>Self-evaluation</p> <p>Self-evaluation</p> <p>Give up (see herself of very low ability) SELF-EFFICACY TRAIT – evaluating herself of low level of English in general</p>		

		<p>Self-evaluation</p> <p>Give up SELF-EFFICACY TRAIT – evaluating herself of low level of English especially in listening</p> <p>+ attributing failure to external factor (listening task as it is even more difficult)</p> <p>Self-evaluation (that she could only identify words)</p> <p>Identification of word</p> <p>NR – Integration</p> <p>Self-evaluation</p> <p>Identification of word</p>		
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		Elaboration		
	<p><u>Passage 2</u></p> <p>Deaw: Hi.</p> <p>Jackie: Hello.</p> <p>Deaw: Your presentation was wonderful.</p> <p>Jackie: Thank you very much. Umm..... Sorry to ask but are you a new student? I've never met you before at any PhD seminar.</p> <p>Deaw: Yes, I've just started my PhD study two weeks ago. I'm Emily Wong.</p> <p>Jackie: Jacqueline Smith. You can call me, Jackie.</p> <p>Deaw: Pleasure to meet you, Jackie.</p> <p>Jackie: You too, Emily.</p>	<p>Hypothesis formation</p> <p>Hypothesis formation</p>		
	<p>Deaw: How you incorporate literature into language lesson is very interesting. Your knowledge about language and literature is so sophisticated.</p> <p>Jackie: Thanks. I have to give the credit to my lecturers from my bachelor degree, then.</p>			

	<p>Deaw: Oh! You must have great teachers! What did you study in your bachelor degree, Jackie?</p> <p>Jackie: I did my bachelor degree in modern and medieval languages and literature.</p>			
	<p>Deaw: Was it English literature?</p> <p>Jackie: Oh no, ... French and German, modern and medieval languages and literature in French and German.</p>			
	<p>Jackie: (Continue) It was..err...it was quite a traditional degree...um...quite a lot of literature, sort of heavily biased towards literature with language input.</p>	<p>Give up</p> <p>Problem identification Task evaluation SELF-EFFICACY TRAIT – Attributing failure to external factor Note: See if she still think like this after lexical segmentation strategy training</p>		
	<p>Deaw: Literature with language input? How much time did you spend on literature and language?</p> <p>Jackie: Ermm.....let me think.....</p> <p>Deaw: Language must have taken up quite a lot of your time since you learnt both French and German.</p>	<p>Hypothesis formation</p>		

	<p>Jackie: Ermm..it was quite a while ago</p> <p>Deaw: 50-50?</p> <p>Jackie: 50-50? Err...well...., no, properly more like 75 literature 25 percent language.</p>			
	<p>Deaw: Oh! 25 percent language. Is that for both French and German?</p> <p>Jackie: Yeah, we studied 50-50 French and German.</p>	Comprehension monitoring		
	<p>Deaw: Was it hard work?</p> <p>Jackie: Um hum... Um...I did a lot of essay writing. I remember that I had to submit an essay every week. There were also language classes to go to, prose translations, all that sort of things.</p> <p>Deaw: It sounds like quite an intensive programme!</p> <p>Jackie: Yeah... it was.</p>			
	<p>Passage 2 after and questions</p>	<p>Self-evaluation (negatively)</p> <p>Problem identification</p> <p>Task evaluation</p> <p>Self-evaluation</p>		

		<p>SELF-EFFICACY TRAIT – Attributing failure to external factor (audio text intelligibility)</p> <p>Self-evaluation</p> <p>Dismissal</p> <p>Integration</p>		
	<p><u>Passage 3</u></p> <p>Deaw: Hi, Jake! It's been a long time. I only get to see you on Facebook!</p> <p>Jake: Yeah.</p>	<p>Hypothesis formation</p> <p>Dismissal</p>		
	<p>Deaw: You seemed to have such a fun life here in university. How did you manage to keep up your grade in the top ten of the class?</p>	<p>A pattern of Hypothesis formation + Dismissal</p> <p>Hypothesis formation</p> <p>Hypothesis formation</p>		

		Hypothesis formation		
	<p>Jake: Ah..... For me, I don't know. Any time in an organized class or whatever, there's gonna be some nonsense stuff, you know, the stuff that teacher puts in there because the teacher needs to take up time.</p> <p>Jake: (Continue) I don't know why but I was always really good at figuring out like "Okay, this is going to be on a test. This isn't." So, I was pretty good at knowing what I could skip, just like an innate ability.</p> <p>Deaw: That's a very good strategy.</p>	<p>Hypothesis formation</p> <p>Comprehension monitoring</p> <p>Hypothesis formation</p> <p>Task evaluation (length of sentence)</p> <p>Self-evaluation</p> <p>SELF-EFFICACY TRAIT – Attributing failure to external factor (Length of sentence)</p> <p>Task evaluation (length of sentence)</p> <p>Self-evaluation</p>		

		<p>SELF-EFFICACY TRAIT – Attributing failure to external factor (Length of sentence)</p> <p>Give up</p>		
	<p>Jake: Yeah! So, I mean, realistically, most days .. ermm... I'd wake up at like 11, play video games, hang out with my roommates until like 4 or five. Then I'd...I'd go get dinner and then we go out drinking.</p>	<p>Hypothesis formation</p> <p>Summarisation</p>		
	<p>Jake: (Continue) And some days I go to a class, maybe two, but that didn't happen a whole lot. If I like the class, you know, if I was interested, I'd go.</p> <p>Deaw: It depended on the classes you are taking?</p> <p>Jake: Right. Right. It depended. Yeah. If I like the class and I thought it was interesting, I'd go.</p>	<p>Hypothesis formation</p> <p>Self-evaluation</p>		

	<p>Deaw: That means you can get good grades just from going to a few classes? You're a genius!! No reading at all??</p> <p>Jake: But for keeping up with the reading, some of the reading I'd already done. I can just read history quickly because I already have a base knowledge and once you have the base knowledge, it's not that difficult.</p>	<p>Dismissal</p> <p>Hypothesis formation</p> <p>Self-questionning</p> <p>Hypothesis formation</p> <p>Hypothesis formation Identification of word/chunk</p>		
	<p>Jake: (Continue) And so then, you know, like a week before the exam, I just start reading.</p>			

	<p>Deaw: I see.</p> <p>Jake: That's pretty much my university life.</p>			
	<p>Passage 3 after and questions</p>	<p>Self-evaluation</p> <p>Task evaluation</p> <p>Self-evaluation</p> <p>Task evaluation</p> <p>Give up</p> <p>On-line selective attention</p>		

		Self-evaluation NR – Selective attention		
	<p><u>Passage 4</u></p> <p>Deaw: Congratulations! I heard that you graduate with honour! That is quite an accomplishment!</p> <p>Mary: Thank you very much!</p>	<p>Hypothesis formation</p> <p>Reprise</p> <p>Identification of word (Half NR honour – owner)</p> <p>Vocalisation</p> <p>NR – Word elaboration</p>		

		General deduction Hypothesis formation		
	Deaw: What did you do in the lab? Mary: Well... we did quite a lot of different things, in some cases we were ..erm... learning about statistics,and other times we were actually doing research.	Hypothesis formation Dismissal Give up		
	Mary: (Continue) We did one experiment where we test memories for words and made-up words.			
	Deaw: Aha. Okay. Is that why you have such a strong research base? Mary: That's probably it. My degree was a lot about research training. It was a life full of research.			

	<p>Deaw: That must be quite a stressful time!</p> <p>Mary: It was! Ermm..Well...outside of my research studies, though, I spent quite a lot of time reading. I love reading fiction and doing dance classes. Those I really enjoyed. I've always liked going to dance classes and also hanging out with my friends, going to the pubs and such.</p> <p>Deaw: Good for you!</p>	<p>Identification of word</p>		
	<p>Passage 4 after and questions</p>	<p>NR - Self-evaluation</p> <p>Give up</p> <p>SELF-EFFICACY TRAIT – Comparing herself to more proficient student next to her, feeling very nervous and that she couldn't do it</p> <p>Give up</p>		

Appendix J: Example of strategy grid sheet

Passage point	Strategy Analyses Post-test All Participants						
Before listening	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
<p>LLC = Lower Level Comparison,</p> <p>LLI = Lower Level Intervention,</p> <p>HLI = Higher Level Intervention,</p> <p>HLC = Higher Level Comparison</p>					<p>Planning Planning Prediction</p> <p>Task evaluation Monitoring against the question</p>		<p>Task evaluation</p> <p>Planning</p> <p>Planning Prediction – Theme</p>

	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Planning Monitoring against the question		Planning Prediction Selective attention Hypothesis formation				
<u>Passage 1</u>	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
Deaw: Miss. Mary Ellsworth? Mary: Yes, I'm Mary Ellsworth. How are you today?	Hypothesis formation	Identification of word	Hypothesis formation But she lacked of knowledge to identify which part of	NR - Hypothesis formation	Hypothesis formation NR - Hypothesis formation Hypothesis monitoring	Self- evaluation	Identification of word

<p>Deaw: Very good. Thank you. I heard some good things about you!</p> <p>Mary: Thank you very much, madam. I'd like to have an opportunity to work in your company.</p> <p>Deaw: If things go well, you will! Your master degree profile is quite impressive for our company.</p> <p>Mary: I hope that my degree will help me to understand more about people.</p>	<p>Identification of word Dismissal</p> <p>Self-evaluation</p> <p>Dismissal</p>	<p>On-line selective attention</p> <p>Identification of words Translation</p> <p>On-line selective attention Hypothesis formation</p> <p>Translation</p>	<p>the conversation this is.</p> <p>Identification of word</p> <p>Translation Problem identification</p>	<p>Problem identification (Don't know how to spell the word 'Bachelor' in English) But I asked her to answer in Thai!</p> <p>Identification of word</p> <p>Word elaboration Hypothesis formation Problem identification</p>	<p>SHE NOTICED THERE WAS STH DODGY.</p> <p>Hypothesis formation Identification of word Word elaboration</p>	<p>Self-evaluation</p> <p>NR - Hypothesis formation</p> <p>NR - Hypothesis formation Self-protection</p>	
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		Identification of words Translation On-line prediction					
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Hypothesis formation Identification of word Dismissal	Identification of word On-line selective attention	Hypothesis formation But she lacked of knowledge to identify which part of the conversation this is.	NR - Hypothesis formation Problem identification	Hypothesis formation NR - Hypothesis formation Hypothesis monitoring SHE NOTICED THERE WAS STH DODGY.	Self-evaluation Self-evaluation	Identification of word

	Self-evaluation	Identification of words Translation	Identification of word	(Don't know how to spell the word 'Bachelor' in English) But I asked her to answer in Thai!	Hypothesis formation Identification of word Word elaboration	NR - Hypothesis formation	
	Dismissal	On-line selective attention Hypothesis formation	Translation Problem identification	Identification of word	Word elaboration Hypothesis formation Problem identification	NR - Hypothesis formation Self-protection	
		Translation					
		Identification of words Translation On-line prediction					

Deaw: Now, ...Let's...let's talk about what you studied in your bachelor degree. What did you do for your bachelor?	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
Mary: Well, I did experimental psychology as an undergraduate.	Hypothesis formation Identification of words	Identification of words Questioning prior knowledge Hypothesis formation	Vocalisation NR – Word elaboration NR – Hypothesis formation Identification of chunk Vocalisation NR – Word elaboration	Hypothesis formation	Hypothesis formation	Hypothesis formation	Problem identification

			Problem identification				
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Hypothesis confirmation Task evaluation Hypothesis monitoring Identification of chunk Hypothesis confirmation Chunk identification Saliency deduction	Hypothesis formation	Hypothesis formation	Hypothesis formation Monitoring against the passage Hypothesis formation Identification of words Problem identification NR - Inferencing NR - Inferencing Text structure elaboration Problem identification Vocalisation Problem identification Self-evaluation		Identification of chunk Comprehension monitoring	Hypothesis formation Hypothesis formation

	Hypothesis formation Elaboration Identification of word						
Deaw: Experimental psychology? Can you tell me about it?	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
Mary: Erm...and...experimental psychology was all about understanding.. human minds and ...errr... how humans process information..... as well as understanding relationships between humans.... and how they operate within society.	Hypothesis formation	Problem identification Task evaluation Hypothesis formation Comprehension monitoring NR – Inferencing			Hypothesis formation Identification of word Self-questioning Word elaboration Hypothesis formation Identification of word Word elaboration Hypothesis formation Hypothesis monitoring Self-questioning	Identification of words Problem identification Inferencing Hypothesis formation Hypothesis formation	

		Identification of word NR – Vocalisation					
		Word elaboration					
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Hypothesis formation Vocalisation Translation Hypothesis monitoring Hypothesis formation	Identification of word Problem identification (Lack of vocabulary knowledge)	Comprehension monitoring World knowledge elaboration	Hypothesis formation Hypothesis formation Hypothesis confirmation Visualisation (I think the fact that she repeat those English words is because she held those words in her mind and use	Identification of word Vocalisation Hypothesis formation Problem identification Hypothesis formation Inferencing	Problem identification Integration Identification of chunk	Hypothesis formation Questioning world knowledge Hypothesis formation General deduction

	<p>Hypothesis formation Problem identification Vocalisation Dismissal (Half-way then dismiss)</p>	<p>Identification of word/chunk</p> <p>Identification of word/chunk</p> <p>Inferencing</p>	<p>Identification of word Hypothesis confirmation</p>	<p>them for verification/hypothesis confirmation later)</p> <p>Identification of words Problem identification Selective attention Hypothesis formation</p> <p>Hypothesis confirmation Identification of word</p> <p>Text structure elaboration Hypothesis formation</p> <p>Text structure elaboration Integration</p>			<p>Identification of word</p>
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				Identification of words Integration Integration Identification of word Translation REPEAT Identification of word Problem identification Word elaboration			
	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI

<p>Deaw: How did you find it?</p> <p>Deaw: (Continue) ... Did you like it?</p> <p>Mary: I found it really interesting.</p> <p>Deaw: Why did you find it really interesting?</p> <p>Mary: It's a really nice progression from the A-levels that I've done at school.</p> <p>Deaw: A-level? You mean the GCE Advanced level from high school?</p>	Vocalisation (could be the word interesting)		Hypothesis formation	Hypothesis formation	Identification of words Phoneme-grapheme conversion Self-questioning	Comprehension monitoring Problem identification	Self-evaluation Task evaluation SELF-EFFICACY TRAIT – Attributing success to external factor (speed)
	Hypothesis formation			<p>On-line selective attention</p> <p>(selecting to listen to only words she knew, which doesn't work every time.</p> <p>There were times that she selected like that and got negative results.)</p>	General deduction Hypothesis formation Identification of word Word elaboration World knowledge elaboration	Hypothesis formation Hypothesis monitoring NR - Vocalisation Problem identification	
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Hypothesis formation	Self-evaluation	Hypothesis formation	Task evaluation	Hypothesis formation	Identification of word/chunk Integration	Hypothesis formation Problem identification

		<p><i>surprised that she didn't feel positive about this and not confident about her answer. After all, she didn't know this was the most difficult part of the test</i></p> <p>Inferencing Hypothesis formation</p> <p>Hypothesis monitoring</p>		<p>Hypothesis formation Hypothesis confirmation</p> <p>Comprehension monitoring Identification of word REPEAT</p> <p>Identification of chunk Integration Hypothesis formation General deduction</p> <p>Phoneme-grapheme conversion (A-level) Self-evaluation Questioning prior knowledge</p>			
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		World knowledge elaboration		Self-questioning REPEAT Self-evaluation Identification of chunk General deduction Self-evaluation Comprehension monitoring Hypothesis formation Self-questioning			
Deaw: (Continue) How is your A-level related to your bachelor?	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
Mary: Ermm....My A-levels were a bit unusual in			NR - Identification of word	Identification of word Integration	Hypothesis formation	Problem identification Problem identification Questioning prior knowledge SELF-EFFICACY	

<p>the sense that I did both science and arts.</p> <p>Deaw: Oh!</p> <p>Mary: I did English, math and chemistry.</p>				Dismissal		<p>TRAIT – Perseverance</p> <p>Comprehension monitoring</p> <p>Comprehension monitoring</p> <p>Hypothesis formation</p> <p>Self-questioning</p> <p>Double-check monitoring</p> <p>Inferencing</p> <p>Problem identification</p> <p>Inferencing</p> <p>Dismissal</p>	
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	<p>Word identification</p> <p>Vocalisation</p> <p>Word elaboration (from subject)</p>		Hypothesis formation	<p>Problem identification</p> <p>Identification of words</p>			<p>Hypothesis formation</p> <p>Hypothesis monitoring</p>

	Hypothesis formation						
	Hypothesis formation						
	Problem identification Vocalisation Self-evaluation						
Mary: (Continue) So... psychology was a really good choice for me because it is a science but it also has a very ...kind of... er..... analytical component to it too, which I found really interesting.	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
					Hypothesis formation General deduction Integration	SELF-EFFICACY TRAIT – Physical response (sigh) Give up?	

	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Task evaluation Self-evaluation Comprehension monitoring Problem identification Problem identification Task evaluation Self-evaluation Self-evaluation	Hypothesis formation Problem identification Identification of words Hypothesis formation		Hypothesis formation Hypothesis formation Text structure elaboration Self-questioning Identification of words Comprehension monitoring Hypothesis formation Integration Identification of words NR - Saliency deduction 'art'	Hypothesis formation Identification of word Saliency deduction		Identification of word Hypothesis formation Hypothesis formation Hypothesis monitoring

	Problem identification Self-evaluation			Hypothesis formation			
	Identification of word			Double-check monitoring			
				Identification of words Hypothesis confirmation			
Deaw: Ah... and where did you do that?	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
Mary: University of Bristol.					NR - Identification of word Saliency deduction		
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
		Problem identification Dismissal	Hypothesis formation	Hypothesis formation	Hypothesis formation	Identification of word Problem identification Comprehension monitoring	Hypothesis formation

Passage 1 after and questions	1LLC	2LLC	3LLC	4LLC	6LLI	7LLI	8LLI
<p>Comprehension monitoring</p> <p>Questioning prior knowledge NR - General deduction Hypothesis formation</p> <p>Self-evaluation</p> <p>Problem identification Self-efficacy trait – Attributing failure to external factor – Speed</p> <p>Comprehension monitoring</p>			<p>Hypothesis formation Self-evaluation SELF-EFFICACY TRAIT – Attributing failure to external factor (speed)</p> <p>Selective attention</p> <p>Task evaluation SELF-EFFICACY TRAIT – Attributing failure to external factor (speed)</p> <p>Problem identification Self-evaluation SELF-EFFICACY TRAIT – Attributing failure to external factor (speed)</p>	<p>Comprehension monitoring Task evaluation (Difficult accent)</p> <p>Hypothesis formation SELF-EFFICACY TRAIT – Not feeling confident about her answer</p> <p>NR – Frequency deduction</p>	<p>Comprehension monitoring On-line selective attention</p> <p>Prediction Hypothesis monitoring Visual/written prompts</p>	<p>Comprehension monitoring</p> <p>Dismissal</p> <p>Problem identification Dismissal</p>	

	Inferencing		Self-evaluation Q				
	Identification of word Inferencing		Vocalisation NR - Word elaboration				
	General deduction		NR – Hypothesis formation NR – General deduction				
	Identification of word Saliency deduction		NR - General deduction				
	Saliency deduction						
	9HLI	10HLI	11HLI	12HLI	13HLC	15HLC	16HLC
	Problem identification	Q Hypothesis formation	Problem identification Identification of word Dismissal	Q Hypothesis formation	Q Hypothesis formation	Self-evaluation Self-evaluation Task evaluation	Q Identification of word

	Comprehension monitoring Dismissal	Self-evaluation Deduction from tone of voice Task evaluation Questioning world knowledge World knowledge deduction World knowledge elaboration	Hypothesis formation Visualisation Hypothesis confirmation Problem identification Identification of word Word elaboration	Identification of words Saliency deduction Integration Hypothesis formation Problem identification Problem identification	Hypothesis formation Hypothesis confirmation	Self-evaluation Problem identification	General deduction Hypothesis formation Comprehension monitoring Hypothesis formation
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Appendix K: Ethical approval, information sheets and consent forms

University of Reading
Institute of Education
Ethical Approval Form (version November 2012)



Tick one:

Staff project: _____
Postgraduate project: PGCE _____ GTP _____ MA _____ PhD
Undergraduate project: _____

Name of applicant (s): ...Nantikarn Simasangyaporn.....

Title of project: ... The effect of strategy instruction on Thai learners' listening comprehension and self-efficacy.....

Name of supervisor (for student projects):Prof. Suzanne Graham, Dr. Jessie Ricketts.....

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	<input checked="" type="checkbox"/>		
b) explains how they have been selected as potential participants	<input checked="" type="checkbox"/>		
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	<input checked="" type="checkbox"/>		
d) makes clear that participation in the project is voluntary	<input checked="" type="checkbox"/>		
e) explains the arrangements to allow participants to withdraw at any stage if they wish	<input checked="" type="checkbox"/>		
f) explains the arrangements to ensure the confidentiality of any material collected during the project, including secure arrangements for its storage, retention and disposal	<input checked="" type="checkbox"/>		
g) explains the arrangements for publishing the research results and, if confidentiality might be affected, for obtaining written consent for this	<input checked="" type="checkbox"/>		
h) explains the arrangements for providing participants with the research results if they wish to have them	<input checked="" type="checkbox"/>		
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	<input checked="" type="checkbox"/>		
k) explains, where applicable, the arrangements for expenses and other payments to be made to the participants	n/a		
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'.	<input checked="" type="checkbox"/>		
k) includes a standard statement regarding insurance "The University has the appropriate insurances in place. Full details are available on request".	<input checked="" type="checkbox"/>		
Please answer the following questions			
1) Have you sought written or other formal consent from all participants, if they are able to provide it, in addition to (2)?	<input checked="" type="checkbox"/>		
2) Have you provided 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?	<input checked="" type="checkbox"/>		
3) Is there any risk that participants may experience physical or psychological distress in taking part in your research?		<input checked="" type="checkbox"/>	
4) Have you taken the online training modules in data protection and information security?	<input checked="" type="checkbox"/>		
5) Does your research comply with the University's Code of Good Practice in Research?	<input checked="" type="checkbox"/>		
	YES	NO	N.A.
6) If your research is taking place in a school, have you obtained the permission in writing of the head teacher or other relevant supervisory professional?	<input checked="" type="checkbox"/>		
7) Has the data collector obtained satisfactory CRB clearance?			<input checked="" type="checkbox"/>
8) 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 sought parental consent or given parents/carers the opportunity to decline consent?			<input checked="" type="checkbox"/>

9) If your research involves processing sensitive personal data ¹ , have you obtained the explicit consent of participants?			✓
10) 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 appropriate technical and organisational security measures to protect the data?			✓
11a) Does your research involve data collection outside the UK?	✓		
11b) If the answer to question 11a is "yes", does your research comply with the legal and ethical requirements for doing research in that country?	✓		
12a. Does the proposed research involve children under the age of 5?		✓	
12b. If the answer to question 12a is "yes": 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 proceed until I have confirmation that insurance cover is in place.			✓
If you have answered YES to Questions 2 and/or 3, please complete Section B below			

PLEASE COMPLETE EITHER SECTION A OR B AND PROVIDE THE DETAILS REQUIRED IN SUPPORT OF YOUR APPLICATION, THEN SIGN THE FORM (SECTION C)

A: My research goes beyond the 'accepted custom and practice of teaching' but I consider that this project has no significant ethical implications.	
Give a brief description of the aims and the methods (participants, instruments and procedures) of the project in up to 200 words. Attach any consent form, information sheet and research instruments to be used in the project (e.g. tests, questionnaires, interview schedules).	
Please state how many participants will be involved in the project: <i>This form and any attachments should now be submitted to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.</i>	
This study aims to investigate the efficacy of an intervention aimed at improving English listening proficiency in Thai tertiary-level learners. In addition, it will explore the relationship between English listening proficiency, listening strategy use and self-efficacy. The participants will be 300 Thai tertiary students taking English fundamental courses at a university in Thailand. Two classes will be randomly selected from each course (highest-proficiency-level course, medium level course and elementary level course), making a total of six classes. One of the classes from each course will be experimental class and the other will be compared class.	
The project will consist of three phases: pre-intervention, intervention, and post intervention. In the pre-intervention phase, participants will be asked to perform a listening comprehension task, consisting of a free-recall task and listening comprehension questions. Immediately after the task finishes, the participants will be asked to complete a set of questionnaires, comprising the Metacognitive Awareness Listening Questionnaire (MALQ) and an additional self-efficacy questionnaire. Twelve learners with high and low levels of self-efficacy will be selected and invited for an interview. During intervention phase, half of the learners will be given seven listening strategy lessons as a part of their regular English language class over the course of fourteen weeks by the researcher. In each lesson, learners will have the opportunity to reflect on their own strategy use, be presented with listening strategies, practice using listening strategies and evaluate their use of listening strategies in the lesson. After the intervention phase, the participants will be asked to perform a listening task and complete the questionnaires again. Comparing pre-intervention and post-intervention measures will elucidate whether the strategy intervention has been effective in improving listening comprehension and whether there has been any change in listening comprehension, level of self-efficacy and strategy usage. A second interview will be conducted with the same group as before.	

B: I consider that this project may have ethical implications that should be brought before the Institute's Ethics Committee.	
Please provide all the further information listed below in a separate attachment.	
<ol style="list-style-type: none"> 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 	

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.

then.

7. estimated start date and duration of project

This form and any attachments should now be submitted to the Institute's Ethics Committee for consideration. Any missing information will result in the form being returned to you.

C: SIGNATURE OF APPLICANT:

I have declared all relevant information regarding my proposed project and confirm that ethical good practice will be followed within the project.

Signed: N. Simasangyaporn Print Name...NANTIKARN SIMASANGYAPORN... Date...05/04/13....

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: Daisy Powell Print Name...Daisy Powell... Date...13/5/2013
(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.



Research Project: An exploration of listening comprehension among Thai learners of English

Project Team Members: Professor Suzanne Graham; Dr. Jessie Ricketts;
Miss Nantikarn Simasangyaporn

Dear Director of Language Institute, Thammasat University,

We are writing to invite your institute to take part in a research study on listening in a foreign language. The research is being conducted as a part of Nantikarn Simasangyaporn's PhD research, under supervision of Professor Graham and Dr Ricketts.

What is the study?

This study aims to explore which factors are important for learning to listen in English and focuses on tertiary-level learners in Thailand. We are particularly interested in understanding the relationship between listeners' thoughts and beliefs and how well they learn to listen in English over time. We hope that the study will inform classroom practice for the teaching of English language listening, and foreign language listening more generally.

Why has the institute been chosen to take part?

We are particularly interested in looking at English learners at the entry level of tertiary education in Thailand. Therefore, we seek participants who have just started their undergraduate study in a university in Thailand and currently take an English language course. The institute is invited to take part in this study as it meets such criteria, and because of my work with you in the past.

Do we have to take part?

It is entirely up to you whether you would like to participate. You may also withdraw your consent to participation at any time during the project, without any repercussions to you or your institution, by contacting the Miss Nantikarn Simasangyaporn, Tel: +4470598443330 (UK) or 0892023749 (Thailand), email: n.simasangyaporn@pgr.reading.ac.uk

What will happen if I take part?

With your agreement, all the students in the designated classes, approximately 6 randomly-selected classes from high, medium and elementary English classes, will be invited to take part in the study. With students' agreement, participation would involve four activities. First, they will be asked to complete a listening comprehension task. Second, also in class time, they will be asked to complete a questionnaire. The questionnaire consists of 30 questions, which require them to think back about the task that they have just already completed. The tasks and questionnaire together would take approximately 30 minutes to finish. Third, a small number of participants, approximately 12 of them, will be asked to take part in an interview to explore further how they went about the listening task that was completed earlier. This will take an additional hour, and will take place outside of regular lessons, at a time and place convenient to participants. With their consent, the interview will be recorded. These three activities (listening tasks, questionnaires, interviews) will be administered twice, once at the beginning of the semester and again at the end of the semester. Finally, classes for half of the students, the experimental classes, will be given specially designed listening lessons to see if learners' thoughts and beliefs as well as how they listen can be changed by using pedagogic methodology. The lessons for those classes will be given by Nantikarn in order to maintain instructional consistency among them.

What are the risks and benefits of taking part?

We do not foresee any ethical issues arising from this study. The information provided by participants in the study will remain confidential and will only be seen by the project team. Individual participants and the institute will not be identified in any published report resulting from the study. Information about individuals will not be shared with the class teacher or the university. We feel that there will be many benefits of the project. Through their participation, individuals will develop their listening skills and be able to reflect on their own language learning. We also hope that our findings will provide information about strategies for improving English listening in Thai learners, thus informing English teaching practice.

What will happen to the data?

The results of the study will be included in Nantikarn's PhD thesis. We also hope to present the findings at conferences and in academic journals. However, any data collected will be held in strict confidence and no real names will be used. The records of this study will be kept private. No identifiers linking you to the study will be included in any sort of report that might be published. During the study, the identity of participants will be kept confidential and only the researcher will have access to that information. Numbers and alias names will be used to protect the participants' identities. The name of the institute and the university will be omitted from reports, and alias names will also be used in any mention of individual participant mentioned. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the research team will have access to the records. The data will be destroyed securely once the findings of the study are written up, after five years.

What happens if I change my mind?

You can change your mind at any time and without any repercussions. If you change your mind after data collection has ended, we will discard your data.

What happens if something goes wrong?

In the unlikely case of concern or complaint, you can contact Professor Suzanne Graham, University of Reading; Tel: 0118 378 2684, email: s.j.graham@reading.ac.uk

Where can I get more information?

If you would like more information, please contact Nantikarn Simasangyaporn
Tel: +4470598443330 (UK) or +66892023749 (Thailand), email:
n.simasangyaporn@pgr.reading.ac.uk

We do hope that you will agree to your participation in the study. If you do, please complete the attached consent form and return it to Nantikarn Simasangyaporn.

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.
Thank you for your time.

Yours sincerely
Nantikarn Simasangyaporn



Director Consent Form

Researcher: Miss Nantikarn Simasangyaporn

Phone: +4470598443330 (UK) or

0892023749 (Thailand)

Email: n.simasangyaporn@pgr.reading.ac.uk

Project supervisors: Prof. Suzanne Graham, Dr. Jessie Ricketts

Email: s.j.graham@reading.ac.uk j.ricketts@reading.ac.uk

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 Participant: Assoc. Prof. Supong Tangkiengsirisin, Ph.D.

Please tick as appropriate:

I consent to the involvement in the project as outlined in the Information Sheet



Signed: 

Date: 28 / 05 / 13

ชื่องานวิจัย: An exploration of listening comprehension among Thai learners of English

ผู้ทำการวิจัย: นส. นันทิกานต์ สิมะแสงยาภรณ์ Professor Suzanne Graham และ Dr. Jessie Ricketts

เรียน ผู้เข้าร่วมงานวิจัยทุกท่าน

เราขอเชิญท่านเข้าร่วมเป็นส่วนหนึ่งของงานวิจัยเพื่อพัฒนาระบบการเรียนรู้อีกเกี่ยวกับการฟังภาษาต่างประเทศ งานวิจัยชิ้นนี้เป็นส่วนหนึ่งของการศึกษาระดับปริญญาเอกของ นส. นันทิกานต์ สิมะแสงยาภรณ์ ภายใต้การดูแลของ Professor Suzanne Graham และ Dr. Jessie Ricketts แห่ง University of Reading, United Kingdom

งานวิจัยนี้เกี่ยวกับอะไร

จุดมุ่งหมายของงานวิจัยนี้คือการค้นหาว่าปัจจัยใดเป็นสิ่งสำคัญในการเรียนรู้การฟังภาษาอังกฤษโดยมุ่งเน้นไปที่ผู้เรียนในระดับอุดมศึกษาในประเทศไทย สิ่งที่มีนัยสำคัญเป็นพิเศษคือความสัมพันธ์ระหว่างสิ่งที่ผู้ฟังคิดและความเชื่อเกี่ยวกับตนเอง ต่อระดับความสำเร็จในการเรียนภาษาอังกฤษ เราหวังว่าการศึกษานี้จะให้ข้อมูลที่ประโยชน์ต่อการเรียนการสอนทักษะการฟังภาษาอังกฤษและภาษาต่างประเทศอื่นๆ

เหตุใดท่านถึงได้รับเลือกให้เข้าร่วมงานวิจัยนี้

เราต้องการที่จะศึกษาเกี่ยวกับผู้เรียนภาษาอังกฤษในระดับเริ่มต้นของการศึกษาระดับอุดมศึกษาในประเทศไทย ดังนั้นเราจึงต้องการผู้เข้าร่วมวิจัยซึ่งกำลังศึกษาวิชาภาษาอังกฤษอยู่ในภาคการศึกษาแรกของระดับปริญญาตรีของมหาวิทยาลัยในประเทศไทย ท่านได้รับเชิญให้เข้าร่วมการวิจัยนี้เนื่องจากท่านมีคุณสมบัติดังกล่าว อีกทั้ง นส. นันทิกานต์ ยังเป็นอาจารย์สอนวิชาภาษาอังกฤษ ณ สถาบันภาษา มหาวิทยาลัยแห่งนี้อีกด้วย

ท่านจำเป็นต้องเข้าร่วมงานวิจัยนี้ไหม

การตัดสินใจที่จะเข้าร่วมงานวิจัยหรือไม่ขึ้นอยู่กับท่าน

ท่านสามารถที่จะถอนตัวออกจากงานวิจัยในเวลาใดก็ได้ตลอดระยะเวลาการวิจัยนี้โดยที่ไม่มีผลแก่ตัวท่านแต่ประการใด

ท่านสามารถถอนตัวได้ด้วยการติดต่อ นส. นันทิกานต์ สิมะแสงยาภรณ์ ที่ โทรศัพท์ +4470598443330 (สหราชอาณาจักร) หรือ 0892023749 (ประเทศไทย), email: n.simasangyaporn@pgr.reading.ac.uk

หากท่านเข้าร่วมงานวิจัยนี้ท่านจะต้องทำอะไรบ้าง

หากท่านตัดสินใจที่จะเข้าร่วมงานวิจัยนี้ ท่านจะได้เข้าร่วมกิจกรรม 4 ขั้นตอน คือ

1. ขั้นตอนแรกคือการทำกิจกรรมภาษาอังกฤษที่เน้นการฟังเพื่อความเข้าใจ (listening comprehension)
2. ขั้นที่สองคือการตอบแบบสอบถามซึ่งเกี่ยวข้องกับกิจกรรมการฟังในขั้นตอนแรก ประมาณ 30 คำถาม ทันทีหลังจากทำกิจกรรมทั้งกิจกรรมการฟังและแบบสอบถามนี้จะใช้เวลาประมาณ 30 นาทีและจะทำในระหว่างคาบวิชาภาษาอังกฤษ
3. ขั้นตอนที่สาม
ผู้เข้าร่วมงานวิจัยจำนวนหนึ่งจะได้รับเชิญให้เข้าร่วมการสัมภาษณ์เกี่ยวกับการทำกิจกรรมการฟังภาษาอังกฤษที่ได้ทำไปแล้ว โดยผู้วิจัย (นส. นันทิกานต์) จะเป็นผู้สัมภาษณ์ด้วยตนเอง การสัมภาษณ์จะใช้เวลาประมาณหนึ่งชั่วโมงนอกเวลาเรียน การกำหนดสถานที่และเวลาในการสัมภาษณ์นั้นจะเอื้อความสะดวกให้แก่ผู้เข้าร่วมการวิจัย หากท่านอนุญาตบทสัมภาษณ์นั้นจะได้รับการบันทึกเสียง ทั้งสามขั้นตอนนี้ (กิจกรรมการฟังภาษาอังกฤษ แบบสอบถาม และการสัมภาษณ์) จะเกิดขึ้นสองครั้ง ครั้งหนึ่งตอนต้นภาคการศึกษาและครั้งที่สองตอนท้ายภาคการศึกษา
4. ในขั้นตอนสุดท้ายนักศึกษาจากห้องเรียนที่เข้าร่วมการวิจัยจะได้เรียนการฟังภาษาอังกฤษกับ นส. นันทิกานต์ โดยเป็นส่วนหนึ่งของการเรียนการสอนวิชาภาษาอังกฤษพื้นฐานที่ท่านกำลังเรียนอยู่นั่นเอง

การเข้าร่วมงานวิจัยนี้มีผลดีหรือผลเสียต่อท่านอย่างไรบ้าง

งานวิจัยนี้เป็นไปตามจริยธรรมของการทำวิจัย ข้อมูลที่ท่านให้จะเป็นความลับและผู้ที่เห็นข้อมูลมีเพียงผู้วิจัยเท่านั้น ชื่อของท่านจะไม่ปรากฏในงานวิจัยหรือสิ่งตีพิมพ์ใดๆที่เกี่ยวข้องกับงานวิจัยนี้

อาจารย์ผู้สอนอื่นๆในรายวิชาและมหาวิทยาลัยจะไม่สามารถเข้าถึงข้อมูลของผู้เข้าร่วมแต่ละท่านได้

นอกจากนี้การเข้าร่วมงานวิจัยนี้จะไม่ส่งผลกระทบต่อผลการเรียนของท่านแต่อย่างใด

เราคาดว่าประโยชน์ที่จะเกิดขึ้นจากการเข้าร่วมงานวิจัยนั้นมีหลายประการ

ผู้เข้าร่วมจะได้พัฒนาทักษะการฟังภาษาอังกฤษและยังสามารถเห็นภาพสะท้อนของลักษณะการเรียนภาษาของตนเองอีกด้วย

ข้อมูลที่ท่านให้จะได้รับการจัดการอย่างไร

ผลของงานวิจัยนี้จะไปปรากฏอยู่ในวิทยานิพนธ์ของ นส.นันทิกานต์ เราหวังว่าจะได้เผยแพร่ผลของงานวิจัยโดยการนำเสนอในงานประชุมวิชาการและวารสารวิชาการ อย่างไรก็ตามข้อมูลใดๆก็ตามที่ได้จากท่านจะเป็นความลับ ชื่อและนามสกุลจริงของท่านจะไม่ปรากฏในที่ใดทั้งสิ้น บทสัมภาษณ์ที่ได้รับการบันทึกจะถูกเก็บเป็นความลับ ไม่มีสิ่งใดที่จะบ่งชี้ได้ว่าท่านเป็นผู้เข้าร่วมงานวิจัยนี้

ไปปรากฏอยู่ในการเผยแพร่งานวิจัยไม่ว่าในรูปแบบใด ในขณะที่กำลังดำเนินการวิจัย สิ่งใดก็ตามที่ระบุว่าท่านได้เข้าร่วมงานวิจัยจะถูกเก็บเป็นความลับและผู้วิจัยท่านนั้นจะสามารถเข้าถึงข้อมูลเหล่านั้นได้ หากต้องมีการบ่งชี้ถึงผู้เข้าร่วมคนใดคนหนึ่งก็จะใช้ตัวเลขและนามสมมุติแทนชื่อของสถาบันและมหาวิทยาลัยจะไม่ปรากฏอยู่ในรายงานใดๆ เอกสารที่เกี่ยวข้องกับการวิจัยทั้งหมดจะถูกเก็บไว้ในตู้ปิดกุญแจและคอมพิวเตอร์ที่ต่ออินเทอร์เน็ตจะสามารถเข้าไปได้โดยที่ผู้วิจัยท่านนั้นจะมีสิทธิ์ในการเข้าถึงข้อมูลเหล่านั้นได้ ข้อมูลต่างๆจะถูกทำลายหลังจากมีการเขียนรายงานผลของการศึกษาวิจัยแล้วห้าปี

หากท่านเปลี่ยนใจ

ท่านสามารถเปลี่ยนใจได้ตลอดเวลาโดยที่ไม่มีผลใดๆกับตัวท่าน หากท่านเปลี่ยนใจภายหลังการเก็บข้อมูลผู้วิจัยจะไม่ใช้ข้อมูลของท่านในการศึกษาวิเคราะห์ต่อไป

หากมีข้อขัดข้อง

ในกรณีที่ท่านเกิดความกังวลใดๆหรือต้องการร้องเรียน ท่านสามารถติดต่อ Professor Suzanne Graham ที่ University of Reading ได้ที่ โทรศัพท์ 0118 378 2684, email: s.j.graham@reading.ac.uk

หากท่านต้องการข้อมูลเพิ่มเติม

หากท่านต้องการข้อมูลเพิ่มเติม กรุณาติดต่อ นส. นันทิกานต์ สิมะแสงยาภรณ์ โทรศัพท์: 089-202-3749 (ประเทศไทย) หรือ +4470598443330 (สหราชอาณาจักร) email: n.simasangyaporn@pgr.reading.ac.uk เราหวังว่าท่านจะให้ความร่วมมือในการเข้าร่วมงานวิจัยในครั้งนี้

หากท่านยินดีเข้าร่วม กรุณากรอกแบบฟอร์มให้ความยินยอมที่แนบมาท้ายเอกสารนี้และคืนให้แก่ นส. นันทิกานต์ สิมะแสงยาภรณ์

งานวิจัยชิ้นนี้ได้รับการพิจารณาผ่านตามขั้นตอนของ คณะกรรมการจริยธรรมของ University of Reading ทาง University of Reading มีการประกันความเสี่ยงและท่านสามารถขอข้อมูลได้หากต้องการ

ขอขอบคุณสำหรับการสละเวลาของท่าน

ด้วยความนับถือ

นส.นันทิกานต์ สิมะแสงยาภรณ์

ใบแสดงความยินยอมของผู้เข้าร่วมงานวิจัย

ข้าพเจ้าได้อ่านเอกสารรายละเอียดเกี่ยวกับงานวิจัยและได้รับเอกสารเป็นของตนเองแล้ว 1 ชุด

ข้าพเจ้าเข้าใจวัตถุประสงค์ของงานวิจัยและเข้าใจสิ่งที่ข้าพเจ้าต้องทำในงานวิจัยนี้

ข้อข้องใจเกี่ยวกับงานวิจัยและบทบาทของข้าพเจ้าได้รับการอธิบายและทำความเข้าใจเป็นที่เรียบร้อยแล้ว

ชื่อผู้เข้าร่วมงานวิจัย: _____

กรุณาทำเครื่องหมายในช่องหลังข้อความที่ท่านให้ความยินยอม:

- | | |
|--|--------------------------|
| ข้าพเจ้ายินยอมที่จะทำกิจกรรมการฟังเพื่อความเข้าใจ | <input type="checkbox"/> |
| ข้าพเจ้ายินยอมที่จะตอบแบบสอบถาม | <input type="checkbox"/> |
| ข้าพเจ้ายินยอมที่จะให้สัมภาษณ์หากได้รับเชิญจากผู้วิจัย | <input type="checkbox"/> |
| ข้าพเจ้ายินยอมที่จะให้ผู้ทำวิจัยบันทึกเสียงในการสัมภาษณ์ | <input type="checkbox"/> |

ลายเซ็น: _____

วันที่: _____



Research Project: An exploration of listening comprehension among Thai learners of English

Project Team Members: Professor Suzanne Graham; Dr. Jessie Ricketts;
Miss Nantikarn Simasangyaporn

Dear Participant,

We are writing to invite you to take part in a research study on listening in a foreign language. The research is being conducted as a part of Nantikarn Simasangyaporn's PhD research, under supervision of Professor Graham and Dr Ricketts.

What is the study?

This study aims to explore which factors are important for learning to listen in English and focuses on tertiary-level learners in Thailand. We are particularly interested in understanding the relationship between listeners' thoughts and beliefs and how well they learn to listen in English over time. We hope that the study will inform classroom practice for the teaching of English language listening, and foreign language listening more generally.

Why have I been chosen to take part?

We are particularly interested in looking at English learners at the entry level of tertiary education in Thailand. Therefore, we seek participants who have just started their undergraduate study in a university in Thailand and currently take an English language course. You are invited to take part in this study as you meet such criteria, and because of my work with your university in the past.

Do I have to take part?

It is entirely up to you whether you would like to participate. You may also withdraw your consent to participation at any time during the project, without any repercussions to you, by contacting the Miss Nantikarn Simasangyaporn, Tel: +4470598443330 (UK) or 0892023749 (Thailand), email: n.simasangyaporn@pgr.reading.ac.uk

What will happen if I take part?

With your agreement, participation would involve four activities. First, you will be asked to complete a listening comprehension task. Second, also in class time, you will be asked to complete a questionnaire. The questionnaire consists of 30 questions, which require you to think back about the task that you have just already completed. The tasks and questionnaire together would take approximately 30 minutes to finish. Third, a small number of participants will be asked to take part in an interview to explore further how you went about the listening task that was completed earlier. This will take an additional hour, and will take place outside of regular lessons, at a time and place convenient to participants. With your consent, the interview will be recorded. These three activities (listening tasks, questionnaires, interviews) will be administered twice, once at the beginning of the semester and again at the end of the semester. Finally, classes for half of the students will be taught by Nantikarn.

What are the risks and benefits of taking part?

We do not foresee any ethical issues arising from this study. The information provided by you will remain confidential and will only be seen by the research team. You will not be identified in any published report resulting from the study. Information about individuals will not be shared with the class teacher or the university. Participating in this study will not affect your academic progress of the course in any way. We feel that there will be many benefits of the project. Through their participation, individuals will develop their listening skills and be able to reflect on their own language learning.

What will happen to the data?

The results of the study will be included in Nantikarn's PhD thesis. We also hope to present the findings at conferences and in academic journals. However, any data collected will be held in strict confidence and no real names will be used. The records of this study will be kept private. No identifiers linking you to the study will be included in any sort of report that might be published. During the study, the identity of participants will be kept confidential and only the researcher will have access to that information. Numbers and alias names will be used to protect the participants' identities. The name of the institute and the university will be omitted from reports, and alias names will also be used in any mention of individual participant mentioned. Research records will be stored securely in a locked filing cabinet and on a password-protected computer and only the research team will have access to the records. The data will be destroyed securely once the findings of the study are written up, after five years.

What happens if I change my mind?

You can change your mind at any time and without any repercussions. If you change your mind after data collection has ended, we will discard your data.

What happens if something goes wrong?

In the unlikely case of concern or complaint, you can contact Professor Suzanne Graham, University of Reading; Tel: 0118 378 2684, email: s.j.graham@reading.ac.uk

Where can I get more information?

If you would like more information, please contact Nantikarn Simasangyaporn
Tel: +4470598443330 (UK) or +66892023749 (Thailand), email: n.simasangyaporn@pgr.reading.ac.uk
We do hope that you will agree to your participation in the study. If you do, please complete the attached consent form and return it to Nantikarn Simasangyaporn. 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.

Thank you for your time.

Yours sincerely

Nantikarn Simasangyaporn

Participant 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 Participant: _____

Please tick as appropriate:

- I consent to take part in listening comprehension tasks.
- I consent to complete the questionnaires.
- I consent to have interviews with the researcher if invited.
- I consent for the interview to be recorded.

Signed: _____

Date: _____